

Self, Identity and the Philosophy of Person-Centred Care

by

Matthew Tieu

*Thesis Submitted to Flinders University
for the degree of*

Doctor of Philosophy

College of Humanities, Arts and Social Sciences

September 2019

Table of Contents

Abstract	i
Declaration	ii
Acknowledgements	iii

Introduction – Person-Centred Care and the Self

Background	1
What is Person-Centred Care?	3
Origins of Person-Centred Care	3
Defining Person-Centred Care	5
Promoting Personhood and Selfhood	11
The Ethics of Personhood	11
Promoting and Maintaining Continuity of Selfhood	16
Egoistic Imperatives	21
Aim and Structure of Thesis	25
General and Specific Aims	25
Chapter Structure	26

Chapter 1 – Varieties of Self

Introduction	30
Historical Perspectives	31
The Essence of Selfhood	31
The Phenomenology of Selfhood	34
The Persistence of Personal Identity	39
Psychological Continuity	39
Giving up on Personal Identity	43
The Science of Selfhood	48
The Self in Psychology	48
Self-Schema, Self-Concept and Identity	49
Moral and Practical Dimensions of Self	52
The Self Naturalised	54

The Self as a Construction	58
What is a Construction?.....	58
Social Constructionism.....	60
Self as a Social Construction	65
Constructivism	69
Radical Constructivism.....	71
Conclusion	76

Chapter 2 – Foundations of Human Selfhood

Introduction	79
Proto-selves and Minimal Selves	80
Self-Representation	80
Metarepresentation.....	82
The Minimal Self	85
The Elements of Human Selfhood	89
Human Uniqueness.....	89
Language and Conceptual Thought	90
Conceptual Self-Awareness	93
Mental Time Travel.....	95
Theory of Mind	97
Summary	99
Diachronic Selves and Diachronic Agents	101
Decontextualization and Offline Cognition.....	101
Normative Self-Government.....	106
Diachronic Agency and Mental Time-Travel	110
The Emergence of Human Selfhood	113
The Minimal Human Self.....	113
Autobiographical Selves and Diachronic Agents.....	118
Conclusion	120

Chapter 3 – The Sociobiographical Self

Introduction	122
Constructing Minimal Human Selves	123

Construction in Natural Development.....	123
Neuroconstructivism.....	125
Facial Recognition and Language Development.....	131
Perceptual Narrowing.....	137
The Role of the Social Environment.....	140
Constructing Sociobiographical Selves.....	146
Socially Situated Construction.....	146
The Biographical Dimension.....	147
Tensions During Infancy and Early Childhood.....	151
Socialisation in Childhood and Adolescence.....	154
How Self-Concept is Constructed?.....	159
Conclusion.....	163

Chapter 4 – Narrative Constructivism

Introduction.....	165
From Reflexivity to Narrativity.....	166
Self Concept and Practical Identity.....	166
Narrative Identity and Narrative Agency.....	170
Socially Situated Narrative Agency.....	175
Narrative Theories of Self.....	181
Fictional Selves and Narrative Centres of Gravity.....	181
Hermeneutical Selves.....	184
The Practical Necessity of Personal Identity.....	189
The Narrative Self-Constitution View.....	192
Narrative Constructivism.....	198
Intersubjective Constructions.....	198
From Neuroconstructivism to Narrative Constructivism.....	202
Unity of Embodied Agency and Narrative.....	206
Conclusion.....	212

Conclusion – What Becomes of the Self?

Introduction.....	215
The Self in Old Age.....	216
Lifespan Development and Cognitive Aging.....	216

Dementia.....	222
The Self in Dementia.....	227
The Limits of Egoistic Self-Concern.....	227
Deconstructing Narrative Identity.....	228
Refining the Definition of Person-Centred Care.....	234
Personhood as Third-Person Narratives.....	234
Summary.....	240
Conclusion.....	242

Bibliography

Books, Chapters and Journal Articles.....	247
Organisational Reports and Websites.....	282

Abstract

“Person-centred care” is a model of care that is widely regarded as best practice in aged care, particularly in dementia care. The impetus for person-centred care is typically grounded in both ethical and egoistic considerations. Firstly, there is the idea that people with dementia are still persons and it is in virtue of their personhood that they are worthy of a particular standard of treatment that is delivered through person-centred care. Secondly, there is also the idea that it is in one’s own interests to maintain quality of life and well-being in older age by receiving person-centred care, and this idea constitutes the egoistic impetus for person-centred care.

Though our understanding of person-centred care remains somewhat contentious, there is a general definition emerging from the literature, which defines person-centred care as primarily concerned with promoting or maintaining continuity of selfhood. However, because there are so many theories, models and frameworks that describe selfhood, it remains unclear what selfhood is and what it means to promote or maintain its continuity. As a result, person-centred care lacks a proper philosophical and ethical foundation, and this can lead to uncertainty about what best practice in aged care consists of.

The aim of my thesis is to clarify some of these issues. I begin by introducing a variety of discussions and debates about selfhood and then argue that human beings possess a unique form of selfhood that no other species possesses. This paves the way for me to develop a theoretical framework that describes human selfhood and its development across the lifespan, which I refer to as “narrative constructivism”. It captures the idea that human selfhood is constituted by a first-person subjective sense of personal identity that takes the form of autobiographical narratives, which we as agents construct to make sense of our lives and our place in the world. This framework will draw on concepts, theories, empirical evidence, and other frameworks from disciplines such as analytic philosophy, continental philosophy, cognitive neuroscience, developmental psychology, social psychology, lifespan development, and sociology. I then conclude by discussing what it means to promote or maintain continuity of human selfhood in the context of person-centred care, with specific reference to how this translates to situations where a person with dementia has either retained or lost a substantive amount of their selfhood.

Declaration

I certify that this thesis:

1. Does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university, and...
2. To the best of my knowledge and belief, does not contain any material previously published or written by another person except where due reference is made in the text.



Signed _____

Matthew Tieu

Acknowledgements

I acknowledge the contribution of an “Australian Government Research Training Program Scholarship” to this thesis and to any publications that arise directly from the research undertaken during my candidature.

I would like to thank Dr. Lina Eriksson for welcoming me and encouraging me during the early part of my candidature. I would also like to thank Associate Professor Greg O'Hair for being part of our small reading group and for the many interesting and informative discussions we had throughout my candidature. I would also like to thank Dr. Andrew Gleeson, my associate supervisor, for his support throughout my candidature, and particularly for the time and effort he put into reviewing the final draft of my thesis.

I would also like to thank Associate Professor Tim Windsor from the College of Education, Psychology and Social Work, who was very supportive of me in the initial stages of my candidature when I was still trying to gain a sense of direction and considering a variety of research topics to pursue in my thesis. I am most grateful for his willingness to work with me and for his willingness to be an adjunct supervisor.

Finally, I would like to give special thanks to Associate Professor Ian Ravenscroft who warmly welcomed me from the very beginning of my candidature and supported me throughout the rest of it in his role as my principle supervisor. I am most grateful for the numerous interesting and stimulating discussions I had with him, and of course, for the effort that he put into reading and reviewing various pieces of work that I produced throughout my candidature, including the final draft of my thesis.

I have been most fortunate to be part of a small but very supportive philosophy department here at Flinders University and am most grateful to all of the academic staff and fellow postgraduate students (Haley, Wanas, Piper, and Ryan), who helped to make my candidature a thoroughly rewarding experience.

Introduction - Person-Centred Care and the Self

Background

The phenomenon of population aging throughout most of the world in recent decades presents significant challenges to maintaining health and well-being for older people. Health systems need to align themselves with the needs of current and future older populations in order to meet these challenges. In Australia the number of people aged 65 and over is expected to increase rapidly from 2.5 million in 2002 to 6.2 million by 2042. For Australians aged 85 and over, the growth is even more rapid, from around 300,000 in 2002 to 1.1 million in 2042.¹ An aging population is associated with an increase in prevalence of age-related diseases which will result in a greater demand for health and aged care services. According to a recent Productivity Commission Inquiry Report entitled “Caring for Older Australians” there are over one million Australians currently receiving aged care services. This number is expected to increase to 3.5 million by 2050.²

One of the biggest challenges is the increased prevalence and rising incidence of dementia. In Australia there are currently more than 353,800 people living with dementia and this is expected to increase to 400,000 within the next five years, and 981,000 by 2050. Dementia is the second leading cause of death in Australia and the single greatest cause of disability in Australians aged 65 or older. More than 50% of residents in Australian-Government subsidised aged care facilities have dementia.³ The Productivity Commission Inquiry Report states that fundamental reforms are required to respond to future challenges arising from an increase in the incidence of dementia, as well as a new generation of clients (i.e. baby boomers) and an increase in diversity of older Australians in general (i.e. cultural, linguistic, and sexual diversity). The report identified a need to provide a higher quality of care and a greater range of services that are tailored to meet individual needs and preferences through “person-centred” services.⁴

Dementia is a complex multifaceted pathology that exists in many different forms. The onset of dementia marks the beginning of a significant decline in cognitive function and overall health, which

¹ “Australia’s Demographic Challenges”, Department of Communications, Information Technology and the Arts, Commonwealth of Australia 2004; Pg. 21

² “Caring for Older Australians”, Productivity Commission Inquiry Report, Volume 1, No. 53, 28 June 2011

³ “Key facts and statistics 2016”, Alzheimer’s Australia; <https://fightdementia.org.au/about-dementia/statistics> (last accessed 1/5/2019)

⁴ “Caring for Older Australians”, Productivity Commission Inquiry Report, Volume 1, No. 53, 28 June 2011

eventually leads to acute and chronic health problems and ultimately death. This is why dementia has been redefined as a terminal illness in recent years.^{5 6 7} During the course of the pathology, people with dementia inevitably experience a significant reduction in quality of life and well-being. Of particular concern for care providers are the behavioural and psychological symptoms, which also place significant burden and distress on the family members and friends of people with dementia. Aged care providers throughout many parts of the world now recognise that fundamental changes in care services are necessary in order to adapt to the changing business and demographic landscape that comes as a result of population aging and the prevalence of dementia. The shift from care models based on medical and behavioural management of dementia as a disease towards “person-centred care” (PCC) in recent decades plays a central role in all of this. Aged care providers are beginning to adapt and innovate in a variety of ways to ensure that they are able to facilitate the delivery of PCC. This typically consists of things such as novel design of care facilities and built-environment, appropriate workforce development, and evidence-based innovative care (e.g. the use of psychosocial therapies and assistive technologies).

If the aim of aged care is to cater to the unique, complex and diverse care needs of future populations, there needs to be an appropriate framework to help guide aged care providers and policy makers. PCC promises to guide the development of such a framework. However, PCC remains very broad in scope, and as a result, has been interpreted or translated in a variety of ways. This is because PCC is fundamentally based on the relatively uncontroversial though vague idea that we ought to treat older people (particularly people with dementia) as “persons”. A better understanding of what PCC entails can be achieved by addressing the question of personhood, i.e. what it means to be a person. This is of course a deeply puzzling philosophical question, which may turn out to remain a mystery or become moot, but nevertheless, has not been sufficiently addressed in the PCC literature. Where it has been addressed it is typically done so in passing (or as a brief introduction to another topic that is the main focus of investigation) and discussions are usually very general, platitudinous, often unsophisticated or highly contentious from a philosophical standpoint. This leaves PCC without a proper ethical and philosophical foundation, which leads to uncertainty about what PCC is and what best practice in aged care consists of.

⁵ Mitchell, S. L., Teno, J. M., Kiely, D. K., Shaffer, M. L., Jones, R. N., Prigerson, H. G., Volicer, L., Givens, J. L. and Hamel, M. B. (2009) The Clinical Course of Advanced Dementia, *New England Journal of Medicine*, Vol. 361(16); Pp: 1529-38

⁶ Sachs, G. A. (2009) Dying of Dementia, *New England Journal of Medicine*, Vol. 361(16); Pp: 1595-6

⁷ Teper, E. L. and Hughes, J. C. (2010) Clinical and Ethical Issues in Palliative Care and Dementia – An Overview, *European Neurological Review*, Vol. 5(2); Pp: 29-33

What is Person-Centred Care?

Origins of Person-Centred Care

The idea of person-centred care (PCC) originated with Tom Kitwood, who adopted the term from Carl Rogers' "client-centred psychotherapy" and "person centred counselling" (also known as "Rogerian psychotherapy") and applied it to the care of people with dementia.^{8 9 10} The central tenets of Kitwood's framework for PCC consists of what he refers to as an "enriched model of dementia" and an ethical framework based on the notion of personhood.¹¹ The "enriched model of dementia" refers to the idea that dementia is not just a biological/neurological condition but also a psychological and social condition. He points out that the symptoms of dementia are not just caused by structural failures of the brain. They are caused by a multiplicity of factors affecting the lived experience and quality of life of a person with dementia. Those factors include physical health, biography, personality and social environment. Thus, Kitwood offers the following definition/formula for understanding dementia.¹²

$$D = P + B + H + N + SP$$

Dementia = Personality + Biography (life history) + Health + Neurological Impairment + Social Psychology.

According to Kitwood, the ethical framework for PCC is based on the moral requirement that we interact with people with dementia in a manner that treats them as "persons", which he describes as "a standing or status that is bestowed upon one human being, by others, in the context of relationship and social being. It implies recognition, respect and trust".¹³ This meant that the traditional approach to dementia care, which focused primarily on medical and behavioural management of dementia as disease needed to be replaced with a new approach that focuses on promoting the most important elements of positive health and well-being. Thus, according to Kitwood, PCC is a model of care which:

⁸ Brooker, D. (2003) What is person-centred care in dementia? *Reviews in Clinical Gerontology*, Vol. 13(3), pp 215--222

⁹ Evardsson, D., Fetherstonhaugh, D. and Nay, R. (2010) Promoting a continuation of self and normality: person-centred care as described by people with dementia, their family members and aged care staff, *Journal of Clinical Nursing*, Vol. 19(17-18); Pp: 2611--2618

¹⁰ Kitwood, T. (1997) *Dementia reconsidered: The person comes first*. Buckingham, U.K.: Open University Press

¹¹ Brooker, D. (2007) *Person-Centred Dementia Care: Making Services better*. Jessica Kingsley Publishers. Pg. 83

¹² Kitwood, T. (1997) *Dementia reconsidered: The person comes first*. Buckingham, U.K.: Open University Press; Pg. 274

¹³ Ibid. Pg. 8

...brings into focus the uniqueness of each person, respectful of what they have accomplished and compassionate to what they have endured. It reinstates the emotions as the well-spring of human life, and enjoys the fact that we are embodied beings. It emphasizes the fact that our existence is essentially social (Kitwood 1997: p.135).

Kitwood placed much emphasis on the idea of promoting positive social interactions, authentic communication and genuine relationships as prescribed by Rogerian psychotherapy (a form of psychotherapy developed by Carl Rogers).¹⁴ ¹⁵ For example, an important aspect of Kitwood's framework for PCC is avoiding what he calls "malignant social psychologies". These include, for example, intimidation, ignoring, infantilising, invalidation, mockery, and disparagement. Kitwood also described the social dimension as important for maintaining a sense of self, particularly when it begins to break down due to dementia, arguing that people with dementia are in fact often able to engage in meaningful interpersonal interactions.¹⁶ Contemporary research has demonstrated the importance of people with dementia having adequate relationships with family and other people, and such relationships are also important dimensions of quality of life measures.¹⁷ ¹⁸

One of the most widely cited frameworks for understanding Kitwood's ideas about PCC is Dawn Brooker's VIPS framework. VIPS is an acronym that describes how people with dementia and their carers must be "valued", treated as "individuals", how we must incorporate the "perspective" of the person with dementia, and how we must attend to the person's "social environment".¹⁹ ²⁰ Firstly, the "value" criterion forms the moral and ethical basis of PCC. As Brooker states, "in this day and age, how could anyone disagree that treating people struggling to live with dementia as whole human beings is

¹⁴ In addition to the application of Rogerian psychotherapy to people with dementia, PCC also draws from pre-existing approaches to care such as validation therapy, reality orientation, and the "Eden Alternative". See Brooker, D. (2003) What is person-centred care in dementia? *Reviews in Clinical Gerontology*, Vol. 13(3); Pp: 215-222

¹⁵ Rogerian psychotherapy is also foundational part of the humanistic psychology movement that emerged in the 1960s (often referred to as the "third force" in psychology), which can be understood as a response against Freudian psychoanalytic theory and behaviourism (after B. F. Skinner). It emphasizes a holistic approach towards understanding (i.e. the individual is greater than the sum of its parts), and also emphasizes the primacy of individual subjective experience, an idea that is influenced and informed by philosophies of existentialism and phenomenology. See Rogers, C. R. (1957) The Necessary and Sufficient Conditions of Therapeutic Personality Change, *Journal of Consulting Psychology*, Vol. 21(2); Pp: 95-103

¹⁶ Brooker, D. (2007) *Person-Centred Dementia Care: Making Services better*. Jessica Kingsley Publishers; Pg. 83

¹⁷ Moyle, W., Murfield, J., Venturto, L., Griffiths, S., Grimbeek, P., McAllister, M. and Marshall, J. (2011) Factors influencing quality of life for people with dementia: a qualitative perspective, *Aging and Mental Health*, Vol. 15(8); Pp: 970-977

¹⁸ Ettema, T. P., Droes, R-M., de Lange, J., Ooms, M. E., Mellenbergh, G. J. and Ribbe, M. W. (2005) The concept of quality of life in dementia in the different stages of the disease, *International Psychogeriatrics*, Vol. 17(3); Pp: 353-370

¹⁹ Brooker, D. (2003) What is person-centred care in dementia? *Reviews in Clinical Gerontology*, Vol. 13(3); Pp: 215-222

²⁰ Brooker, D. (2007) *Person-Centred Dementia Care: Making services better*. Jessica Kingsley Publishers

the right and civilised way to respond?”²¹ Secondly, treating persons with dementia as “individuals” requires an appreciation of their unique history and personality, physical and mental health, socioeconomic resources, and the way in which these will affect their responses to dementia. This requires that aged care providers work from individualised care plans, are aware of their clients’ life history, incorporate clients’ personal possessions for everyday use, facilitate individual preferences, and facilitate activities that meet the individual needs of clients. Thirdly, looking at the world from the personal “perspective” of the person with dementia requires a recognition that each person’s experience has its own psychological validity, that people from dementia act from this perspective, and that empathy with this perspective has therapeutic potential. This criterion encompasses a broad range of areas including staff communication, physical/built environment, appreciating the subjective experience of illness and pain, addressing underlying causes of challenging behaviours, and general advocacy for the client. In other words, an understanding of a client’s lived-experience.

Finally, providing a supportive “social environment” is according to Brooker, the key to maintaining personhood on a day-to-day basis. This requires that aged care providers offer a supportive social environment, recognise that all human life is grounded in relationships and that people with dementia need an enriched social environment which both compensates for their impairment and fosters opportunities for personal growth. According to Brooker “personhood can only be maintained in the context of relationships”.²²

Defining Person-Centred Care

Aged care providers are nowadays less solely focused on the acute health care needs and daily living needs of clients. There is a genuine recognition that quality of life and well-being is paramount and that this is best facilitated by giving primacy to their psychosocial needs. Similarly, the “behavioural and psychological symptoms of dementia” (BPSD), which cause distress to their clients and make it difficult to provide care for them, are increasingly addressed by applying novel psychosocial approaches, rather than traditional approaches that may have involved physical restraint and pharmacological treatment (which is nowadays considered a form of “chemical” restraint). This also demonstrates a greater focus on the needs of the client rather than the needs of the care provider, which, in a very basic sense, exemplifies what it means to implement PCC. In this regard PCC can be

²¹ Ibid. Pg. 31

²² Ibid. Pg. 83

generally thought of as a model of care that aims to promote quality of life and well-being for people with dementia by focusing more on their psychosocial needs.

PCC is nowadays widely regarded as synonymous with both quality aged care (“best practice”) and evidence-based aged care and is likely to become the universal standard for aged care in the future.²³ However, there are various barriers preventing the proper implementation of PCC. Many of those barriers are due to organisational structure and culture, and lack of relevant knowledge and skills.^{24 25} One particular barrier that I want to focus on in this thesis is the lack of consensus surrounding the definition of PCC.^{26 27 28 29 30}

...there is still no consensus or explicit agreement on the definition of person-centred care, and further research is needed in defining the concept, developing and testing measurement tools, and conducting and replicating intervention studies... we cannot overstate the fact that, although the body of literature on person-centred care is accumulating, there is a lack of studies describing actual empirical findings where consumers and providers of aged care have been asked to convey what person-centred care is to them. This suggests that current understandings of the concept largely rest on abstractions, conceptual synergies and personal opinions. (Edvardsson et al, 2010; Pg. 2612)

A central contention is whether it is correct to define PCC in terms of the promotion and advocacy of the individual in isolation from their place within interpersonal relationships with family, carers and the broader community. In a review of the literature on PCC by Morgan and Yoder (2012), they state that the term “individualised” is the most frequently acknowledged attribute of PCC, referring the particular care needs of the patient as an individual. Additionally the notion of empowerment is also

²³ Kim, S. K. and Park, M. (2017) Effectiveness of person-centered care on people with dementia: a systematic review and meta-analysis, *Clinical Interventions in Aging*, Vol. 12; Pp: 381–39

²⁴ Moore, L., Britten, N., Lydahl, D., Naldemirci, O., Elam, M. and Wolf, A. (2017) Barriers and facilitators to the implementation of person-centred care in different healthcare contexts, *Scandinavian Journal of Caring Science*, Vol. 31(4); Pp: 662-73

²⁵ McCormack, B. (2004) Person-centredness in gerontological nursing: an overview of the literature, *Journal of Clinical Nursing*, Vol. 13(3a); Pp: 31-8

²⁶ Slater, L. (2006) Person-centredness: a concept analysis, *Contemporary Nurse*, Vol. 23(1); Pp: 135-44

²⁷ Edvardsson, D., Winblad, B. and Sandman, P. O. (2008) Person-centred care for people with severe Alzheimer’s disease – current status and ways forward, *Lancet Neurology*, Vol. 7(4); Pp: 362–367

²⁸ Edvardsson, D., Fetherstonhaugh, D. and Nay, R. (2010) Promoting a continuation of self and normality: person-centred care as described by people with dementia, their family members and aged care staff, *Journal of Clinical Nursing*, Vol. 19(17-18); Pp: 2611–2618

²⁹ McCormack, B. and McCance, T. (2010) *Person-centred Nursing: Theory and Practice*. Oxford: Wiley Blackwell.

³⁰ Ekman, I., Swedberg, K., Taft, C., Lindseth, A., Norberg, A., Brink, E., Carlsson, J., Dahlin-Ivanoff, S., Johansson, I. L., Kjellgren, K., Liden, E., Ohlen, J., Olsson, L. E., Rosen, H., Rydmark, M. and Sunnerhagen, K. S. (2011) Person-centered care - ready for prime time, *European Journal of Cardiovascular Nursing*, Vol. 10(4); Pp: 248-51

considered an equally important attribute, referring to autonomy and self-confidence.³¹ However, many have argued that PCC is not just about promoting various aspects associated with individuality and autonomy, but that there must also be an emphasis on the relationship between an older person and their carer and the broader familial and social community.^{32 33 34 35 36} This is an issue that is particularly relevant with regard to aged care policy reform in which there is currently a general trend (particularly in the West) towards developing and implementing policies that redirect resources to aged care recipients who are then able to decide what care services they require.³⁷ Insofar as such policies are promoted as “person-centred”, it indicates that the operative definition of PCC is one that is concerned with promoting individualism, independence, autonomy, self-determination, self-management, and consumerism.

This focus on individuality reflects wider trends within health and social care which emphasize the importance of promoting the independence and autonomy of older people, which together with notions of greater user involvement, have become major policy drivers... it is the application of consumerism to health care, and the promotion of a philosophy that treats people as individuals that has resulted in the emergence of the ‘contemporary speak’ of person-centred care. (Nolan et al, 2004; Pg. 46)

As a case in point we can consider the recent implementation of a model of care in Australia known as “Consumer Directed Care” (CDC), which was recommended by the Productivity Commission (an independent government agency and advisory body). As of July 1st 2015, all Commonwealth funded “Home Care Packages” were delivered on a CDC basis and it is expected that CDC will also be delivered to residential aged care settings in the near future. The Australian Government’s Department of Social Services describes CDC as follows.³⁸

³¹ Morgan, S. and Yoder, L. H. (2012) A Concept Analysis of Person-Centred Care, *Journal of Holistic Nursing*, Vol. 30(1); Pp: 6-15

³² McCormack, B. (2001) *Negotiating Partnerships with Older People: A Person-Centred Approach*. Ashgate, Aldershot.

³³ Nolan, M. R. Davies, S. Brown, J. Keady, J. and Nolan, J. (2004) Beyond ‘person-centred’ care: a new vision for gerontological nursing, *International Journal of Older People Nursing*, Vol. 13(3a); Pp: 45-53

³⁴ Argyle, E. (2012) Person centred dementia care: problems and possibilities, *Working with Older People*, Vol. 16(2); Pp: 69-77

³⁵ Packer, T. (2003) Turning rhetoric into reality: person-centred approaches for community mental health nursing. In Keady, J., Clarke, C. and Adams, T. (Eds) *Community Mental health nursing and dementia Care*. Open University Press, Maidenhead: Pp: 104-119

³⁶ Nay, R., Bird, M., Edvardsson, D., Fleming, R. and Hill, K. (2009) Person-centred care. In R. Nay and S. Garratt (Eds) *Older People: Issues and Innovations in Care*. Sydney: Elsevier Australia; Pp: 107-120

³⁷ Manthorpe, J. and Samsi, K. (2016) Person-centered dementia care: current perspectives, *Clinical Interventions in Aging*, Vol. 11; Pg. 1735

³⁸ “What is Consumer Directed Care? – Information for Home Care Package providers” Australian Government/Department of Social Services.

CDC allows you and your carer more power to influence the design and delivery of the services you receive. It also allows you to exercise a greater degree of choice in what services are delivered and where and when they are delivered. (Australian Government – Department of Social Services)

Hence the operative definition of “person-centred care” underpinning CDC policy seems to be closely linked to self-determination and autonomy. During the initial trial phase of CDC, an evaluation of the implementation, effectiveness, costs and barriers associated with CDC was conducted, and at the end of the trial phase in 2012, a Final Report was released. One of the purposes of the evaluation was to determine the extent to which CDC was person-centred. A key finding of the report was that CDC participants (i.e. clients) and their carers appeared to be more actively involved in planning and decision making though they chose similar types of supports as those available under the standard care package. Interestingly and perhaps most importantly, other key findings indicate that CDC appeared to have a positive impact on clients’ level of satisfaction in relation to participation in social and community activities, visiting family and friends, quality of their home life and close relationships, and health and wellbeing. However, there was no statistically significant difference between the CDC participant group and the standard package care comparison group on the single measure of wellbeing.³⁹

There were also some key findings that raised concerns related to those mentioned above and highlight some of the challenges that still remain. For example, there were concerns about balancing the consumer choice element of CDC with the CDC provider’s responsibility and duty of care. For example, CDC providers had concerns about requests for funds made by participants or carers that would compromise the participant’s care and wellbeing by reducing the level of personal care or clinical care that a participant could access. Similarly, CDC providers were also concerned by participants choosing to build up a sizeable contingency fund by foregoing some regular supports.⁴⁰

A recent report by Beer et al (2018) investigated the expectations, aspirations and experiences of Australians aged over 50 in three cohorts – those not in receipt of aged care services, those who transitioned from the previous model of home care into CDC, and those who only ever received home care under CDC. Though there were many positive responses, a number of difficulties and challenges

https://agedcare.health.gov.au/sites/g/files/net1426/f/documents/04_2015/what_is_consumer_directed_care_0_0.pdf (last accessed 24/4/2018)

³⁹ “Evaluation of the consumer-directed care initiative – Final Report” (2012) KPMG and Department of Health and Aging. <http://www.tdsa.org.au/wp-content/uploads/2016/03/KPMG-CDC-Final-Report-2012-ALL-merged.pdf> (last accessed 24/4/2018)

⁴⁰ The key findings are presented in section 10 of the Final Report – Pp: 113-119

were identified. For example, it was found that a significant percentage of respondents did not embrace the freedom to choose, actively avoided change, struggled with decision making, and 20-30% of respondents preferred the previous model of care. The role of informal carers (particularly family members) remained unacknowledged in the CDC model. Furthermore, it was found that knowledge of aged care was poorer than expected, particularly the financial aspects of CDC where 65% were unaware that they may be required to make a substantial contribution to the provision of services.⁴¹

A recent study of fourteen CDC home care recipients by Gill et al (2018) found that their knowledge and understanding of CDC was limited and primarily came from information provided by service providers rather than what they could identify themselves. The study also found that recipients tended to comply (either happily or unhappily) with services that were offered rather than negotiating for a more personalised service due to fear of losing existing funding and services. The perception of CDC was also dependent on their experience with services under the previous provider directed model. One recipient described how agency provider restrictions reduced the range of CDC services they could access, another was dissatisfied with the change in personal care staff, and a number of recipients expressed concern over the extra costs involved for services that they required. The authors conclude that ongoing engagement and discussion with the recipients is necessary to ensure they receive effective and relevant CDC services.⁴²

Some of these difficulties might be seen as vindicating those who have been critical of this kind of approach towards PCC. For example, Nolan et al (2004) have argued that definitions of “person-centred care” that focus primarily on meeting individual needs “may well be misguided” because the importance of the relationships that older people have with carers and their social networks might be neglected under such a definition.⁴³ Instead, it has been argued that PCC ought to place greater value on interdependence and promote carer-client relationships as well as other relationship networks, an idea that derives from what is referred to as “relationship-centred care”.^{44 45 46} Hence Nolan et al have

⁴¹ Beer, A., Beilby, J., Cornell, V., Faulkner, D., Karnon, J. and Thredgold, C. (2018) Consumer Directed Care: The expectations and experiences of people aged 50 years and over in Australia, Final Report, ARC Linkage Project LP130100045, www.cdcengage-ment.com/publications (last accessed July 2018)

⁴² Gill, L., Bradley, S. L. Cameron, I. A. and Ratcliffe, J. (2008) How do clients in Australia experience Consumer Directed Care? *BMC Geriatrics*, Vol. 18(148); Pp: 1-12

⁴³ Nolan, M. R. Davies, S. Brown, J. Keady, J. and Nolan, J. (2004) Beyond ‘person-centred’ care: a new vision for gerontological nursing. *International Journal of Older People Nursing*. Vol. 13(3a); Pg. 46

⁴⁴ Tresolini, C. P. and The Pew-Fetzer Task Force (1994) *Health Professions Education and Relationships-centred Care: A Report of the Pew-Fetzer Task Force on Advancing Psychosocial Education*. Pew Health Professions Commission, San Francisco.

⁴⁵ Beach, M. C. and Inui, T. (2006) Relationship- centred Care: A Constructive Reframing, *Journal of General Internal Medicine*, Vol. 21(S1); Pp: S3-S8

⁴⁶ Nundy, S. and Oswald, J. (2014) Relationship-centred care: A new paradigm for population health management, *Healthcare*, Vol. 2(40); Pp: 216-219

developed an alternative view known as “The Senses Framework”, which advocates for all parties that are involved in caring to be able to experience a sense of security, belonging, continuity, purpose, achievement and significance, in the context of their care relationships.^{47 48 49} Similarly, McCormack (2001) has argued that even the promotion of autonomy requires an appreciation of the interconnectedness of the nurse-patient relationship, whereby decisions making takes place within a framework of negotiation.⁵⁰ This is part of a broader notion of person-centredness that according to McCormack consists of four main contexts in which we can understand a person’s *being*, i.e. “being in relation” (referring to relationships with other people), “being in a social world” (referring to relationships with their social environment), “being in place” (relationships with the place or context in which care is provided), and “being with self” (referring to one’s sense of self and autonomy).^{51 52}

These ideas seem to be more consistent with the original ideals of PCC which reflect a broader notion of PCC, one that undoubtedly includes relationships with other people and regards PCC as a shared social responsibility.^{53 54 55} The ethical significance of this is highlighted by the fact that dementia can affect prudential decision making. Within an increasingly competitive and privatised aged care service marketplace, issues concerning equity, accessibility of services, choice of service providers and informed decision making will inevitably arise. Consumer based policy runs the risk of ignoring the role support networks play in facilitating autonomy and self-determination in the context of PCC.^{56 57 58}

⁴⁷ Nolan, M. R., Davies, S. Brown, J. Keady, J. and Nolan, J. (2004) Beyond ‘person-centred’ care: a new vision for gerontological nursing. *International Journal of Older People Nursing*. Vol. 13(3a); Pg. 46

⁴⁸ Nolan, M. R., Brown, J., Davies, S., Nolan, J. and Keady, J. (2006) The Senses Framework: improving care for older people through a relationship-centred approach. *Getting Research into Practice (GRiP) Report No. 2. Project Report*. University of Sheffield.

⁴⁹ Ryan, T., Nolan, M., Reid, D. and Enderby, P. (2008) Using the Senses Framework to achieve relationship-centred dementia care services, *Dementia*, Vol. 7(1); Pp: 71-93

⁵⁰ McCormack, B. (2001) Autonomy and the relationship between nurses and older people, *Ageing and Society*, Vol. 21(4); Pp: 417-46

⁵¹ McCormack, B. (2004) Person-centredness in gerontological nursing: an overview of the literature, *Journal of Clinical Nursing*, Vol. 13(3a); Pp: 31-8

⁵² McCance, T., McCormack, B. and Dewing, J. (2011) An Exploration of Person-Centredness in Practice, *The Online Journal of Issues in Nursing*, Vol. 16(2); Manuscript 1

⁵³ Evans, M. (1999) Ethics: Reconciling Conflicting Values in Health Policy. *Policy Futures for UK Health*, No. 9. Nuffield Trust, London

⁵⁴ Nolan, M. (2001) Successful ageing: keeping the ‘Person’ in person-centred care, *British Journal of Nursing*, Vol. 10(7); Pp: 450-54

⁵⁵ Munthe, C., Sandman, L. and Cutas, D. (2011) Person Centred Care and Shared Decision Making: Implications for Ethics, Public Health and Research, *Journal of Health Philosophy and Policy*, Vol. 20(3); Pp: 231-49

⁵⁶ Manthorpe, J. and Samsi, K. (2016) Person-centered dementia care: current perspectives, *Clinical Interventions in Aging*, Vol. 11; Pp: 1733-40

⁵⁷ Latimer, T., Roscamp, J. and Papanikitas, A. (2017) Patient-centredness and consumerism in healthcare: an ideological mess, *Journal of the Royal Society of Medicine*, Vol. 110(11); Pp: 425-427

⁵⁸ Cardona, B. (2007) New analysis identifies potential pitfalls of a consumer-driven market, *Community Care Review*, Autumn edition: <https://www.australianageingagenda.com.au/2017/04/13/new-analysis-identifies-potential-pitfalls-consumer-driven-market/> (last accessed 26/04/2018)

Hence the question of what PCC is really about and whether it is being effectively operationalised in various contexts (ranging from specific care contexts to public policy development and implementation) are important issues that will need to be continuously addressed moving forward.

Promoting Personhood and Selfhood

The Ethics of Personhood

As I stated above, in a very general sense, we can understand person-centred care (PCC) as aimed at promoting quality of life and well-being for people with dementia. However, this is too broad and abstract to constitute a workable definition and serves only to defer the matter to a debate about what constitutes quality of life or well-being. One could regard PCC as advocating for people with dementia to be treated in a manner that upholds their dignity, value, moral status, and that which is in accordance with general ethical principles.⁵⁹ This is also broadly consistent with the humanistic ideals that underpinned Kitwood's formulation of PCC (such as autonomy, self-determination, individualised approaches, authentic communication and genuine relationships). These ethics and ideals are captured by the notion that we ought to treat people with dementia as "persons" (rather than as patients or merely biological organisms), hence the phrase "person-centred care" and why much of the current literature in nursing and aged care defines PCC as promoting the personhood of people with dementia.^{60 61 62 63}

The support for such a definition of PCC is reflected in an emerging body of empirical evidence. For example, a recent study by Milte et al (2016) demonstrated that people with dementia (or cognitive impairment) living in residential aged care settings, as well as their family members, defined "quality" in residential aged care services as based on maintaining or supporting personhood.⁶⁴ Another recent study by Hunter et al (2013) demonstrated that acknowledging the personhood of a person with

⁵⁹ That is, the general principles that are applied in discussions of normative ethics, e.g. beneficence, non-maleficence, autonomy, and justice.

⁶⁰ Dewing, J. (1999) Dementia. Part 1: Person-centred care. *Professional Nurse*, Vol. 14(8); Pp: 585-8

⁶¹ Penrod, J., Yu, F., Kolanowski, A., Fick, D. M., Loeb, S. J. and Hupcey, J. E. (2007) Reframing Person-Centered Nursing Care for Persons With Dementia, *Research and Theory for Nursing Practice*, Vol. 21(1); Pp: 57-72

⁶² De Bellis, A. M., Bradley, S., Wotherspoon, A. J., Walter, B. K., Guerin, P. B., Cecchin, M. L. and Paterson, J. (2009) Come into my world: How to interact with a person who has dementia. Bedford Park, SA: Flinders University.

⁶³ Manthorpe, J. and Samsi, K. (2016) Person-centered dementia care: current perspectives, *Clinical Interventions in Aging*, Vol. 11; Pg. 1735

⁶⁴ Milte, R., Shulver, W., Killington, M., Bradley, C., Ratcliffe, J. and Crotty, M. (2016) Quality in residential care from the perspective of people living with dementia: The importance of personhood, *Archives of Gerontology and Geriatrics*, Vol. 63; Pp: 9-17

dementia increased the likelihood of them receiving better quality of care (e.g. non-pharmacological interventions) in the context of managing pain and BPSD.⁶⁵ Therapeutic measures to address BPSD that promote positive social interaction (such as art, music, reminiscence therapy) are also often framed in terms of promoting personhood.⁶⁶

A kind word spoken, a gentle touch, smiling eye contact, the sharing of a story or song, and communicating in ways that affirm people in their present condition all validate personhood and foster its expression. And when personhood is strengthened, dementia's hold is weakened.
(Potts, 2012; Pg. 836)

Furthermore, a recent study by Smebye and Kirkevold (2013) indicated that the quality of interpersonal relationships is also thought to influence personhood in people with dementia. They found that close emotional bonds between family and professionalism between carers and people with dementia, helped to sustain personhood. In contrast, relationships that were more task orientated, lacking in professionalism, or where there was hesitance or reluctance to help, diminished the personhood of people with dementia.⁶⁷ Such a study highlights the importance of positive relationships in PCC and also supports a definition of PCC that explicitly advocates for promoting such relationships.

Even though persons with dementia actively form and assert their personhood, some are not capable of doing so and need personhood to be bestowed on them especially in the face of progressive decline in dementia and if they do not experience relationships that support personhood. They need other people to confirm their worth and recognize who they are.
(Smebye and Kirkevold, 2013; Pg. 12)

While the definition of personhood can be reiterated and specified in various ways, the ethical impetus for promoting personhood in PCC remains the same. To be a person is to have a particular moral status, which implies a special kind of ethical consideration and particular standard of treatment. Some moral philosophers understand this in terms of the idea that persons are subjects with intrinsic value, as opposed to objects, which many believe have no intrinsic value. Another more general way of understanding this is that being a person means that one is bestowed the status of being a moral recipient (i.e. a recipient of moral consideration). Conversely, those who are not persons, are not

⁶⁵ Hunter, P. V., Hadjistavropoulos, T., Smythe, W. E., Malloy, D. C., Kaasalainen, S. and Williams, J. (2013) The Personhood in Dementia Questionnaire (PDQ): Establishing an association between beliefs about personhood and health providers' approaches to person-centred care, *Journal of Aging Studies*, Vol. 27(3); Pp: 276-87

⁶⁶ Potts, D. C. (2012) The art of preserving personhood, *Neurology*, Vol. 78(11); Pp: 836-37

⁶⁷ Smebye, K. L. and Kirkevold, M. (2013) The influence of relationships on personhood in dementia care: a qualitative, hermeneutic study, *BMC Nursing*, Vol. 12(1); Pp: 29-41

worthy of being recipients of this kind of moral consideration (though they can still be worthy of some other kind of moral consideration for other reasons).⁶⁸ The general idea is that personhood confers one with what might be referred to as “full moral status”.⁶⁹ Furthermore, it is also thought that only persons are capable of being held morally responsible for their actions.⁷⁰

Personhood serves as a foundational concept in ethics and morality and so it is in virtue of the putative personhood of people with dementia that the ethical impetus for PCC exists. This is assumed in Kitwood’s definition of personhood as well as other various definitions of personhood. However, while the topic of personhood has attracted much investigation and discussion in moral philosophy and normative ethics, a cursory glance at the body of literature will reveal a myriad of different arguments, explanations and conjectures. There is currently no consensus on what constitutes personhood and what the necessary and sufficient conditions for personhood are. Some philosophers and cognitive neuroscientists have even argued that the concept of “persons” does not correspond to any real category or entity that exists in the world and should be abandoned.^{71 72} Hence it is of no surprise to read that not much has been written about this in the PCC literature.⁷³

Person-centered care can be seen as the processes that maintain the personhood of people who have dementia and contribute towards their enduring sense of self-worth and well-being. However, while personhood has been a powerful motif, it is less often articulated than person-centered care. (Manthorpe and Samsi, 2016; Pg. 1735)

Historically, personhood is a concept that is taken to be synonymous with humanity, which suggests that being a member of the relevant species (*Homo sapiens*) is necessary and sufficient for personhood and thus having “full moral status”.⁷⁴ But such a definition of personhood is criticised for promoting a human-centred prejudice (“speciesism”) in which the human species is unjustly favoured over and

⁶⁸ Those reasons may include their capacity for pain and suffering. For further discussion. See Singer, P. (1990) *Animal liberation*. New York, N.Y: New York Review of Books

⁶⁹ Wasserman, David, Asch, Adrienne, Blustein, Jeffrey and Putnam, Daniel, "Cognitive Disability and Moral Status", *The Stanford Encyclopedia of Philosophy* (Fall 2017 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2017/entries/cognitive-disability/> (last accessed 26/04/2018)

⁷⁰ Eshleman, Andrew, "Moral Responsibility", *The Stanford Encyclopedia of Philosophy* (Winter 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2016/entries/moral-responsibility/> (last accessed 26/04/2018)

⁷¹ Farah, M. J. and Heberlein, A. S. (2007) Personhood and neuroscience: Naturalizing or nihilating? *The American Journal of Bioethics*, Vol. 7(1); Pp: 37-48

⁷² Higgs, P. and Gilleard, C. (2016) Interrogating personhood and dementia, *Aging and Mental Health*, Vol. 20(8); Pp: 773-80

⁷³ Manthorpe, J. and Samsi, K. (2016) Person-centered dementia care: current perspectives, *Clinical Interventions in Aging*, Vol. 11; Pg. 1733-40

⁷⁴ This idea is also contained in the notion of the “sanctity of human life” that comes from various religious traditions such as the Jewish and Christian traditions. It refers to the idea that human life is sacred and thus conferred with a unique moral status that non-humans lack.

above all non-human species, which are thereby more vulnerable to harm and exploitation.⁷⁵ So there must be a reason other than mere species membership for attributing one particular species (which happens to be ours) “full moral status”.⁷⁶ For example, we might still argue that human beings have a moral status greater or distinct from non-human animals in virtue of our being a person where being a person is not synonymous with merely being a human or a member of the species *Homo sapiens*. Instead, being a person might require certain kinds of traits or capacities.

Traditionally, cognitive capacities have been regarded as the most important features associated with personhood. John Locke equated personhood with rationality, intelligence, self-awareness and personal identity. Immanuel Kant also placed great importance on those aspects, particularly in the context of our moral capacities. Contemporary philosophers such as Harry Frankfurt associate personhood with our capacity for reflective evaluation and volition.⁷⁷ Christine Korsgaard relates those capacities to the idea of normative self-government, which describes our ability to act on the basis of reasons (i.e. practical reason).⁷⁸ If human beings have a unique moral status that consists in our “personhood”, then it is more reasonable to argue that it is based on these kinds of capacities rather than mere species membership.⁷⁹

However, the major point of contention that arises from this kind of conception of personhood relates to instances where such capacities are diminished or possibly absent (particularly self-awareness). Hence why there are controversies concerning whether foetuses, infants, the terminally ill and those in a persistent vegetative state, are persons (and thus have the “full moral status” conferred by personhood). Hence why much of the debate about the ethical acceptability of human embryonic stem cell research, some aspects of assistive reproductive technology, pre-implantation genetic diagnosis, abortion, euthanasia, and treatment of non-human animals, hinges on whether the subjects in question are considered persons.

The same contention may arise with regard to people with dementia. It may be the case that the capacities necessary for personhood are so diminished in people with dementia that they have lost their personhood. If we take this to imply that the moral status conferred by personhood also ceases to exist, then the moral imperative to provide such individuals with PCC may no longer exist and the

⁷⁵ Singer, P. (2009) Speciesism and Moral Status, *Metaphilosophy*, Vol. 40(3-4); Pp: 566-81

⁷⁶ Gruen, Lori, "The Moral Status of Animals", *The Stanford Encyclopedia of Philosophy* (Fall 2017 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2017/entries/moral-animal/> (last accessed 26/04/2018)

⁷⁷ Frankfurt, H. G. (1971) Freedom of the Will and the Concept of a Person. *The Journal of Philosophy*, Vol. 68(1); Pp: 5-20

⁷⁸ Korsgaard, C. (2013) Personhood, Animals and the Law. *Think*, Vol. 12(34); Pp: 25-32

⁷⁹ Singer, P. (2011) *Practical Ethics*. New York: *Cambridge University Press*

phrase “person-centred care” becomes a misnomer. We might insist that there is still a moral imperative to provide them with PCC, but if it is not based on personhood or something that is unique to humans, then the imperative might also exist for other kinds of “non-persons” (perhaps our pets, wild animals or even plants). Hence, we would be guilty of arbitrariness, partiality and double standards if we only offered PCC to just one particular category of “non-persons” (in this case it is those with dementia who have lost their personhood) without providing a sound reason or argument for such partiality. If the imperative is based on the fact that those with dementia are still human beings we run back into the problem of speciesism.

Definitions of personhood that have been offered in the literature on PCC run into similar problems. Kitwood, in his earlier work, described the dementia sufferer as “a person in the fullest possible sense: he or she is still an agent, one who can make things happen in the world, a sentient, relational and historical being.”⁸⁰ In addition to Kitwood’s definition, Brooker also cites Julian Hughes’ definition in her discussion of personhood, which is that a person is a “situated embodied agent”.⁸¹ Similarly, McCormack’s discussion of personhood also emphasises agency, though he distinguishes action from “will” so as to accommodate cases in which agency may be lacking but the will to turn desires into actions remains.⁸² The problem with such definitions is that they are too broad and would include non-human creatures (or even machines/robots) who are also situated, embodied and sentient agents, capable of having desires or a will to perform certain actions. This leads us back to the same kind of problems I mentioned previously because if we still held the view that we have limited or no moral obligations towards such creatures (which fit the definition “persons”) we would be guilty of arbitrariness, partiality and double standards. Conversely, it might suggest that such creatures ought to be given the same kind of moral consideration as human persons. Furthermore, there is also the problem that as agency diminishes due to the cognitive impairments associated with aging and dementia, then so too does their moral status if it is predicated on some form of agency. However, it is not clear why someone who lacks agency therefore also lacks moral status.⁸³

These difficulties highlight some of the challenges of using a concept like persons or personhood as an ethical and theoretical foundation for PCC. Nevertheless, as it currently stands, “personhood” remains a foundational concept for many ethical debates relating to treatment of both human beings and non-

⁸⁰ Kitwood, T. (1993) Person and process in dementia, *International Journal of Geriatric Psychiatry*, Vol. 8(7); Pg. 541

⁸¹ Brooker, D. (2007) *Person-Centred Dementia Care: Making services better*. Jessica Kingsley Publishers; Pg. 30

⁸² McCormack, B. (2004) Person-centredness in gerontological nursing: an overview of the literature, *Journal of Clinical Nursing*, Vol. 13(3a); Pg:33

⁸³ Higgs, P. and Gilleard, C. (2016) Interrogating personhood and dementia, *Aging and Mental Health*, Vol. 20(8); Pp: 773-80

human beings. It is also the operative concept within PCC, which means that if we are interested in a definition of PCC, we need to understand what it means to be a “person”. Alternatively, we could do away with the idea that dementia care ought to be “person-centred” but this would still leave us with the task of explaining why there is an imperative to offer people with dementia a particular level of care that we are not compelled to offer to objects, plants or non-human animals (i.e. non-persons). If we can articulate the reasons why this is the case then it is those reasons that will contribute towards an operative definition of personhood and PCC.

These challenges are not just theoretical or intellectual in nature. If they are not addressed then it essentially leaves PCC with an incomplete philosophical and ethical foundation, which may give rise to uncertainty about what PCC is, what best practice in aged care consists of (e.g. consider the contentions surrounding CDC discussed in the previous section), and at worst could lead to increased neglect and abuse of people with dementia.⁸⁴

Promoting and Maintaining Continuity of Selfhood

Personhood is often considered as synonymous or very closely related to selfhood. This can be traced back to John Locke who stated that “where-ever a man finds what he calls himself there, I think, another may say is the same Person”.⁸⁵ In this sentence, the terms “himself” and “Person” (or “selfhood” and “personhood”, generally speaking) have the same referent and in this regard they are synonymous and can be used interchangeably. However, the perspectives from which the referent is described are different. The former refers to someone describing themselves from a first-person perspective and the latter refers to someone else describing them from a third-person perspective. This points to an important way in which we might distinguish selfhood from personhood (which I also discuss in more detail in later chapters). The notion of selfhood denotes self-referentiality and is specifically related to having a first-person perspective of some kind. Thus, to describe someone as a self or as having selfhood is also to describe their first-person perspective. In contrast, the notion of personhood is not self-referential and is typically used to describe human beings in the third-person sense. To describe someone as a person or as having personhood is to describe a certain kind of being with a unique moral status (as discussed in the previous section). While such beings are typically

⁸⁴ Motivated in part by the prevalence of abuse in aged care facilities throughout Australia, a Royal Commission into Aged Care Quality and Safety was established on the 8th of October 2018. <https://agedcare.royalcommission.gov.au/Pages/default.aspx> (last accessed, 31/10/2018)

⁸⁵ Locke, J. (1689) *An Essay Concerning Humane Understanding*. In Fuller, G., Stecker, and Wright J. P. (Eds) “John Locke: An Essay concerning Human Understanding”. Routledge: London and New York; Pg. 112

human beings with selfhood, it is not clear whether selfhood, the capacity to have a first-person perspective of some kind, or even membership of the relevant species is necessary for personhood.⁸⁶

Definitions of person-centred care (PCC) have been framed in terms of promoting or maintaining continuity of either personhood or selfhood, where explanations of what this entails are often very similar. This reflects the assumption of synonymy between personhood and selfhood I described above.^{87 88 89} However, there is a sense in which it might be more apt to define dementia as a pathology affecting selfhood rather than personhood, which is reflected in the distinction I alluded to above. Dementia is a pathology that affects our lives in many different and profound ways, but more specifically, it affects our lived-experience of life. For example, it affects our relationships with family and friends, our most important and cherished memories, our independence and autonomy, our sense of identity, and our sense of purpose and meaning in life. In other words, dementia affects our first-person subjective experience of life, which can in turn affect our understanding of who we are (i.e. our sense of personal identity). Given that PCC also stresses the importance of understanding things from the perspective of a person with dementia, the idea that dementia is a pathology affecting selfhood forms a central part of our understanding of dementia. It is no surprise then, that in recent years, “the self” has become an important topic for research in dementia.^{90 91 92 93 94 95}

It is important to understand how people with dementia experience their sense of self because this has implications for how people cope with the illness, how they relate to others, including

⁸⁶ These are all highly contentious matters that are beyond the scope and parameters of this thesis.

⁸⁷ Surr, C. A. (2006) Preservation of self in people with dementia living in residential care: A socio-biographical approach, *Social Science and Medicine*, Vol. 62(7); Pp: 1720-30

⁸⁸ Edvardsson, D., Fetherstonhaugh, D. and Nay, R. (2010) Promoting a continuation of self and normality: person-centred care as described by people with dementia, their family members and aged care staff, *Journal of Clinical Nursing*, Vol. 19(17-18); Pp: 2611–2618

⁸⁹ Reed, P. Carson, J. and Gibb, Z. (2017) Transcending the Tragedy Discourse of Dementia: An Ethical Imperative for Promoting Selfhood, Meaningful Relationships, and Well-Being, *AMA Journal of Ethics*, Vol. 19(7); Pp: 693-703

⁹⁰ Fazio, S. (2008) *The enduring self in people with Alzheimer’s: Getting to the heart of individualized care*. Baltimore, MD: Health Professions Press

⁹¹ Caddell, L. S. and Clare, L. (2010) The impact of dementia on self and identity: A systematic review, *Clinical Psychology Review*, Vol. 30(1); Pp: 113-26

⁹² Caddell, L. S. and Clare, L. (2011) Interventions supporting self and identity in people with dementia: A systematic review, *Aging and Mental Health*, Vol. 15(7); Pp: 797-810

⁹³ Millett, S. (2011) Self and embodiment: A bio-phenomenological approach to dementia, *Dementia*, Vol. 10(4); Pp: 509-522

⁹⁴ Caddell, L. S. and Clare, L. (2013) Studying the self in people with dementia: How might we proceed? *Dementia*, Vol. 12(2); Pp: 192-209

⁹⁵ Brown, J. (2017) Self and identity over time: dementia, *Journal of evaluation in clinical practice*, Vol. 23(5); Pp: 1006-1012

friends, family, and health professionals, and what types of intervention might be appropriate for them. (Caddell and Clare, 2009; Pg. 114)

A recent study by Edvardsson et al (2010) investigated how people with dementia, their family members and care staff in a residential aged care setting (the most relevant “stakeholders”) understood and operationalised PCC. The results indicate that “promoting a continuation of self and normality” is considered to be the core of PCC by those stakeholders.⁹⁶ In a study by Kelly (2010), the quality of interactions between care staff and residents in care facilities were observed and analysed. It was found that where the selfhood of residents was given adequate consideration by care staff (i.e. where the selfhood of residents was particularly salient), the quality of interactions improved, which also led to improvements in residents’ well-being.⁹⁷ A more recent study by Cederval et al (2015) looked at the relationship between physical activity, self and well-being in people with mild Alzheimer’s disease. The results point to the importance of physical activity for maintaining selfhood and well-being.⁹⁸

These kinds of studies take the notion of promoting or maintaining continuity of self or selfhood to mean helping a person with dementia to continue to be who they are, which relates to their past, present and future achievements, roles, activities, preferences, goals, relationships and potential for well-being. Thus, a definition of PCC as primarily concerned with promoting or maintaining continuity of selfhood may offer a slightly more precise and fitting way of understanding PCC (as opposed to promoting one’s personhood). Ultimately, this is because focusing on the self emphasizes the first-person subjective dimension of dementia and the importance of understanding dementia from the point of view of the person with dementia. Not only does this encourage a more empathic understanding of the difficulties and challenges that a person with dementia must endure, it can also motivate a greater commitment towards providing PCC. Indeed, such a definition of PCC is emerging as an operative one in both aged care service and public policy, particularly with regard to the promotion of a more personalised or individualised approach towards aged care. However, as I discussed in a previous section, researchers continue to reiterate the view that this cannot be achieved independently of promoting relationships and psychosocial well-being. Promoting or maintaining

⁹⁶ Edvardsson, D., Fetherstonhaugh, D. and Nay, R. (2010) Promoting a continuation of self and normality: person-centred care as described by people with dementia, their family members and aged care staff, *Journal of Clinical Nursing*, Vol. 19(17-18); Pp: 2611–2618

⁹⁷ Kelly, F. (2010) Recognising and supporting self in dementia: A new way to facilitate a person-centred approach to dementia care, *Ageing and Society*, Vol. 30(1); Pp: 103–124

⁹⁸ Cedervall, Y., Torres, S. and Aberg, A. C. (2015) Maintaining well-being and selfhood through physical activity: experiences of people with mild Alzheimer's disease, *Ageing & Mental Health*, Vol. 19(8); Pp: 679-688

continuity of selfhood also requires promoting or maintaining continuity of the kind of social environment that people with dementia have been accustomed to throughout their life.⁹⁹

Even though focusing on selfhood might offer a little more precision, there are still many significant challenges associated with this approach. Much like the idea of persons or personhood, the self or selfhood is also a philosophically puzzling concept that requires much clarification. This is important, because how we conceive of selfhood affects how we understand, measure and evaluate selfhood in people with dementia. Not having a clear definition of selfhood also makes it difficult to know what it means to promote or maintain continuity of selfhood in the context of PCC. Furthermore, defining PCC in this way implies that it is only applicable to those who still retain a certain degree of selfhood or to those whose selfhood can be restored to some degree. There may be cases where one's dementia is so severe that it results in an irreversible loss of selfhood which means that the idea of promoting or maintaining continuity of selfhood for those individuals is not possible. Hence PCC may not be applicable in every case of dementia but this depends on what we mean by the self.

Interestingly, a systematic review of the literature on the impact of dementia on the self and identity by Caddell and Clare (2010) concluded that while many studies record some degree of deterioration in aspects of self or identity, almost all of them offer some evidence for persistence of self in both the mild and moderate to severe stages of dementia. However, the studies that were reviewed utilise a wide variety of different frameworks and concepts of self, and also describe a variety of specific aspects or phenomena that are more loosely related to selfhood. Frameworks include social constructionism, interactionism, and self as narrative. Concepts include embodied self, narrative self, social self, autobiographical self, conceptual self and identity. Phenomena investigated include, social roles, social personae, social cognition, self-recognition, self-concept, role identity, individual skills, and autobiographical memory.¹⁰⁰ A more recent review by Caddell and Clare (2013) reiterated this problem and so in order to make sense of what is being investigated and discussed, they propose that we apply Ulric Neisser's model of self as a framework for investigating the impact of dementia on the self.¹⁰¹

Neisser's model is one of the most influential models of self in the psychology literature, though it has not been widely applied in dementia research. It describes five dimensions of self (or five types of

⁹⁹ Reed, P. Carson, J. and Gibb, Z. (2017) Transcending the Tragedy Discourse of Dementia: An Ethical Imperative for Promoting Selfhood, Meaningful Relationships, and Well-Being, *AMA Journal of Ethics*, Vol. 19(7); Pp: 693-703

¹⁰⁰ Caddell, L. S. and Clare, L. (2010) The impact of dementia on self and identity: A systematic review, *Clinical Psychology Review*, Vol. 30(1); Pp: 113-126

¹⁰¹ Caddell, L. S. and Clare, L. (2013) Studying the self in people with dementia: How might we proceed? *Dementia*, Vol. 12(2); Pp: 192-209

distinct “selves”). Firstly, there is an “ecological self”, which describes the self as it is experienced and perceived with respect to its physical environment. This includes visual, auditory and kinaesthetic self-awareness. Secondly, there is an “interpersonal self”, which refers to the self that is engaged in social interaction with other people. Thirdly, there is an “extended self”, which refers to the self as experienced across time, which is necessary for the experience of continuity, as well as for identifying past memories and anticipating future events. Fourthly, there is the “private self”, which consists of conscious experiences that are not available to anyone else, such as aspects of perception and action, as well as thoughts, feelings and dreams. Fifthly, there is the “conceptual self”, which refers to a number of abstract representations about oneself, such as roles, traits, identity, personal characteristics, and autobiography. This conceptual self draws together the other four types of information about the self.¹⁰²

One model that has been influential in the dementia literature is Rom Harre’s tripartite model.^{103 104} It has been applied in numerous studies of selfhood in dementia in recent years, including the study by Cedervall (2015), which I described above.^{105 106 107 108 109} The model consists of three kinds of self (Self-1, Self-2 and Self-3), which together constitute a person. Self-1 is described as a “necessary singularity” that constitutes the continuous subjective experience of being a person over time. It is the “point of view from which one perceives the material environment and acts on it” and is linked to personal pronoun use (such as “I”, “me”, “my” and “mine”). Harre also refers to this as the “philosophers’ concept of personal identity”. A number of studies indicate that this Self-1 is preserved in people with dementia even when the ability to use personal pronouns is lost.¹¹⁰ Self-2 refers to the “shifting totality of personal characteristics”, which captures a person’s past and present physical and

¹⁰² Neisser, U. (1988) Five kinds of self-knowledge, *Philosophical Psychology*, Vol. 1(1); Pp: 35–59

¹⁰³ Harre, R. (1991) The Discursive Production of Selves, *Theory and Psychology*, Vol. 1(1); Pp: 51-63

¹⁰⁴ Harre, R. (1998) *The Singular Self: An Introduction to the Psychology of Personhood*. London: Sage

¹⁰⁵ Cedervall, Y., Torres, S. and Aberg, A. C. (2015) Maintaining well-being and selfhood through physical activity: experiences of people with mild Alzheimer’s disease, *Aging & Mental Health*, Vol. 19(8); Pp: 679-688

¹⁰⁶ Skaalvik, M. W., Norberg, A., Normann, K., Fjelltun, A-M. and Asplund, K. (2016) The experience of self and threats to sense of self among relatives caring for people with Alzheimer’s disease, *Dementia*, Vol. 15(4); Pp: 467-480

¹⁰⁷ Hedman, R., Hansebo, G., Ternestedt, B. M., Hellstron, I. and Norberg, A. (2016) Expressed Sense of Self by People With Alzheimer’s Disease in a Support Group Interpreted in Terms of Agency and Communion, *Journal of Applied Gerontology*, Vol. 35(4); Pp: 421-43

¹⁰⁸ Hedman, R., Hansebo, G., Ternestedt, B. M., Hellstron, I. and Norberg, A. (2012) How people with Alzheimer’s disease express their sense of self: analysis using Rom Harre’s theory of selfhood, *Dementia*, Vol. 12(6); Pp: 713-33

¹⁰⁹ Viana, J. N. M. and Gilbert, F. (2018) Deep brain stimulation for people with Alzheimer’s disease: Anticipating potential effects on the tripartite self, *Dementia*, Article first published online: March 11, 2018
<https://doi.org/10.1177/1471301218761147> (last accessed 1/5/2019)

¹¹⁰ Caddell, L. S. and Clare, L. (2010) The impact of dementia on self and identity: A systematic review, *Clinical Psychology Review*, Vol. 30(1); Pp: 113–126

psychological attributes (as well as their beliefs about those attributes) as a unity. Those unities are created from discursive practices of both private thought and interpersonal conversation. Self-2 can be significantly affected by deficits of memory associated with dementia. Self-3 refers to the “totalities of personal impressions we make on other people”. Cederval et al (2015) describes Self-3 as the “self of social roles” or the “social persona”, highlighting the fact that it is this dimension of self that is seriously threatened by dementia due to the way in which people’s perceptions of people affect how others interact with them.¹¹¹

The literature on the self is enormous and numerous models, theories and frameworks from a variety of different disciplines have been proffered. I will discuss this in more detail in the following chapter in an attempt to hone in on the most important aspects of selfhood as it pertains specifically to human beings. In the following section I want to briefly discuss one more issue regarding the ethical grounding for PCC as defined by promoting or maintaining continuity of selfhood. Given that selfhood is in many ways synonymous with personhood (or is understood as the first-person subjective dimension of personhood), the ethical impetus for PCC conferred by personhood, as discussed above, is also conferred by selfhood. However, there is an additional ethical impetus for PCC that is made more explicit by the first-person dimension inherent to selfhood. It is based on an individual’s recognition that they themselves may someday develop dementia and that it is in their own self-interest to be cared for, protected, and to maintain a certain quality of life. Hence the ethical impetus for PCC is also an egoistic one and promoting or maintaining continuity of selfhood can be understood as also upholding one’s interests in the future.¹¹²

Egoistic Imperatives

The adoption and advocacy of person-centred care (PCC) by policy makers is partly motivated by the recent observation of “first wave” baby boomers entering into old age and the impending challenge of meeting their unique and novel aged care needs. Compared to their predecessors (the so called “silent generation”), baby boomers are not only more savvy, assertive, and health-conscious, but also independent, autonomous and demanding. They are likely to insist on various forms of health care and social services that traditionally were not available, while also having certain expectations for their

¹¹¹ Cedervall, Y., Torres, S. and Aberg, A. C. (2015) Maintaining well-being and selfhood through physical activity: experiences of people with mild Alzheimer’s disease, *Aging & Mental Health*, Vol. 19(8); Pg. 680

¹¹² The egoistic imperative can be either an ethical or psychological one. See Rachels, J. (2015) *The Elements of Moral Philosophy (Eighth Edition)*, McGraw-Hill: New York; Pp; 65-67; and Kraut, Richard, "Altruism", The Stanford Encyclopedia of Philosophy (Spring 2018 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/spr2018/entries/altruism/> (last accessed 5/11/2018)

own well-being and quality of life that exceed the expectations of previous generations.¹¹³ Many are in positions where they can directly shape the future landscape of aged care in a way that is tailored to suit the specific needs and interests of themselves and their generation. This is largely due to the fact that those who are currently well-established in their careers, hold positions of authority and power, and have significant influence in relation to public policy, are predominantly baby boomers.¹¹⁴ It reflects the fact that as individuals, we have a natural concern for ourselves and our own well-being. Therefore, while PCC is undoubtedly based on an ethics of altruism (associated with benevolence, beneficence and non-maleficence), there is also an egoistic motivation behind it. This is most apparent when considering the general rationale offered for consumerist models of PCC. Such models confer on individuals a greater level of responsibility for their own care provisions by placing them at the centre of the decision-making process. The individual, as a client of aged care, must decide which services will best serve their interests in both the short-term and long-term. The most viable aged care providers will be the ones who are best able to cater to their clients' current and foreseeable needs, as defined by the client themselves.

However, the notion that a person can have egoistic concerns assumes they will remain one and the same person in the future, i.e. their personal identity persists over time. Thus, it only makes sense for a person to have this kind of egoistic imperative if they maintain a sense of identity with their future selves, which is the very thing that dementia threatens to diminish. For most of us this is an incontrovertible assumption but it does raise the question of what is required for personal identity to persist over time. This is a central topic in analytic philosophy and the predominant view is that the persistence of personal identity over time requires psychological states of a certain kind (typically associated with our memories) that connect our past, present and future. However, it may be the case that as time progresses our memories become so diffuse that we lose those psychological connections and can no longer identify with our past in any substantive way. As a result, we will have lost our personal identity and can therefore no longer be considered the same person. This kind of psychological disconnectedness that results in a loss of personal identity might also be caused by deficits associated with dementia. In either case, it no longer makes sense for one to be currently concerned, on the basis of egoistic self-interest, with receiving a certain standard of aged care in the future. This is because there is a real sense in which future care provisions (established in the present out of egoistic concern) will not be reaped by oneself but will in fact be reaped by some "other" person (formerly oneself or a descendent of oneself). In this regard, the desire to receive appropriate aged

¹¹³ Kahana, E. and Kahana, B. (2014) Baby Boomers' Expectations of Health and Medicine, *Virtual Mentor*, Vol. 16(5); Pp: 380-84

¹¹⁴ For a recent critique of how baby boomers have shaped policy in the United States see Gibney, B. C. (2017) *A Generation of Sociopaths: How the Baby boomers Betrayed America*, Hachette Books: New York

care in future will no longer matter to us in the same way as it would if we were one and the same person receiving the care. It would only matter to us in an altruistic or “other-regarding” sense, which may not provide us with the kind of impetus we need for effective implementation of PCC.¹¹⁵

Nevertheless, it is unlikely that such considerations will give us cause to question the egoistic impetus for PCC. This is because the idea that our personal identity persists over time is a deeply intuitive and ingrained assumption that underpins every aspect of our practical, social, moral and political lives. Furthermore, it is unclear whether our concept of personal identity can be understood independently of those practical aspects of our lives (I will discuss this idea in more detail in Chapter 4). For these reasons it is unlikely that there will be such a radical shift away from this intuitive assumption about the persistence of personal identity and its connection with our egoistic motivations. However, what is likely to be of practical relevance is how a loss of personal identity might affect our understanding of what it means to promote or maintain continuity of personhood or selfhood and how this will translate into practice. To illustrate this point, we might ask the following question: Whose personhood or selfhood are we promoting or maintaining? There are two ways to answer this question depending on whether there is continuity of personal identity or not. Where there is continuity of personal identity, the answer will be that we are promoting or maintaining the personhood/selfhood of one and the same person/self (i.e. the same person/self they have always been). This presumably is what most PCC theorists are advocating for, especially given the emerging view that the self and identity (or at least some aspects of them) remain intact or persist in those with severe dementia.¹¹⁶ In contrast, where there is discontinuity or loss of personal identity, the answer will be that we are only able to promote or maintain the personhood/selfhood of what is essentially a different or other person/self (i.e. they are no longer the same person/self as they were), or no person/self at all (i.e. they have lost all semblance of personhood or selfhood). On the one hand, this might imply a tangible difference to the kind of care offered to such individuals because a loss of personhood or selfhood means that it no longer makes sense to promote or maintain its continuity. On the other hand, such individuals might still be cared for in a way that assumes the persistence or continuity of their personal identity, but the rationale for this cannot be based on the kind of egoistic concerns associated with persistence or continuity of personal identity. The rationale is primarily an altruistic one (I explore this issue in more detail in the concluding and final chapter).

¹¹⁵ In Western societies, dependence on altruism has often yielded sub-optimal outcomes, for example, regarding organ donation. See Caplan, A. L. and Virnig, B. (1990) Is Altruism Enough? *Critical Care Clinics*, Vol. 6(4); Pp: 1007-1018; Schwartz, B. (1993) Why Altruism Is Impossible...and Ubiquitous, *Social Service Review*, Vol. 67(3); Pp: 314-343; Machan, T. R (2006) Altruism’s Bad Influence, *Free Inquiry*, Vol. 26(6); Pg. 24

¹¹⁶ Caddell, L. S. and Clare, L. (2010) The impact of dementia on self and identity: A systematic review, *Clinical Psychology Review*, Vol. 30(1); Pp: 113–126

The nature of egoistic and altruistic imperatives and their relation to each other is an interesting and complex debate. According to some philosophers, traditional moral philosophy is framed in a way that circumscribes the individual from the collective, and as a result, the actions and motivations of individuals are typically explained from within a psychological framework. This way of framing the issues has given rise to contentions about whether genuine altruism is possible or whether our ethical beliefs are solely motivated by egoistic ones. Thomas Hobbes, the 17th century British philosopher, was a particularly influential voice on this matter. He saw morality as a means by which self-interested individuals could live cooperatively and peacefully within societies.¹¹⁷ Nevertheless, contemporary moral philosophy regards altruism and impartiality as a normative standard. However, it is often the case that egoistic imperatives are more motivating than altruistic ones, which could be partly attributed to our individualistic values and lifestyles (particularly in the West). There is also the view that for the most part, egoistic imperatives are justified in and of themselves, whereas altruistic imperatives require further justification.¹¹⁸ It is beyond the scope of this thesis to discuss these matters in any further detail but these considerations determine the kind of ethical impetus that exists for PCC.

The impetus for any policy (or cause) and its advocacy is ultimately grounded in a set of philosophical and ethical premises. Hence it is important to have a clear understanding of the relationship between philosophy, ethics and policy. PCC as a framework for dementia-care and aged care policy is first and foremost motivated by a sense of compassion and goodwill towards fellow human beings who find themselves in a particularly vulnerable state. In this regard it is fundamentally based on an ethic of altruism, beneficence and non-maleficence. Additionally, we know that there is a possibility that we will find ourselves in the same vulnerable predicament as those people with dementia, whose struggles are now beginning to occupy a prominent position in both our private and public conscience. Hence PCC is also based on an egoistic imperative, motivated by a forward-looking sense of self-concern or prudential concern.

¹¹⁷ However, whether his moral and political theory is based on psychological egoism is subject to ongoing debate. See, Gert, B. (1967) Hobbes and Psychological Egoism, *Journal of the History of Ideas*, Vol. 28(4); Pp: 503-520; Chung, H. (2016) Psychological Egoism and Hobbes, *Filozofia*, Vol. 71(3); Pp: 197-208; Lloyd, Sharon A. and Sreedhar, Susanne, "Hobbes's Moral and Political Philosophy", *The Stanford Encyclopedia of Philosophy* (Summer 2018 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/sum2018/entries/hobbes-moral/> (last accessed 5/11/2018)

¹¹⁸ Kraut, Richard, "Altruism", *The Stanford Encyclopedia of Philosophy* (Spring 2018 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/spr2018/entries/altruism/> (last accessed 5/11/2018)

Aim and Structure of Thesis

General and Specific Aims

The philosophical and ethical foundations of person-centred care (PCC) are discussed primarily within disciplines associated with clinical practice and social advocacy (e.g. social gerontology, aged care, nursing, social work, social psychology and psychotherapy). Most of those discussions focus on reiterating the fact that people with dementia are still persons and that the ethical basis of PCC consists in and is implied by their personhood. However, as highlighted previously, discussions of personhood are often based on the adoption of conceptions of personhood that are either very general, platitudinous, relatively unsophisticated or highly contentious from a philosophical standpoint. The recent focus on selfhood represents a shift away from this ethical focus to a more practical focus in which a concerted effort has been made to articulate more precisely what PCC consists of. However, the self and the nature of selfhood is just as complex and contentious as personhood and also just as vulnerable to dementia. Despite these being central topics in philosophy, there has been very little attempt by philosophers or ethicists to apply much of their insights towards better understanding the philosophical and ethical foundations of PCC. This reflects a broader concern about the need for a more detailed and enriched philosophical perspective applied to a range of matters relating to aged care and dementia.¹¹⁹

The general aim of my thesis is to understand what it means to be a self (or to have selfhood) and what it means to promote or maintain its continuity in the context of PCC. The methodology I use is a specific kind of philosophical approach towards investigation that is aimed at promoting a conceptually and scientifically rigorous understanding of the relevant issues.¹²⁰ This inevitably requires one to draw on concepts, theories, frameworks and empirical evidence from a wide variety of disciplines.¹²¹ An important virtue of such an approach is that the outcomes tend to be amenable to further exploration and analysis within and across those disciplines, while also potentially paving the way for new disciplines to emerge. The specific aim of my thesis is to use this methodology to develop a theoretical framework that describes the nature of human selfhood and its development across lifespan. I will draw on concepts, theories, frameworks and empirical evidence, from disciplines such as analytic philosophy, continental philosophy, cognitive neuroscience, developmental

¹¹⁹ This has been highlighted by Julian Hughes in a recent review. See Hughes, J. C. (2013) Philosophical issues in dementia, *Current Opinion in Psychiatry*, Vol. 26(3); Pp: 283-8

¹²⁰ Peterson, G. (2013) Philosophical Naturalism. In Runehov, A. L. C. and Oviedo, L. (Eds) *Encyclopedia of Sciences and Religions*. Springer, Dordrecht

¹²¹ Perhaps such an approach is implicitly “trans-disciplinary” or even “post-disciplinary”.

psychology, social psychology, and lifespan development. I then conclude by discussing some of the ways that this can inform our understanding of the ethical basis of PCC and how it might shape our approach towards PCC.

Chapter Structure

In Chapter 1, I present a general survey of the literature on selfhood and personal identity. Given that the breadth of the literature is enormous, in which a plethora of ideas, theories and conjectures are available, I will only focus on those perspectives that are relevant to my thesis. Nevertheless, the survey will still be quite broad in scope and will introduce a large variety of important topics and issues that I discuss in more detail in subsequent chapters. However, one of the issues that I do address at the outset is a terminological one relating to how we understand terms such as “the self” (or “selfhood” and “selves”) and “personal-identity”. Researchers from different disciplines tend to use such terms idiosyncratically, so it is not always clear what they are referring to and whether they are referring to the same thing. Hence one of my aims in this chapter is to clarify what researchers mean when they use such terms.

An important issue that I introduce in this chapter is whether there is a stable self that persists over time. Not only is this a fundamental question about the nature of selfhood, it is also a condition on which the rationale for person-centred care (PCC), and the egoistic imperative underpinning it, is based. For if there is no stable self that persists over time then it makes little sense, from an egoistic perspective, to try to promote or maintain its continuity. This issue relates to the question of how selfhood is constituted and so in the second half of the chapter I discuss a variety of perspectives that address this question. Some of those perspectives are controversial and conflict with other perspectives. For example, there are competing constructivist and social constructionist frameworks that explain how selfhood is constructed. However, in later chapters, I will show how both of those perspectives can help us understand the nature of selfhood in human beings, how it is constituted, and how it is maintained.

In Chapter 2, I focus on the fundamental elements of selfhood drawing from some basic insights in contemporary philosophy of mind and cognitive science. I then discuss a particular conception of selfhood known as the “minimal self”, which constitutes an important biological and phenomenological basis for selfhood in all sentient beings. I point out that such a conception does not capture what is unique about selfhood in human beings, which is associated with reflective, discursive, rational, agential, social and moral phenomena, all of which shape the quality and experience of

human subjective lives. It is in virtue of certain cognitive capacities, which as far as we know, only human beings possess, that such a complex multidimensional form of selfhood is possible. I discuss some of those cognitive capacities and argue that selfhood in human beings must be understood accordingly.

Understanding how human selfhood is constituted also requires an understanding of its ontogeny, which I discuss in the final section of this chapter. Here I describe how a rudimentary form of human selfhood, which I refer to as the “minimal human self”, emerges during early childhood development coinciding with the development of nascent forms of the unique human cognitive capacities I referred to above. The development of the minimal human self (or minimal human selfhood) can be understood primarily as a neurobiological achievement but it is also scaffolded by interpersonal and environmental interactions. This highlights the fact that development of human selfhood is socially situated from the earliest stages of ontogeny through to adulthood.

In Chapter 3, I discuss this socially situated developmental process in more detail. I begin by describing how the development of minimal human selfhood during infancy and early childhood can be considered a construction. However, I argue against the application of either social constructionist and constructivist theories, favouring instead a framework from developmental cognitive neuroscience known as “neural-constructivism” or “neuroconstructivism” (I will use the latter). In the second part of this chapter, I describe how a more developed, mature and socially situated selfhood emerges from the complex interactions between biological, psychological and social factors, involving both constructivist and social constructionist elements. This kind of selfhood might be understood as a psychosocial or biopsychosocial phenomenon, but it fails to capture the essential feature of human selfhood, which is the hermeneutical sense of self-awareness that enables one to construct a first-person subjective sense of personal identity. Given that our sense of personal identity (understood in this first-person subjective sense) is understood as having the form of a temporally extended (or diachronic) autobiographical narrative, I borrow the phrase “sociobiographical self” to describe human selfhood so as to capture both the socially situated and autobiographical dimensions. This provides us with the basis of a theoretical framework for understanding what it means to be a uniquely human self in its mature and fully developed multidimensional form.

A problem I highlight in this chapter is the difficulty of trying to understand human selfhood in terms of the constructivist and social constructionist dichotomy. Neither perspectives alone provide an adequate account of the development and constitution of sociobiographical selves. Thus, in Chapter 4, I develop and propose an alternative theoretical framework that explains how sociobiographical selves are constructed, which I refer to as “narrative constructivism”. It describes our capacity to

reflect on our past, present and future experiences, to make sense of them and to evaluate them, and ultimately to represent them in the form of autobiographical narratives. Not only does this process confer on us a sense of personal identity, it also enables us to make decisions and to act in accordance with it. This is why some philosophers use the phrase “practical identity” or “narrative identity” (I will use the latter) to describe how our sense of personal identity is entwined with our capacity for agency. Thus, our sense of personal identity can be understood as both represented in the autobiographical narratives that we construct and enacted in the decisions we make as agents. My framework expands on this notion of narrative identity to describe how it also plays a continuous role in shaping the development or construction of our narrative identities over time. This can be thought of as an auto-hermeneutical process driven by what I refer to as our “narrative agency”.

A rudimentary capacity for narrative agency emerges during early childhood (as part of minimal human selfhood) and continues to develop during adolescence and emerging adulthood. During adolescence, socialisation processes are highly influential in shaping us into social beings, preparing us for a highly interpersonal and social adult life. This in turn shapes our capacity for narrative agency and thus greatly influences the way in which we construct our narrative identities. This reiterates the fact that narrative identity is socially situated, and that human selfhood is sociobiographical. Narrative constructivism describes the process by which we, as narrative agents, construct our narrative identities within developmental and social contexts so as to yield a sociobiographical self. This provides us with a theoretical framework for understanding how human selfhood (in its sociobiographical form) is constructed during adolescence and emerging adulthood, and how we as narrative agents play a central role, not only in its initial construction, but also, in its ongoing construction, modification and maintenance during mature adulthood. It is a framework that captures what is important in both constructivist and social constructionist perspectives and is broadly consistent with an emerging framework in lifespan developmental psychology known as “biocultural co-constructivism”.¹²²

In the second half of Chapter 4, I demonstrate how my framework integrates various theories from philosophy of mind and cognitive neuroscience (which I discussed in Chapter 2) with existing theories of narrative selfhood in philosophy. This discussion is particularly important because of its relevance to the idea that PCC is partly underpinned by an egoistic imperative, which I discussed at the start of this introductory chapter. As I mentioned in that discussion, such an imperative depends on the possibility of maintaining our sense of personal identity over time, which is the very thing that is

¹²² Baltes, P. B., Reuter-Lorenz, P. A. and Rosler, F. (2006) *Development and the Brain: The Perspective of Biocultural Co-Constructivism*. Cambridge University Press: New York

threatened by dementia. However, if the autobiographical narratives that constitute our narrative identity enable us to somehow unify our past, present and future lives, then this might be precisely what is required for us to maintain our personal identity over time, and for the egoistic imperative to remain relevant. Narrative constructivism provides the framework for understanding how this might be achieved and thus how sociobiographical selfhood can be maintained or promoted in later life when it starts to diminish due to age-related decline and dementia.

In my concluding chapter, I return to the general issues that I introduced in this introductory chapter, which motivated this thesis. I discuss what it means to promote or maintain continuity of selfhood and personhood in the context of PCC, with specific reference to how this translates to situations where a person with dementia has either retained or lost a substantive amount of their selfhood (more specifically their narrative identity). I argue that while it is possible for a person with dementia (especially in its advanced stages) to lose both their selfhood and their capacity to maintain or promote its continuity (i.e. their narrative agency), there is a sense in which they still retain their personhood. This is based on the idea that selfhood and personhood can be distinguished in the way that I alluded to earlier in this introductory chapter. I argue that PCC, in this context, can be defined more specifically as primarily concerned with promoting or maintaining personhood as distinct from selfhood and I discuss what this might look like. The discussion in this chapter will constitute some important initial steps in the development of a more comprehensive philosophical and ethical understanding of PCC.

Chapter 1 - Varieties of Self

Introduction

“The self” or “selfhood” (the quality of being a self) is a topic of great interest in a wide range of disciplines, particularly in analytic philosophy, phenomenology, psychology, cognitive neuroscience and sociology.¹²³ There are questions about the metaphysics of self, particularly whether it is a unified entity and whether it persists over time as one and the same entity, whether the self is real or an illusion and thus yielding either realist or anti-realist conceptions of the self respectively. There are questions about what kind of phenomenon the self is, whether it is an actual physical/biological entity or merely a fictional abstraction, whether it consists in immanent self-consciousness or something more, and whether it is a psychological or social construction. However, despite the enormous amount of literature on the self, spanning those various disciplines and more, there is not yet a clear understanding, definition or conceptualization of the self. Instead there is a fragmented understanding of the self, where “the self” can refer to various distinct conceptions of selfhood or various distinct (though often related) phenomena associated with selfhood, such as personhood, subjectivity, self-consciousness, self-awareness, self-representation, self-concept, personal identity and agency. Stanley Klein, a philosopher and neuropsychologist, states that “there is perhaps no term in psychology that is more widely used, yet less well-understood, than ‘self’”.¹²⁴ Roy Baumeister, a social psychologist, has gone so far as to state that the thousands of journal articles dealing with the self seem to make the answer to the fundamental question “what is the self?” more elusive than clear.¹²⁵

Despite these difficulties, “the self” is a phrase commonly used and understood in our normal everyday human lives, in which it functions as an indispensable part of how we, as human beings, understand and describe our thoughts, beliefs, and experiences, as well as our place in the world and our relations to others. Given this, it seems we have little choice but to take seriously the fact that we *deal* in the concept of “the self”, and therefore, must try to understand what such a “self” consists in (even if it turns out to be an illusion). As Rom Harre states: “it may be that there is no better way of talking about certain common features of human interaction than some form of 'self' talk”.¹²⁶ With

¹²³ I use the terms “self” and “selfhood” interchangeably in this thesis.

¹²⁴ Klein, S. B. (2012) The self and science: Is it time for a new approach to the study of human experience? *Current Directions in Psychological Science*, Vol. 21(4); Pg. 253

¹²⁵ Baumeister, R. F. (1998) The self. In D. T. Gilbert, S. T. Fiske, and G. Lindzey (Eds) *Handbook of social psychology 4th ed.* New York: McGraw-Hill; Pg. 680

¹²⁶ Harre, R. (1998) *The Singular Self: An Introduction to the Psychology of Personhood.* London: Sage; Pg. Preface

this in mind, one way to avoid difficulty and confusion is to take the view that much of the literature on the self is not so much concerned with offering formal definitions or conceptions of the self, but more concerned with discussing various “self” related phenomena (which we are more likely to have a clearer understanding of). We can then relate our investigation to those “self” related phenomena instead of trying to relate them to contentious concepts or definitions of the self. Hence when one observes the terms “self” or “selfhood” in various discussions and investigations, rather than assuming that a particular definition or conception of self is being applied, one might regard those terms as interchangeable or synonymous with various “self” related phenomena, some of which will be more relevant to our everyday “folk” understanding of the self than others.

The aim of my thesis is to make sense of this talk of “self” in the way I have just described, and to apply it to understanding what it means to promote or maintain continuity of selfhood in person-centred care (PCC). The survey of the literature on the self in this chapter proceeds with this goal in mind. It covers a broad range of relevant perspectives on selfhood and “self” related phenomena and will serve as the introductory background to the discussions in later chapters.

Historical Perspectives

The Essence of Selfhood

Ancient and medieval thinkers held a notion of the self as something spiritual or immaterial. For example, Plato equated the essential self with the idea of a soul, which is distinct from the body. This distinction is made in accordance with his well-known theory of the “Forms” in which he distinguishes between the world of every-day material objects, which are imperfect and ever-changing, and the world of ideas or concepts, which are immaterial, permanent and perfect. He regarded the body as a deficient copy of the soul, which was perfect in form, immortal, immaterial, divine, existing prior to incarnation into a body and surviving bodily death. In contrast, Aristotle’s view was that “form” is instantiated in “matter”. Hence the soul was thought to be integrated and unified as a whole with the body, and the self was thought to be a hylomorphic composite of body and soul.¹²⁷ The relationship between body and soul, and the matter of personal immortality were of particular interest to Christian philosophers throughout the medieval period. For example, St. Augustine (354-430), despite his Neoplatonic view of the primacy of soul over body, believed that personal immortality (i.e.

¹²⁷ Sihvola, J. (2008) Aristotle on the Individuality of Self. In “Ancient Philosophy of the Self”, *The New Synthese Historical Library*, Volume 64 of the series; Pp: 125-137

“resurrection”) required the continuation of both the immaterial soul and the very same material body. This became an integral and enduring dogma of Christianity.¹²⁸

Descartes has been cited as the first major thinker to start using the word “mind” (or in Latin, *mens*) as an alternative to the word soul (*anima*).¹²⁹ His influential analysis set the agenda for centuries of contention about the nature of the self in the modern and postmodern era. In attempting to establish an infallible foundation for human knowledge, Descartes adopted a method involving the application of hyperbolic doubt so as to isolate that which could not be doubted. This led him to claim that it was possible to imagine/conceive of himself not having a physical body, but that it was impossible for him to imagine/conceive of himself not having a mind. This is because, in virtue of calling everything into doubt (his body, his entire world and his very own existence), he finds that he, as the “I” who doubts (the *cogito*), necessarily exists. This idea is contained in the famous dictum “I doubt, therefore I am”. Thus, Descartes concluded that it is possible for the mind to exist independently of a physical body, which according to him, implies that physical properties are not essential to the mind and that the mind must therefore be a non-physical substance. Hence for Descartes, the essence of the mind is thought, whereas the essence of physical matter is spatial extension, and this implied a metaphysical distinction between conscious subjective experience and objective reality.

Descartes’ epistemological and metaphysical analysis thus led him to conclude that the mind was an immaterial substance, unified, stable, and existing over time independently of the body and hence distinct from the material/physical world. This is known as mind/body dualism or substance dualism. Furthermore, because the mind is essential to the thinking/doubting subject (the *cogito*) it is also synonymous with the self (or the soul). Hence this kind of self, conceived of as the thinking/doubting *Cogito*, the “I” who doubts, the Cartesian subject, is essentially distinct from its body (and other objects in the world), and yields a distinction between subject and object.

Though the idea of substance dualism and the non-physical soul is no longer considered plausible within most of contemporary analytic philosophy, the distinction between subject and object persists in various iterations. In large part this is based on intuition. Conscious experiences feel as though they are connected to a distinct, stable, unified, whole, i.e. a monolithic entity that we call a “self”. When we reflect on the quality of our experiences and perceptions of objects in the world, there is an inescapable sense that those experiences and perceptions belong to such a self, which we think of as essentially distinct from the objects it perceives (including its own body). However, Hume famously

¹²⁸ Barresi, J. and Martin, R. (2011) History as Prologue: Western Theories of the Self. In Gallagher, S. (Ed) *The Oxford Handbook of the Self*. New York: Oxford University Press; Pp: 33-56

¹²⁹ Ibid. Pg. 39

argued that when we look inwardly to try to observe the self, we find that there is nothing that resembles the self as such. Rather, we find that there are various sensations or experiences in succession, which may give us the impression that those successive experiences reflect changes in the same thing (i.e. a self), but according to Hume, this does not demonstrate that there is such a self. As Hume states, "I can never catch myself at any time without a perception, and never can observe anything but the perception."¹³⁰ Hence, the idea of a single, unified, temporally extended, monolithic self is repudiated by Hume. On this view, our apparent selfhood is constituted by a bundle of mental states that are related by psychological connectedness or contiguity (referred to as Hume's "bundle theory" of the self) and we distinguish ourselves from each other via the unique bundle of mental states that we are constituted by.¹³¹

However, this idea poses a dilemma with regard to how we understand personal responsibility. Locke pointed out that we attribute personal responsibility to that which has ownership and agency over their actions and extends itself beyond present existence, such that it can be identified as responsible for actions in the past, present and future. This requires that there must be a single, unified, temporally extended entity, i.e. a person, rather than particular bundles of mental states. Hence Locke's conception of the self is a forensic conception (framed in terms of personhood).^{132 133}

Person, as I take it, is the name for this self. Wherever a man finds what he calls himself, there, I think, another may say is the same person. It is a forensic term, appropriating actions and their merit; and so belongs only to intelligent agents, capable of a law, and happiness, and misery. (Locke and Nidditch, 1975; Book 2, XXVII, Sec. 26)

Kant had also argued for a similar concept of self or persons (though a transcendental one), not just for moral responsibility, but also as a way of explaining the unity of conscious experience and as a condition of the possibility of such experiences. According to Kant, our conscious experiences are not merely representations but must be represented to someone. Hence conscious experiences and their unity must have a single common subject.¹³⁴

¹³⁰ Hume, D. A. *Treatise of Human Nature*, Book 1, Part IV, Section VI Everyman Edition (Ed Lindsay); Pg. 240

¹³¹ Searle, J. R. (2000) *The Self as a Problem in Philosophy and Neurobiology*. In T. E. Feinberg and J. P. Keenan (Eds) *The Lost Self: Pathologies of Brain and Identity*, Oxford: Oxford University Press; Pg. 8

¹³² Locke, J. and Nidditch, P. (1975) *An essay concerning human understanding*. Oxford: Clarendon Press

¹³³ As stated in the previous chapter, this gives us a way in which we can distinguish selves from persons in terms of identifying persons from a first-person versus third-person perspective, respectively.

¹³⁴ Brook, Andrew, "Kant's View of the Mind and Consciousness of Self", *The Stanford Encyclopedia of Philosophy* (Winter 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2016/entries/kant-mind/> (Last accessed 20/6/2018)

The unity that makes a person or a self the appropriate object of attributions of responsibility, reward, punishment and conscious experiences, consists in the persistence of their “personal identity” over time.¹³⁵ “Personal identity” in this context refers to a person’s numerical identity, which is the idea that when a person changes over time they still remain one and the same person. For example, when a person changes, such as if they have a haircut, lose a limb, or grow older, we still consider them to be one and the same person. Thus, a person can change over time to become qualitatively different while remaining numerically identical to the person prior to the change.¹³⁶ In this regard, they can also be considered to have literally survived over time. Much of the discussion of personal identity in contemporary analytic philosophy has been concerned with identifying the conditions on which personal identity persists over time. This has been referred to as the “persistence question of personal identity”.¹³⁷

Personal identity understood as numerical identity is typically distinguished from another notion of “personal identity” understood as one’s first-person subjective sense of self or identity (i.e. the answer to the question “who am I?”). The former refers to a metaphysical notion of personal identity in which a person is viewed as a metaphysical object, whereas the latter refers to a psychological notion of personal identity associated with various kinds of self-awareness or self-understanding. While this psychological notion of personal identity is an important topic in psychology and the social sciences, it is also the focus of much discussion and debate within both analytic philosophy and also continental philosophy, particularly phenomenology. I provide an overview of those discussion in the following sections.

The Phenomenology of Selfhood

William James’ work contributed significantly towards the disciplinary demarcation that took place in the early 20th century, between philosophy understood as conceptual analysis (or what some might regard as “philosophical speculation”) and what we now understand as empirical or experimental

¹³⁵ Personhood, selfhood and personal identity are used interchangeably in this context. However, I shall later distinguish selfhood from personhood as the first-person subjective aspect of personal identity.

¹³⁶ Generally speaking, numerical identity refers to the idea that an object A can change qualitatively over time, but remain numerically the same object and numerically distinct from another object B, no matter how qualitatively similar object A is now to object B. For example, consider two copies of the same book or identical twins, which are qualitatively identical but numerical distinct.

¹³⁷ Olson, Eric T., "Personal Identity", The Stanford Encyclopedia of Philosophy (Summer 2017 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/sum2017/entries/identity-personal/> (last accessed 13/02/2018)

psychology.¹³⁸ ¹³⁹ This is exemplified in James' own work, particularly his doctrine of "radical empiricism", which postulates that "the only things that shall be debatable among philosophers shall be things definable in terms drawn from experience". What makes his empiricism "radical" is his claim that "the relations between things, conjunctive as well as disjunctive, are just as much matters of direct particular experience" and that "therefore, the parts of experience hold together from next to next by relations that are themselves parts of experience". Hence for James there is no "unifying agent" outside of experience that is required to explain the conjunction of experiences.¹⁴⁰ These ideas are also connected to his pragmatist views about truth relations and his phenomenology, where he discusses the nature of the distinction between experiences and their content, which includes the Cartesian subject/object distinction (i.e. "knower" and "thing known"). James regarded this as an example of the pluralistic nature of phenomenological experience rather than a dualism between subject and object.¹⁴¹

On the topic of the self, James proposed a multidimensional conception, beginning with the widest possible definition of the self, which he describes as "the sum total of all that he can call his" (which includes one's body, thoughts, family and material possessions). He then describes the components of this self as consisting of a "material self" (referring to one's body, possessions and the people in one's life), the "social self" (referring to one's social roles and relations), the "spiritual self" (referring to one's thoughts, beliefs, values, dispositions and sense of identity), and finally, the "pure ego" (the subject to whom all of the previous conceptions of self belong). The pure ego is the *subject* of thought, which James describes as the "I". The subject "I" can also become an *object* of thought, which James describes as the "me" (or the "empirical ego"), which is the self of the material, social and spiritual dimensions.¹⁴² James was also aware of the significant practical dilemma that the Humean conception of self posed for our understanding of personal identity as numerical identity.

If with the Spiritualists, one contend for a substantial soul, or transcendental principle of unity, one can give no positive account of what that may be. And if, with the Humeans, one deny such a principle and say that the stream of passing thoughts is all, one runs against the entire

¹³⁸ "William James (1842-1910)" by Wayne P. Pomerleau, *The Internet Encyclopedia of Philosophy*, <http://www.iep.utm.edu/james-o/#SH2a> (Last accessed 31/10/2017)

¹³⁹ It is in this regard that some distinguish James' approach towards investigation as more "scientific" than "philosophical" though given the nature of philosophical inquiry by the latter part of the 20th century, such a distinction had become anachronistic. See Appiah, K. A. (2008) *Experiments in Ethics*. Harvard University Press

¹⁴⁰ James, W. (1909) *The Meaning of Truth*. New York: Longmans, Green, and Co.; Pp: xii-xiii

¹⁴¹ James, W. (1904) Does "consciousness" exist? *Journal of Philosophy, Psychology, and Scientific Methods*, Vol. 1(18); Pp: 477-491

¹⁴² James, W. (1890) *The Principles of Psychology*. New York: Dover Publications

common-sense of mankind, of which the belief in a distinct principle of selfhood seems an integral part. (James, 1890; Pg. 330)

For James it was the “warmth” and “intimacy” of one’s stream of conscious thoughts and experiences (linked to bodily integrity) that is experienced as a “subjective synthesis”, which thus enables a subject to identify past and present experiences as belonging to them rather than someone else. However, James also acknowledges that there must be a “transcendent” or metaphysical dimension (an “arch-ego”) that functions as a medium to “fuse” different sections of the stream of consciousness, much like how a herd of cattle requires an owner so as each beast can be identified as part of the same herd that belongs to the owner. However, the notion of “transcendent” or metaphysical “arch-ego” in this sense is a purely functional one and does not necessarily imply a transcendental/metaphysical dualism.

These views of the self would serve as an important foundation for the subsequent phenomenological tradition of philosophical and psychological investigation of which Edmund Husserl is regarded as the founding father. A central feature of Husserl’s phenomenology was the application of Brentano’s principle of “intentionality” to conscious experiences, i.e. that our conscious experiences and impressions were always “about” something or “directed at” something. According to Husserl, our conscious experiences were not merely sensations or sense data devoid of any meaning, but rather, they were experiences of stable objects or of things in and of themselves. Hence for Husserl, our conscious experiences were fundamentally meaningful.

In what is referred to as his “transcendental turn”, Husserl points out that we have a certain “natural attitude” towards objects in the world, which we take for granted as existing independently of the mind (akin to a stance of naïve realism). However, much like Descartes, he recognised that we can be deceived and thus we can doubt the veracity of our beliefs and perceptions. Hence, one may justifiably suspend one’s beliefs about the ontological status of objects, which is what Husserl refers to as the method of *epoche* or “bracketing” - i.e. adopting a “detached” or “impartial” attitude towards the view of the world as existing independently of the mind. What one is left with (what cannot be “bracketed”) are those subjective experiences and impressions that one is presented with, that which cannot be meaningfully doubted. This idea would serve as Husserl’s epistemological foundation (“principle of principles”) and motivate his phenomenological dictum that “everything intuitively presented is to be accepted as true as it presents itself and only so far as and in the manner in which it presents itself”.¹⁴³

¹⁴³ Drummond, J. J. (2008) *Historical Dictionary of Husserl’s Philosophy*. Lanham, Md.: Scarecrow Press; Pg. 170

The ultimate goal for Husserl's phenomenology was to understand and identify that which underpins all conscious experience (the preconditions of their existence or their essence). This is what is referred to as the "pure ego" or "transcendental ego", which is also "bracketed" from conscious experience. Of course, as Husserl states, it is impossible to find such a pure ego in conscious reflection because the intentional structure of consciousness yields not the pure ego but an intentional object - what is referred to as an "empirical ego". The phenomenologist is supposed to distinguish ("bracket") conscious experience from the objects that those experiences are directed towards. That which appears when our own experiences and subjectivity become the intentional objects of consciousness is merely the "empirical ego". The pure ego cannot be understood or identified in this way (as the object of consciousness) but rather it is given, immanent, presupposed, and understood as an implicit self-appearance ("Für-sich-selbst-erscheinen").¹⁴⁴

Husserl's ideas were influential in shaping subsequent, though divergent, phenomenological traditions. In particular are the so called "existential" and "hermeneutical" phenomenologists who vehemently challenged the Cartesian distinction between subject and object, and Husserl's "neo-Cartesian" distinction between a transcendental and empirical ego, and whose ideas contributed significantly to postmodernism in philosophy.¹⁴⁵ For example, Jean Paul Sartre, like Husserl, also distinguished between the immanence of consciousness and the consciousness of intentional objects. However, he did not identify the pure ego with the immanence of consciousness (thus denying the Cartesian, Kantian and Husserlian idea of a transcendent ego). Rather, he understood it to be merely a pre-comprehension of the self, which enables it to be the object of reflection (resulting in the "empirical ego"). Sartre thus argued that the "I", which served as the epistemological subject of Descartes' (i.e. the Cogito or the "I" who thinks or doubts), was therefore in fact, an object rather than a subject. Sartre also believed that this undermined the certainty and privileged access that the subject "I" had to itself, which was the very basis of Descartes' epistemology.^{146 147}

Martin Heidegger (who was a student of Husserl's) recast the idea of self as necessarily situated within the world and thus inseparable from social, psychological and historical context. Instead of "the self", Heidegger uses the German term "Dasein" (which translates to "being there") as a means of distancing

¹⁴⁴ It is also understood in a similar sense to the Kantian conception, as a condition of the possibility of conscious experience.

¹⁴⁵ The idea of existential phenomenology (or existentialism) is considered more or less synonymous with postmodernism in philosophy, see Unah, J. I. (2000) Postmodernism is Existential Phenomenology. In Tymieniecka, A-T. (Ed) *Analecta Husserliana: The Yearbook of Phenomenological Research, Vol. 67: The Origins of Life: Volume II The Origins of the Existential Sharing-in-Life*. Kluwer Academic Publishers; Pp: 427-44

¹⁴⁶ Sartre, Jean-Paul. 1960. *Transcendence of the ego* (translation Williams and Kirkpatrick). New York: Hill and Wang.

¹⁴⁷ Sartre, J-P. (2003) *La transcendance de l'ego*. Paris: Vrin

himself from the established conception of the stable subjective self and replacing it with the idea of a self that has been “thrown” or “abandoned” into the world at a particular time, place and culture not of our choice or making. Rather than focus on conscious reflective experiences (as Descartes and Husserl did), Heidegger emphasized the role of implicit activities such as hammering a nail without being explicitly/reflectively conscious of it, which he took to reveal something more fundamental about our nature. In a similar vein, though with an emphasis on experimental psychology, Maurice Merleau-Ponty focused on the significance of embodiment and the way in which our bodies are engaged in activity in the world and saw this as a fundamental part of the human lived experience. Using examples, such as amputees and their phantom limb sensations, he argued that the self as the subject of conscious experience is inseparable from one’s body and the world.¹⁴⁸

These ideas constitute an important basis for contemporary phenomenological approaches towards understanding self-consciousness or self-awareness. For example, Shaun Gallagher and Daniel Zahavi (2014) state that the conscious experience always involves “an implicit pre-reflective self-awareness”. They distinguish this from the kind of self-awareness that comes from reflecting or introspecting on one’s experiences, which they describe as “an explicit, conceptual, and objectifying awareness”. The former gives us a pre-conceptual form of self-awareness, whereas the latter gives us a conceptual form of self-awareness (or a self-concept), which is the basis on which we might report or describe our experiences using language.¹⁴⁹ Hence, the distinction between immanent pre-reflective self-consciousness and reflective self-consciousness continues to play a foundational role in contemporary phenomenology of selfhood.

Paul Ricoeur offers a more unique hermeneutical perspective on the phenomenology of selfhood. According to Ricoeur, there is no Cogito or essential self (the “I” who doubts) that can be abstracted from the body. This is not to say that there is no self beyond pure embodied existence. Rather, the self can *attest* to its own existence, but there can be no clear and distinct knowledge of oneself obtained through introspection (as Descartes believed) because knowledge and perceptions are mediated through subjective embodied existence. Furthermore, the self is also an agent that can act in the world and take responsibility for its actions. These ideas imply the self is both an object that is

¹⁴⁸ Merleau-Ponty, M. (1945) *Phenomenology of Perception*. Translation by Donald A. Landes (2012). London and New York: Routledge.

¹⁴⁹ Gallagher, Shaun and Zahavi, Dan, "Phenomenological Approaches to Self-Consciousness", The Stanford Encyclopedia of Philosophy (Winter 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2016/entries/self-consciousness-phenomenological/> (last accessed 16/6/2018)

acted upon and a subject that performs actions. Ricoeur describes this kind of self as “a wounded Cogito... a Cogito that posits itself but does not possess itself”.^{150 151}

Thus, according to Ricoeur, selfhood is not an objective fact that can be discovered logically or scientifically but is something that can only be *attested* to in the form of personal testimony (i.e. a deep belief or lived conviction). The notion of selfhood here is akin to the psychological notion of personal identity discussed in the previous section (i.e. the “who am I?” question). However, Ricoeur does not treat this as completely distinct from numerical identity because he believes this kind of selfhood (Ricoeur also uses the term “character”) can only exist if it also has the property of numerical identity. This is implied in Ricoeur’s claim that personal identity can only be constituted by a dialectic between two kinds of identity - *Idem*-identity and *Ipse*-identity.¹⁵² The former refers to spatio-temporal sameness or permanence over time and can be discovered logically or scientifically. The latter refers to sameness through or despite change and requires *attestation*, which involves a dialectic between the two. Such a process results in the “emplotment” of selves as characters in a narrative, which in turn yields the unity and permanence necessary for selfhood.^{153 154 155}

The Persistence of Personal Identity

Psychological Continuity

It was Locke’s treatment of the issue of personal identity (understood as numerical identity) that set the agenda for much of the analysis of this topic in contemporary analytic philosophy. According to Locke, what unites our past selves with our present selves, so as to confer persistence of personal

¹⁵⁰ Ricoeur, P. (1970) *Freud and Philosophy: An Essay on Interpretation*, In Savage, D. (trans); New Haven: Yale University Press; Pg. 439

¹⁵¹ Pellauer, David and Dauenhauer, Bernard, "Paul Ricoeur", The Stanford Encyclopedia of Philosophy (Winter 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2016/entries/ricoeur/> (Last accessed 27/5/2018)

¹⁵² Though this distinction may appear to reflect the distinction between numerical identity and the psychological notion of personal identity I discussed above, it actually cuts across that distinction. For example, *Idem*-identity also includes qualitative identity (or sameness between two numerically distinct entities) and *Ipse*-Identity is supposed to confer numerical identity. See Ricoeur, P. (1992) *Oneself as Another*. Translated by Kathleen Blamey. Chicago: University of Chicago Press

¹⁵³ Ricoeur, P. (1985) “History as Narrative and Practice”, interview with Paul Ricoeur by Peter Kemp, *Philosophy Today*, Vol. 29(3); Pp: 213-22

¹⁵⁴ Ricoeur, P. (1988) *Time and Narrative, Vol. 3*; Translated by Blamey, K. and Pellauer, D. The University of Chicago Press

¹⁵⁵ Ricoeur, P. (2005) *The Course of Recognition*. Translated by David Pellauer. Cambridge, Mass.: Harvard University Press

identity, is consciousness (or in Locke's terms "memory") rather than our physical or biological body.¹⁵⁶ However, a significant problem for this criterion arises when we consider that having a memory of a particular experience does not necessarily imply that such an experience occurred. For example, it is possible to have false memories (e.g. due to wishful thinking, fantasy, delusion, or psychotherapeutic inducement) or gaps in our memories (e.g. due to amnesia). Hence, instead of memory or consciousness, the criteria for personal identity attributed to Locke are nowadays understood in terms of psychological relations of causal dependence and coherence,¹⁵⁷ or more specifically, relations of "psychological continuity" and "psychological connectedness".^{158 159}

A being is psychologically connected, at some future time, with me as I am now just if he is in the psychological states he is in then in large part because of the psychological states I am in now... We can then say that you are psychologically continuous, now, with a past or future being just if some of your current mental states relate to those he or she is in then by a chain of psychological connections. (Olson, 2015)

The reason why a psychological criterion is considered more compelling than a physical one is because personal identity is intuitively connected with responsibility and egoistic or prudential concern (and survival is probably the most fundamental of such concerns). For example, Bernard Williams points out that if we were to hypothetically transpose the brains of two different persons (A's brain into B's skull and vice versa) this would typically be understood as switching bodies rather than switching selves or identities. For if prior to the switch, Person A is presented with the possibility of either body being tortured or rewarded with \$100,000 after the switch, they will choose for their body A to be the one tortured and their new body B to be the one rewarded (and vice versa for Person B).¹⁶⁰ But we can also consider various real life scenarios in which psychological function is absent despite the presence of biological function and/or a physical body (e.g. permanent coma or persistent vegetative state). We might also consider imagined scenarios where psychological function is present but biological function and/or a physical body is absent. In such scenarios, most of us would consider the

¹⁵⁶ Copenhaver, Rebecca, "Reid on Memory and Personal Identity", *The Stanford Encyclopedia of Philosophy* (Winter 2014 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2014/entries/reid-memory-identity/> (Last accessed 11/02/2018)

¹⁵⁷ Shoemaker, S. (1984) *Personal Identity: A Materialist's Account*. In Shoemaker and Swinburne (Eds) *Personal Identity*, Oxford: Blackwell.

¹⁵⁸ Olson, Eric T., "Personal Identity", *The Stanford Encyclopedia of Philosophy* (Summer 2017 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/sum2017/entries/identity-personal/> (Last accessed 11/02/2018)

¹⁵⁹ Derek Parfit refers to these as "R-Relations". See Parfit, D. (1984) *Reasons and Persons*. Oxford University Press

¹⁶⁰ Williams, B. (1970) The self and the future, *Philosophical Review*, Vol. 79(2); Pp: 161-180

latter as constituting survival rather than the former. These intuitions reflect the primacy we give to the brain/mind over the body, and thus the primacy of a psychological criterion for personal identity.

However, having galvanized our intuitions about the primacy of a psychological criterion in the switching scenario above, Williams then proceeds to undermine it. He asks us to consider a scenario in which he is to be tortured by a person who has power over him (let's call this person X). Thus, X announces to Williams that he will be tortured tomorrow. Additionally, X also informs Williams that when the time comes, X will induce a specific amnesia in him such that he will not remember being told that he is going to be tortured. Not surprisingly, this is of no consolation for Williams, because this is no different to him being forgetful and then suddenly being tortured unexpectedly, which is just as unacceptable. Now suppose that in addition to this, X proposes that immediately prior to the moment of torture, all of Williams' memories will be removed, such that Williams will have no recollection of any of the things he is currently able to remember. Again, this is of no consolation for Williams because he can imagine a similar situation in which he wakes up from an accident completely amnesic and in great pain, and this is just as unacceptable as X's proposition. X's further and final proposition, to have Williams' memories replaced by an entirely different set of memories (perhaps belonging to another person), is also just as unacceptable. Williams compares this final proposition to the possibility of him being tortured after having gone mad (thinking that he is King George IV), which is likewise of no consolation to him.

While such thought experiments may initially suggest that bodily continuity is a necessary criterion for persistence of personal identity (which as Williams suggests is a risky proposition but one that he is willing to take), Williams' goal was really only to demonstrate that both the physical and psychological continuity criteria are problematic and that neither is sufficient for personal identity. The issue, as he puts it, is "conceptually undecidable", which is illustrated by a further thought experiment that combines the two thought experiments described above into one, thereby eliciting the intuitions underpinning both psychological and bodily criteria. In this thought experiment, Williams asks us to consider a situation (similar to the one in which he was the subject) in which a person A is to be tortured. Prior to the torture, A will have all his memories and character traits replaced with those of another person B. There are two methods by which this can be achieved. The first way involves copying/duplicating the memories and character traits of B and uploading the copy into A's brain. This will leave B the same as he was before but A will now have B's memories and character traits (we shall call this person the "A-body person"). The second way involves the transposition (switching) of the memories and character traits between A and B, whereby A will have B's memories and character

traits (this is the “A-body person”), and B will have A’s the memories and character traits (we shall call this the “B-body person”).

The first method produces an A-body person (i.e. person A’s body with B’s memories and character traits) and Person B who remains intact. A’s fears of torture presumably extend to what will happen to the A-body person even though it now has B’s memories and character traits. This is the same scenario as the previous one in which Williams was the experimental subject who found no consolation from the torturer’s manipulations of his memories. This implies that A identifies with the A-body person just as Williams himself presumably identified with his body in the previous set of thought experiments. However, a conundrum arises when we come to consider the outcome of the second method which produces an A-body person and a B-body person. Remember that this second method involves a transposition/switching wherein A’s memories and character traits are now in B’s body and vice versa. This is the same scenario as the very first thought experiment discussed in the previous section wherein both A and B choose for their previous bodies to be tortured and their new bodies to be rewarded. This means that in this particular scenario, A’s fears of torture no longer extend to the A-body person because they instead identify with the B-body person who has their memories and character traits. Thus, we are left with a conundrum - how can A’s fear of torture extend to the A-body person in the first scenario but not extend to the very same person in the second scenario?

According to Derek Parfit, the psychological criterion faces a number of serious problems that can be demonstrated by further thought experiments. For example, consider a scenario in which a person A, were to have their brain split in two (fission) and each hemisphere transplanted into two different recipients B and C. In this scenario psychological continuity is maintained between A and B as well as between A and C. Thus, B and C are both psychologically continuous with A. Three possible scenarios emerge from this:

1. Person A did not survive
2. Person A survives as only one of either B or C
3. Person A survives as both

If neither B nor C can be identified with A then this means that Person A no longer exists (they did not survive the transplantation). But if the psychological continuity criterion is correct then it rules this out and hence rules out scenario 1. Regarding scenario 2, we cannot accept the arbitrariness of believing that A can only survive as B and not C (or vice versa) since both have one half of A’s brain and are equally psychologically continuous with A. Thus, we are left with scenario 3 as the most plausible, where A survives as both B and C, which means that A has “branched” into two numerically

distinct (though psychologically continuous) persons (B and C). But therein lies the problem - how can A be numerically identical with two numerically distinct people?

This problem arises because psychological continuity does not have the same logical form as numerical identity. Firstly, numerical identity is reflexive, meaning that an object can only be numerically identical with itself. Duplication of an object, giving rise to two distinct though qualitatively identical objects (as in scenario 3 above), does not confer numerical identity. This is because numerical identity is symmetrical and can only ever consist of a “one to one” relationship between two identical objects (e.g. Person A can be identical to either B or C but not both). In contrast, psychological continuity can be asymmetrical and consist of a “one to many” relationship where an object can be psychologically continuous with potentially many other distinct objects (e.g. person A being duplicated or branching off into psychologically continuous persons B and C).

Applying a “non-branching” condition to maintain reflexivity, symmetry and a “one-to-one” relation between two psychologically continuous persons, may appear to solve the problem. For example, ensuring that only one hemisphere of A’s brain is preserved and transplanted into a recipient (say B) instead of both hemispheres being preserved in both A and B (i.e. one remains in A and the other transplanted in B). But this implies the absurd proposition that one hemisphere must be destroyed for A to survive, and where both hemispheres have been preserved (which results in duplication or branching), it implies A has not survived. But as Parfit asks: “how could a double success be a failure?”¹⁶¹

Furthermore, relations of numerical identity are transitive, meaning that if $A=B$ and $A=C$ then $B=C$. But relations of psychological continuity can be intransitive. For example, in scenario 3 above, A is psychologically continuous with both B and C. However, B remains numerically distinct from C, even though they are both psychologically continuous with A. Therefore, in this scenario we have $A=B$, and $A=C$, but $B \neq C$.

Giving up on Personal Identity

Parfit points out that such conundrums arise because our concept of survival is linked with identity. If we maintain this link then we will have trouble grasping the notion that a person A can survive as two different people. Hence, he argues that we should “give up the language of identity” and thus come to understand that a person A can survive as two numerically distinct people without implying that

¹⁶¹ Parfit, D. (1971) Personal Identity, *Philosophical Review*, Vol. 80(1); Pg. 5

they *are* those people. This means that death is not the only way in which one could lose one's identity, for in scenario 3 above (A branching off into B and C), A can be said to have lost his/her identity due to the duplication of psychological conditions that previously existed only in A, however, A still survives as both B and C. Therefore, Parfit argues that because questions about survival (and other matters of prudential concern) are no longer conditional upon personal identity, and insofar as we are only concerned with these matters in the first place, the persistence question of personal identity "has no further interest". All that matters for survival is the relation of the original person to each of the resulting people (in either branching or non-branching cases) and this relation is given by psychological continuity. We must be willing to give up on the notion that there is a true answer to the persistence question of personal identity.¹⁶²

Given that memory is an important component of psychological continuity and given that psychological continuity can take a one-to-many (i.e. branching) form, we need a concept of memory that does not presuppose the identity of the person having that memory. This is so that we can make sense of the idea that one person can survive as two in accordance with Parfit's view. In other words, we need to be able to attribute memories that previously belonged to the one original person to the two resultant persons (so as to accommodate the one-to-many or branching forms of relations of psychological continuity). Parfit thus argues for a type of quasi-memory ("q-memories"), which are memories for which we have no grounds to assume necessarily belong to us (i.e. they could actually belong to another person whom we are psychologically continuous with but not numerically identical to). We can only accept that q-memories are beliefs about our own experiences. Hence the relation between a q-memory and the original experience is one that does not presuppose that both belong to the same person. This enables us to make sense of the idea that the two resultant persons can have the same memories as the original person with whom they are psychologically continuous (but from whom they are numerically distinct), which therefore accommodates the possibility of survival through the one-to-many/branching forms of psychological continuity.

Similarly, with regard to intentions we also need a concept of intentions that can accommodate the possibility of the intentions of the precursor person existing within two subsequent psychologically continuous though numerically distinct persons. This will enable the original precursor person, for example, to intend to continue his present career in person A, while also intending to perhaps try something new in person B. Survival implies the possibility of fulfilling such intentions (Parfit calls these "q-intentions"). In fact, we will need "q" concepts for a variety of other important relations that

¹⁶² Parfit points out that not all questions of identity have an answer such as the question: "Was England the same nation after 1066?" See Parfit, D. (1971) Personal Identity, *Philosophical Review*, Vol. 80(1); Pg. 8

must obtain in order for an individual to survive as two or more numerically distinct people. We need to be able to make sense of the idea that “a man who can q-remember could q-recognize, and be a q-witness of, what he has never seen.”¹⁶³

This indicates that there are many different relations that constitute psychological continuity and we need to be able to describe those relations in ways that do not presuppose the continued existence of only one person. Furthermore, it also indicates that psychological continuity can admit of degrees and thus survival must also admit of degrees. This can be demonstrated by considering thought experiments involving the fusing of psychological traits from two different persons into one. For example, fusion with the psychological traits of another person can result in them usurping one’s pre-existing psychological traits. This may result in an outcome akin to non-survival or death. But of course, this is an extreme example and one could reasonably expect that fusion would only diminish or change some psychological traits and not all of them. Fusion need not imply the impossibility of a kind of compromise or co-existence or even enhancement of psychological traits. But it does imply that psychological continuity and therefore survival comes in degrees.

Another way in which we can see how survival comes in degrees is by firstly considering that there can be “direct” or “connected” relations between psychological phenomena and events over time, i.e. the relations between a q-memory and the act of q-remembering (as in recalling the q-memory), or the relation between a q-intention and the q-intended action (or some other lasting q-characteristic). Other relations are indirect, distal and disconnected, consisting of overlapping chains of multiple direct/connected psychological relations. Parfit refers to the direct/connected relations of the former as “psychological connectedness” and reserves the phrase “psychological continuity” for the indirect/distal/disconnected relations of the latter. Secondly, we can consider how an individual person might continuously branch off into many more different persons throughout their life (Parfit uses a tree diagram to represent this). Thus, a person A may initially branch off into B and then into B+1, and then B+2 and then B+3 and so on. There is psychological *connectedness* between B+1 and B+2, but there is no such direct connection between B+1 and B+3 (or B+15), only psychological *continuity*. This also demonstrates that psychological connectedness is intransitive (B+1 is psychologically connected to B+2, and B+2 is psychologically connected to B+3, but B+1 is not psychologically connected to B+3).

Parfit points out that throughout the lifespan of a person, in addition to there being many instances of psychological connections, there will also be many events which are not directly connected (i.e.

¹⁶³ Parfit, D. (1971) Personal Identity, *Philosophical Review*, Vol. 80(1); Pg. 17

events that will have happened at a much later or earlier time). These events are only psychologically continuous with the person at a particular time. Therefore, over time we can potentially lose psychological connectedness with many events in our lives.

Q-memories will weaken with the passage of time, and then fade away. Q-ambitions, once fulfilled, will be replaced by others. Q-characteristics will gradually change. In general, A stands in fewer and fewer direct psychological relations to an individual in his "tree" the more remote that individual is. And if the individual is (like B+30) sufficiently remote, there may be between the two no direct psychological relations. (Parfit, 1971; Pg. 21)

Parfit believes that psychological connectedness is more important for survival than psychological continuity, and his aim is to demonstrate that because there are different degrees of psychological connectedness (ranging from direct psychological connectedness to varying lengths of overlapping chains of direct psychological connections that constitute psychological continuity), it follows that there are also different degrees of survival. Furthermore, because relations of psychological connectedness are not transitive, it means that past and future selves (that are not psychologically connected) cannot be identified with each other. Thus, the relations between past and future selves are also a matter of degree. So Parfit reaches the conclusion that the degree to which a person is psychologically connected at different stages in their life is what determines whether they can use the language of "I" to denote a unified self at the greatest levels of connectedness, or whether they use a phrase such as "an earlier self" when there is reduced connectedness. Where there is little or no psychological connectedness, we are to refer to a "descendent" self or a previous "ancestral" self and this is the condition that Parfit believes characterises our lifespan.¹⁶⁴

All of this reiterates the notion that when it comes to typical human life, we have no reason to postulate the existence of a stable unified self on which personal identity is predicated. Rather, much like Hume's bundle theory, we only have reason to believe that there are states of varying degrees of psychological connectedness and continuity (what Parfit calls "Relation-R" or "R-relations"), which have no deep underlying unity that we can attribute selfhood to.¹⁶⁵ Selfhood is thus reduced to those bundles of "R-relations" and in this regard, Parfit's view is labelled "reductionist".

Furthermore, if all that is relevant to selfhood are bundles of "R-relations" then maintaining those bundles or duplicating them constitutes survival. This idea runs counter to many of our intuitions about what we might prefer when faced with thought experiments that involve branching and/or

¹⁶⁴ Parfit, D. (1971) Personal Identity, *Philosophical Review*, Vol. 80(1); Pg. 25

¹⁶⁵ Parfit, D. (1984) *Reasons and Persons*. Oxford University Press

replication/duplication. For example, our intuitions tell us that “teletransportation” is not a feasible mode of “transporting” ourselves to another planet. We find no consolation in the fact that the bundles of “R-relations” constituted by our brains and bodies will be destroyed here on Earth but then reproduced molecule for molecule in a replicator machine on Mars. However, on Parfit’s view, ordinary survival, in which there are various states of connectedness and disconnectedness, continuity and discontinuity (associated with dream/wake states and the more general course of life) is not much better than this.

Parfit’s contribution is one that turns the question of personal identity on its head by proposing that survival requires psychological connectedness/continuity (Relation-R) rather than personal identity, and it is in fact the former that we are more concerned with. In other words, what matters more is that there is someone in the future who is psychologically connected/continuous with you, regardless of whether they *are* you. Where there is no such psychologically connected/continuous future self, Parfit claims that one is thereby rationally justified in caring less about that future self. For Parfit, this has the interesting implication of diminishing the force of self-interest and thereby undermining egoism in both its psychological and ethical versions.¹⁶⁶ Parfit therefore advocates for an impersonal approach towards morality, one that does not privilege any particular person on the basis of “who” they are, but instead focuses on promoting the equality of the constituent experiences (from which we falsely abstract a notion of persons or selves) that people have at each particular time.

It becomes more plausible, when thinking morally, to focus less upon the person, the subject of experiences, and instead to focus more upon the experiences themselves. It becomes more plausible to claim that, just as we are right to ignore whether people come from the same or different nations, we are right to ignore whether experiences come within the same or different lives. (Parfit, 1984; Pg. 341)

Parfit recognises that such a view might “weaken loyalty to, or love of, other particular selves”.¹⁶⁷ This can be understood as a form of discounting of one’s future due to diminished psychological connectedness, an idea that is related to temporal discounting in decision making.¹⁶⁸ If loss of psychological connectedness/continuity over time gradually confers a loss of personal identity, then the deficits associated with dementia pose an extra level of threat to our personal identity. In either

¹⁶⁶ Parfit also claims that such a view might have the effect (as it did for him) of liberating oneself from one’s fear of death because survival itself is not as important as we intuitively think. Ibid. Pg. 281-82

¹⁶⁷ Parfit, D. (1971) Personal Identity, *Philosophical Review*, Vol. 80(1); Pg. 27

¹⁶⁸ Temporal discounting refers to the greater relative value placed on receiving a reward at an earlier time compared with receiving it at a later time.

case, any supposed egoistic rationale for being concerned about our future selves would be an illusion born out of our mistaken intuitions about personal identity.

The Science of Selfhood

The Self in Psychology

The self has been and continues to be a major area of research and discussion in psychology and particularly in social psychology, which aims to understand the self in social context, i.e. the dynamic interaction between the social environment and various phenomena associated with selfhood (such as self-knowledge, self-concept, self-esteem, personality, identity, judgment, decision making and agency). Psychology's approach towards investigating the self begins by acknowledging that understanding the self is partly a conceptual matter and that there are different levels of explanation.¹⁶⁹ Psychology thus applies both theoretical and experimental methods towards investigation.¹⁷⁰

...I come to the conclusion that psychologists must accept not only that their 'science' is built on a dual ontology, molecules on the one hand and persons on the other, but that it requires two radically different methodologies. (Harre, 1998; Preface)

Hence the approach of psychology is one that often aims at a synthesis of the self by drawing from various related disciplines (such as cognitive psychology, developmental psychology, neuroscience, social science and philosophy) and by developing models of the self that try to capture all of the relevant dimensions of selfhood. William James' model of the self, discussed at the beginning of this section, exemplifies this approach towards the investigation of the self. More recently, Roy Baumeister has proposed a model of self that aims to describe the "prototypical patterns of experience in which people grasp the basic meaning of self".¹⁷¹ We can relate much of his model to Neisser's and Harre's models discussed in the previous chapter and identify several common features that we can regard as constituting specific dimensions of selfhood.

According to Baumeister's model, the first dimension is the experience of reflexive consciousness – "the capacity of the human organism to be conscious of itself". This describes the phenomenological

¹⁶⁹ Namely the "personal" and "sub-personal" level distinction that Dennett makes. See Dennett, D. C. (1969) *Content and Consciousness*. London: Routledge & Kegan

¹⁷⁰ Harre, R. (1998) *The Singular Self: An Introduction to the Psychology of Personhood*. London: Sage

¹⁷¹ Baumeister, R. F. (1998) The self. In D. T. Gilbert, S. T. Fiske, and G. Lindzey (Eds) *Handbook of social psychology 4th ed.* New York: McGraw-Hill; Pg. 680

dimension of selfhood that consists in conscious subjective experience and self-awareness. This dimension is captured in Neisser's "ecological self" and "private self", and in Harre's "Self-1" (albeit at a more coarse-grained level), which I discussed in the introductory chapter. The second dimension is the interpersonal aspect of self, which according to Baumeister is closely linked to this first. It refers to the role that interpersonal relations and social roles have in shaping our social identities and how this may also shape reflexive consciousness of the self. This interpersonal dimension is also more broadly related to the social dimension. It is one of the most significant dimensions of self and is a major focal point of much of the social psychology and social science literature on the self. On Neisser's model, this dimension is captured by the "ecological self" and "interpersonal self" and is the crux of both "Self-1" and "self-2" in Harre's model.

In practice, however, selves always develop amid frequent, ongoing interpersonal relations, and probably those are indispensable to proper, successful development of selfhood. Self is not only a consequence but an active participant in those social relationships. (Baumeister, 1998; Pg. 700)

The third dimension that Baumeister describes is executive function. This capacity is what distinguishes mere behaviour that does not require a unified self (such as an eye-blink or a drool) from behaviour that requires a unity of self (such as marrying or placing a bet). Baumeister also recognises that this concept of self (as unified and underpinned by capacity for executive function) is necessary for concepts of responsibility, particularly moral responsibility. This dimension is captured by Harre's "Self-1". It is not explicitly captured by Neisser's model but it is implied in his notion of the "extended self" and "conceptual self", which describe a unified sense of self that is associated with a complex conceptual awareness of oneself. These dimensions are entwined with notions of agency, responsibility, virtue and integrity, which I discuss in more detail in later chapters.

The self makes decisions, initiates actions, and in other ways exerts control over both self and environment. Common terms [agency, choice, control and decision-making] refer to this aspect of self. Without this function the self would be merely a passive spectator, aware of itself and related to others, but unable to do anything except perceive and interpret the flow of events (and experience emotions). (Baumeister, 1998; Pg. 712)

Self-Schema, Self-Concept and Identity

Aside from the development of the kinds of frameworks described above, the research in social and developmental psychology also focuses on the specific dimensions and the finer-grained elements

that comprise them. Of particular importance are the notions of self-schema, self-concept and identity, which are all associated with Baumeister's third dimension (i.e. the unified sense of self that is associated with a complex conceptual awareness of oneself). It is this dimension and these aspects of selfhood that underpin the sense of personal identity that human beings have as part of their psychological function. Such a notion of personal identity is distinct from the metaphysical notion of personal identity as numerical identity discussed earlier in this chapter. Additionally, this notion of personal identity typically refers to a first-personal and subjective phenomenon, i.e. one's awareness of one's own personal identity. Hence, I use the phrase "sense of personal identity" so as to also capture this first-personal and subjective aspect of personal identity.

Self-schema refers to the structure of beliefs on which a person bases their sense of personal identity. Cantor refers to those beliefs as content-specific organisations of knowledge that are stored in long-term memory.¹⁷² They are thought to be hierarchically organised at different levels of abstraction.¹⁷³ Self-schemas relate to many different aspects of a person, such as physical characteristics, social roles, personality traits, and areas of particular interest and skill. Perceptions, memories, emotions and behaviour are shaped in various ways by self-schemas.^{174 175}

Self-concept refers to how someone evaluates, interprets or perceives themselves in terms of their *actual* selves and their *ideal* selves. It involves the integration of their self-knowledge (from autobiographical memory and knowledge derived from social interactions and evaluations that provide insight into how others view them) with their goals, ideals and values. A person's self-esteem or sense of self-worth is therefore a function of their self-concept. Carl Rogers's (1959) defines self-concept in the following way.¹⁷⁶

...the organized consistent conceptual gestalt composed of perceptions of the characteristics of 'I' or 'me' and the perceptions of the relationships of the 'I' or 'me' to others and to various aspects of life, together with the values attached to these perceptions. (Rogers, 1959; Pg. 200)

¹⁷² Cantor, N. and Zirkel, S. (1990) Personality, cognition, and purposive behavior. In L.A. Pervin (Ed.), *Handbook of personality: Theory and research*. New York: Guilford

¹⁷³ Taylor, S. E. and Crocker, J. (1978) Schematic bases of social information processing. In E.T. Higgins, C.P. Herman, and M.P. Zanna (Eds) *Social cognition: The Ontario Symposium*. Hillsdale, NJ: Lawrence Erlbaum

¹⁷⁴ Markus, H., Crane, M., Bernstein, S. and Siladi, M. (1982) Self-Schemas and Gender, *Journal of Personality and Social Psychology*, Vol. 42(1); Pp: 38-50

¹⁷⁵ Stein, K. F. (1995) Schema Model of the Self-Concept, *Journal of Nursing Scholarship*, Vol. 27(3); Pp: 187-93

¹⁷⁶ Rogers, C. R. (1959) A theory of therapy, personality relationships as developed in the client-centered framework. In S. Koch (Ed), *Psychology: A study of a science. Vol. 3: Formulations of the person and the social context*. New York: McGraw Hill

Oyserman et al (2012) describe self-concept in the following way.¹⁷⁷

...cognitive structures that can include content, attitudes, or evaluative judgments and are used to make sense of the world, focus attention on one's goals, and protect one's sense of basic worth (Oyserman and Markus, 1998). Thus, if the self is an "I" that thinks and a "me" that is the content of those thoughts, one important part of this "me" content involves mental concepts or ideas of who one is, was, and will become. These mental concepts are the content of self-concept. (Oyserman et al, 2012; Pg. 72)

An important feature of a person's identity is that it is typically situated along a social/personal continuum. The social end is associated with one's social roles, standing or status within specific social contexts, whereas the personal end is associated with a more stable/essential sense of identity that can exist independently of social contexts.^{178 179} We can distinguish the former from the latter by referring to it as one's "social identity". In contrast the latter is what constitutes our personal identity (understood in the psychological sense as opposed to the metaphysical sense that I discussed in the previous section).

Though self-schema, self-concept and personal identity are all closely related to one another, there are important distinctions. Self-schemas can generally be thought of as describing the psychological structures that constitute the operative or functional aspects of self-concept and personal identity (the way they manifest in actions and decisions). Certain specific self-concepts can become salient and operative during particular situations which in turn shape subsequent behaviour or responses to those situations. Self-concept in this regard appears to describe the social/role notion of our personal identity (or social identity), both of which function in the same way that self-schemas do. On some definitions, self-concept can also be understood as encompassing the whole sum of various personal identities that one might have, which is linked to an over-arching conception of oneself and associated with the notion of a unified, stable or essential notion of personal identity. In this regard we can distinguish between synchronic and diachronic notions of self-concept. The former is linked to specific contexts and subject to transient situational forces, whereas the latter is more stable, enduring, deep-seated and less subject to situational forces. Thus, while both notions of self-concept describe an over-arching or general notion of personal identity, it is more apt to associate the synchronic sense of self-

¹⁷⁷ Oyserman, D. Elmore, K. and Smith, G. (2012) Self, Self-Concept, and Identity. In Leary, M. R. and Tangney, J. P. (Eds) *Handbook of Self and Identity*. The Guilford Press: New York

¹⁷⁸ Turner, J. C. (1985) Social categorization and the self-concept: a social cognitive theory of group behaviour. In E. J. Lawler (Ed). *Advances in Group Processes*. Vol. 2, Greenwich, Connecticut: JAI Press

¹⁷⁹ Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D. and Wetherell, M. S. (1987) *Rediscovering the social group: A self-categorization theory*. Oxford and New York: Basil Blackwell

concept with our social identities, and the diachronic sense with the stable/essential notion of personal identity that defines who we are. Hence, I use the phrase “self-concept” to refer to the former and “personal identity” to refer to the latter.

In addition to the metaphysical/psychological distinction I pointed out regarding personal identity, it is also important to note that personal identity in the psychological sense can be understood from either a first-person or third-person perspective. The former is associated with self-awareness or an introspective sense of oneself (i.e. the first personal and subjective notion of personal identity I described above) and thus captures the idea of persons as subjects. The latter is associated with knowledge about a person from a perspective other than theirs and thus captures the idea of persons as objects. Therefore, the phrase “sense of personal identity” can also be used to refer to the former. This distinction also reflects the distinction that some philosophers make between selfhood and personhood, i.e. selves are understood as subjects and persons are understood as objects.^{180 181} Sense of personal identity is particularly important when it comes to understanding selfhood, especially human selfhood, which I will discuss in more detail in the following chapter.

Moral and Practical Dimensions of Self

Moral theorists in the Aristotelian tradition emphasize the centrality of reasoning and self-governance in relation to the pursuit of virtue (excellence of character) and the good. Aristotle himself regarded these goals as inextricably linked with the highest fulfilment of essential nature/function, which for him was our capacity for reason. The good of a human being must therefore be concerned with our capacity for reason.¹⁸² Similarly, Kant had argued that morally relevant actions are ones which are guided by free choice, autonomy and reason (in Kantian terms, the *will*). If we did not possess such capacities then we would be merely at the mercy of our whims and motivated purely by desires and impulses, or what Immanuel Kant referred to as “inclination”.¹⁸³ This is why moral theorists in the Kantian tradition regard moral judgment or moral reasoning as a kind of “practical reasoning”

¹⁸⁰ Schechtman, M. (1990) Personhood and Personal Identity, *The Journal of Philosophy*, Vol. 87(2); Pp: 71-92

¹⁸¹ Mackenzie, C. (2014) Embodied agents, narrative selves, *Philosophical Explorations*, Vol. 17(2); Pp: 154-171

¹⁸² Kraut, Richard, "Aristotle's Ethics", *The Stanford Encyclopedia of Philosophy* (Summer 2014 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/sum2014/entries/aristotle-ethics/> (Last accessed 11/02/2018)

¹⁸³ Kant, I. *Metaphysics of Morals*, 6: 213-4. 1

performed by rational agents.^{184 185 186} The capacity for reason to guide actions, i.e. rational agency, is a crucial feature of both the Aristotelian conception of virtue and the Kantian conception of moral nature.

The way in which virtue, morality and rational agency bear on our understanding of selfhood is perhaps best illustrated by starting with a consideration of the notion of integrity. The British philosopher Gabrielle Taylor describes integrity as consisting in a set of particular moral virtues such as honesty, uprightness and loyalty. Having integrity can be understood as not just doing what one believes one ought to do, but also being true to oneself or one's principles. Taylor combines these ideas about integrity in an account of the relationship between integrity and the self, whereby a person of integrity is someone who "keeps his inmost self intact" or whose "self is whole and integrated".¹⁸⁷ Taken together, the notions of virtue, morality and integrity point to the importance of normative ideals by which we try to comport ourselves. Difficulty in achieving such normative ideals arise, in large part, due to our having to make important judgments and decisions in the face of conflicting desires and motives.¹⁸⁸ It is in virtue of our capacity for rational agency that we can reflect upon the worth of various desires, evaluate them and conclude whether they provide any reason for a particular course of action. This requires that we are capable of transcending immediate desires or inclinations so as to reconcile conflicting goals, which presupposes that we are able to perceive ourselves as temporally extended beings (i.e. a diachronic sense of self). Hence rational agency presupposes diachronic agency, which is what enables us to comport ourselves with some degree of virtue, morality and integrity over time.

However, diachronic agency describes more than just our mere ability to make decisions and act. Diachronic agency seems to be integrated with a conceptual and reflective sense of self, which consists in certain beliefs, values and desires that we identify with. Thus, as diachronic agents, we express and enact a self-concept or a sense of personal identity in the decisions we make and the actions that we take. This is why Korsgaard uses the phrase "practical identity" to describe how our sense of personal

¹⁸⁴ Korsgaard, C. M. (2010) Reflections on the evolution of morality. Amherst Lecture in Philosophy. The Department of Philosophy at Amherst College - <http://www.amherstlecture.org/korsgaard2010> (last accessed 19/05/2019)

¹⁸⁵ Kennett, J. and Fine, C. (2009) Will the real moral judgment please stand up? The implications of social intuitionist models of cognition for meta-ethics and moral psychology, *Ethical Theory & Moral Practice*, Vol. 12(1); Pp: 77-96

¹⁸⁶ Gerrans, P. and Kennett, J. (2010) Neurosentimentalism and Moral Agency, *Mind*, Vol. 119(475); Pp: 585-614

¹⁸⁷ Taylor, G. and Gaita, R. (1981) Integrity, *Proceedings of the Aristotelian Society, Supplementary Volumes*, Vol. 55; Pp: 143-159; Gaita's response: Pp: 161-176

¹⁸⁸ Frankfurt, H. G. (1971) Freedom of the Will and the Concept of a Person, *The Journal of Philosophy*, Vol. 68(1); Pp: 5-20

identity shapes our judgments and actions.¹⁸⁹ Similarly, Kim Atkins describes how our “narrative identity” guides the way in which we live our lives over time.^{190 191} Hence, it seems that our decisions, actions, self-concept and sense of personal identity are closely interconnected or entwined with one another and thus the kind of selfhood that human beings possess is a lot more complex than we might have initially imagined.

The Self Naturalised

The naturalist tradition in analytic philosophy is fundamentally committed to a materialist view of reality, which is based on the idea that objects and phenomena in the universe are physical substances and amenable to scientific explanation. Hence philosophical naturalists regard philosophy and science as pursuing the same goal (i.e. acquiring new or “synthetic” knowledge about the world). However, this does not mean that philosophical naturalists use the same methods as scientists (e.g. generating new empirical evidence via experimentation) or even address the same specific questions. Their methodology is essentially theoretical and often involves an attempt to clarify or untangle various theories (particularly those that lead to mystery, obscurity, inconstancy, contradiction, and other various dilemmas) so as to further develop or challenge those theories, as well as facilitate the discovery of new theories. Beyond this, there are differences and nuances in the way philosophical naturalists approach their investigations. For example, there are contentions as to what extent (if any) *a priori* intuitions, “analytic” knowledge, thought experiments and conceptual analysis play a role in those investigations.^{192 193}

Regarding selfhood, a naturalist approach might begin with describing and clarifying the *explananda*, i.e. whether by “self” we mean self-awareness, self-consciousness, subjective experience, self-concept, sense of personal identity, diachronic agency, or other phenomenological and propositional aspects of selfhood. Once the *explananda* are identified then an analysis of the relevant concept and what it entails about other relevant matters may be required (i.e. conceptual analysis), which might involve *a priori* analysis of the concept. However, one of the most important goals of the naturalist approach is to also develop theories or concepts of self (or phenomena related to the self) that are empirically

¹⁸⁹ Korsgaard, C. M. (1996) *The Sources of Normativity*. Cambridge: Cambridge University Press; Pg. 101

¹⁹⁰ Atkins, K. and Mackenzie, C. (2008) *Practical Identity and Narrative Agency*. Routledge, New York

¹⁹¹ Atkins, K. (2008) *Narrative Identity and Moral Identity: A Practical Perspective*. Routledge: NY

¹⁹² For further discussion of this issue see Papineau, David, "Naturalism", *The Stanford Encyclopedia of Philosophy* (Winter 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2016/entries/naturalism/> (last accessed 14/7/2018)

¹⁹³ Papineau, D. (1993) *Philosophical Naturalism*. Oxford: Blackwell

tractable. Only then can the self be open to scientific investigation and an adequate scientific explanation be offered (the *explanans*). Thomas Metzinger articulates the rationale for this type of approach to investigation.¹⁹⁴

By reformulating classical problems from their own discipline, naturalist philosophers try to open them for interdisciplinary investigations and scientific research programs, for instance in the cognitive and neurosciences. These philosophers do not endorse naturalism and reductionism as part of a scientific ideology; instead, they see them as a rational research strategy: if it should turn out that there is something about human self-consciousness that lies outside the reach of the natural sciences in principle, they would be satisfied with this finding as well. They would have achieved epistemic progress. This type of progress could mean being able to describe, in a much more precise and fine-grained manner and with an historically unprecedented degree of conceptual clarity, why exactly science is unable to provide satisfying answers to certain questions, even in principle. (Metzinger, 2003; Pg. 216)

A naturalistic approach to investigating the self typically aims for an integrative explanation of how the nature of the self and associated phenomenology are realized or implemented by its cognitive substrates. Hence it is interested in understanding how selfhood at the phenomenological and personal level (i.e. lived conscious experience and propositional sense of self-awareness) can be understood and explained at the sub-personal level (typically in terms of the cognitive mechanisms and subsystems underpinning personal level phenomena). Thus, the phenomenology and personal level explanations of the self continue to play an important role within the context of the broader aims of the naturalist approach, which is to understand whether those phenomena map onto relevant cognitive subsystems at the sub-personal level, and if so, how.¹⁹⁵ This ambition is where the naturalist approach departs from traditional phenomenology (understood as a “first philosophy”), which regards selfhood as ontologically phenomenal, implying that selfhood can be thoroughly understood in terms of personal-level phenomenology with no need to relate it to sub-personal processes.

In this regard, traditional phenomenology faces serious problems. There is no reason to think that the ontology of selfhood is restricted to phenomenology and independent of neurobiological and cognitive processes. Thus, if the phenomenology suggests that the self is a stable, unified, monolithic entity, this would imply that there must be a corresponding distinct functional centre of the brain

¹⁹⁴ Metzinger, T. (2003) Empirical perspectives from the self-model theory of subjectivity: a brief summary with examples, In R. Banerjee and B. K. Chakrabarti (Eds) *Progress in Brain Research*, Vol. 168; Pp: 215-45

¹⁹⁵ As Dennett points out, “the recognition that there are two levels of explanation gives birth to the burden of relating them, and this is a task that is not outside the philosopher’s province”. See Dennett, D. C. (1969) *Content and Consciousness*. London: Routledge & Kegan Paul; Pg. 95

(where all perceptions, sensations and conscious experiences converge). However, there is no empirical evidence to suggest that such phenomenology maps onto any distinct, well-defined, physical/neurological structures with the relevant functional specialisation.¹⁹⁶ The structures underpinning the phenomenology are in fact distributed across various neural subsystems as well as extending beyond the brain to include the body and the environment.¹⁹⁷ ¹⁹⁸ Furthermore, explanations that are based on, or that abstract from, personal-level phenomenology are often idiosyncratic and thus frequently conflict with each other, which can lead to incorrect aetiologies of mental phenomena.¹⁹⁹ ²⁰⁰ Thus, a naturalistic approach tends to yield a Humean conception of self, i.e. a self that is understood and experienced in terms of personal-level phenomenology, but is ultimately an illusion or merely an abstraction.

Metzinger is renowned for his neurocomputational theory of self, which is exemplary of the type of naturalist approach that I've described above. He hypothesizes that there are complex computational/information-processing mechanisms and representational processes in the brain whose function is to produce a model of the self for more general biological function. The relevant phenomenal aspects of the self must therefore also be instantiated by this model, which he refers to as the "phenomenal self-model".²⁰¹ According to this view one of the most important qualities of phenomenal self-consciousness is "transparency", which refers to the fact that the brain processes/mechanisms that construct our conscious experiences never represent themselves in those conscious experiences. We see, as it were, right *through* such processes, in a manner that leads to the tacit assumption that what is represented by those processes is the real world (in a naïve realist sense). Analogously, when we read a book, we only ever see the representational content (i.e. the pages and words) and never the representational processes (i.e. the workings of our brain), which are in no way "book-like".

It is precisely this feature, Metzinger argues, that enables a person to experience the phenomenology of selfhood, i.e. because we are unable to experience the *processes* that represent our phenomenal self (i.e. the phenomenal self-model). We only experience the *content* of the phenomenal self-model,

¹⁹⁶ Gillihan, S. J. and Farah, M. J. (2005) Is Self Special? A Critical Review of Evidence from Experimental Psychology and Cognitive Neuroscience, *Psychological Bulletin*, Vol. 131(1); Pp: 76–97

¹⁹⁷ Vogeley, K. and Gallagher, S. (2011) Self in the Brain. In Gallagher, S. (Ed.) *The Oxford Handbook of the Self*, Oxford University Press – New York; Pp: 111-36

¹⁹⁸ Cassam, Q. (2011) The Embodied Self. In Gallagher, S. (Ed.) *The Oxford Handbook of the Self*, Oxford University Press – New York; Pp: 139-56

¹⁹⁹ The aetiology of psychiatric disorder is a case in point. See Halligan, P. W. and Marshall, J. C. (1996) *Method in madness: Case studies in cognitive neuropsychiatry*. Hove, UK: Psychology Press

²⁰⁰ Gerrans, P. (2015) All the Self We Need. In Metzinger, T. and Windt, J. M. (Eds) *Open MIND*; Vol 15(T). Frankfurt am Main: MIND Group.

²⁰¹ Metzinger, T. (2003) *Being no one: The self-model theory of subjectivity*. Cambridge, MA: MIT Press

which is simply the phenomenology of being a self (understood and felt as a stable, unified, monolithic entity, like a Cartesian self). As a result, we necessarily *identify* with the content of the relevant processes in a naïve realist manner. The upshot of his theory is that there is no self as traditionally conceived. There is just the process of self-modelling, which gives rise to the phenomenological appearance/experience (thus regarded as an illusion) of a self.²⁰² As Metzinger states (with emphasis added):

*The phenomenology of transparent self-modelling is the phenomenology of selfhood. It is the phenomenology of a system caught in a **naive-realistic self-misunderstanding**. A selfless system can certainly misunderstand itself, for instance by misinterpreting phenomenal experience in terms of implying the actual existence of a self. Phenomenal selfhood results from autoepistemic closure in a self-representing system; it is a function realized by a **lack of information**. We do not experience the contents of our selfconsciousness as the contents of a representational process, but simply as **ourselves, living in the world right now**. (Metzinger, 2005; Pg.4)*

Nevertheless, the illusion or abstraction of selfhood is thought to serve an important function, which is to unify the varieties of phenomena relevant to selfhood, such as reflective and pre-reflective conscious experiences and autobiographical information/memory across time, from which we derive our sense of who we are (i.e. our sense of personal identity). Hence, whether it is the phenomenal illusion of a Cartesian self,²⁰³ the abstracted fictional protagonist of our autobiographies (which I will discuss in more detail in later chapter),²⁰⁴ or a fictional perspectival locus from which we construct such autobiographies and derive our personal identity,²⁰⁵ the naturalist's goal is to understand how they are implemented by complex cognitive/neurological process.

A major area of investigation that naturalist philosophers are interested in is the representational structure that underpins various aspects or phenomena related to selfhood. They are interested in the way humans and biological organisms form different kinds of self-representations, such as lower level implicit representations of both microscopic and macroscopic bodily states, and higher level explicit representations (and metarepresentations) associated with linguistic capacities, reasoning, conceptual knowledge and reflective self-awareness. These capacities play an important role, not just in how we understand the self, but also in how we understand ourselves. In other words, it enables

²⁰² Metzinger, T. (2005) *Precis: Being No-One, Psyche*, Vol. 11(5); Pp: 1-30

²⁰³ Metzinger, T. (2003) *Being no one: The self-model theory of subjectivity*. Cambridge, MA: MIT Press

²⁰⁴ Dennett, D. C. (1992) *The Self as a Center of Narrative Gravity*. In: F. Kessel, P. Cole and D. Johnson (Eds) *Self and Consciousness: Multiple Perspectives*. Hillsdale, NJ: Erlbaum; Pp: 103-115

²⁰⁵ Harre, R. (1998) *The singular self: An introduction to the psychology of personhood*. London: Sage.

us to understand how psychological conceptions of selfhood (i.e. self-concept and sense of personal identity) are achieved. This offers a way in which we might be able to integrate phenomenological, psychological and biological explanations of selfhood and self-related phenomena.

The Self as a Construction

What is a Construction?

The idea of “construction” refers to the role that human beings play (typically a conscious and deliberate causal role) in building or creating something that would not have existed otherwise. Paradigmatic examples include physical objects (e.g. chairs, tables, cars, and houses), social institutions (e.g. governments, banks, corporations, communities and clubs) and the practices, customs, traditions, values and belief systems of various cultures and societies. What all of the above constructions have in common is that they would not have existed without the contributions of human beings, either as individual agents, or as groups or collectives of varying sizes. Of course, there is a sense in which all things may be thought of as constructed (perhaps from matter and energy in accordance with the laws of physics) but this conflates the notion of construction above with what might be regarded as a metaphorical notion of construction. For example, trees, forests, mountains, rivers and rocks are not constructed in the same sense that chairs or governments are. Such objects develop via natural biological, ecological and geological processes and this typically occurs independently of human activity. Hence, we can distinguish this metaphorical notion of construction from the literal notion of construction I described previously, which refers to human beings as individual agents or as collectives, playing a causal role in the construction of objects or phenomena that would not have existed otherwise.

However, this is somewhat of a simplistic depiction of the way in which objects or phenomena come into existence. Regarding the literal notion of construction, the demarcation between individuals and collectives obscures the fact that the processes of construction often involve complex interactions between agents and their environment, particularly the social environment in which there are complex interactions and bidirectional influences between individuals and collectives. Regarding the metaphorical notion of construction, the processes of natural development can also involve similar interactions and influences between objects and their environment, perhaps none more so than the natural development of certain uniquely human capacities. As those capacities develop, they also enable human beings to act on their environment in a manner that in turn shapes the developmental outcomes themselves. Hence there is a sense in which human beings (and also non-human animals)

are also playing a constructive role in the literal sense in their own natural development. In the remainder of this chapter I want to discuss two opposing schools of thought that are primarily concerned with the literal sense of construction - social constructionism and constructivism. I begin by first distinguishing broadly between the two and then in subsequent sections I will discuss them in more detail.

Social constructionism, as the name suggests, refers to the idea that some object or phenomenon is *socially* constructed. This implies that groups or collectives are responsible for the construction process and that sociocultural factors (e.g. beliefs, values, traditions) therefore play a determinative role.^{206 207 208}

Had we been a different kind of society, had we had different needs, values, or interests, we might well have built a different kind of thing, or built this one differently. The inevitable contrast is with a naturally existing object, something that exists independently of us and which we did not have a hand in shaping. (Boghossian, 2001; Pg. 1)

Constructivism, in contrast, refers to the idea that some object or phenomenon is constructed by the individual rather than the collective. Hence it is primarily concerned with an individual's determinative role in the constructive process, particularly processes associated with their own cognitive development, learning and knowledge acquisition.²⁰⁹

The essential difference between such constructivisms and social constructionism are twofold: in the extent to which the individual is seen as an agent who is in control of this construction process, and in the extent to which our constructions are the product of social forces, either structural or interactional. (Burr, 2015; Pg. 22)

Generally speaking, both social constructionism and constructivism represent schools of thought and/or intellectual movements that are concerned with understanding how reality and knowledge are constructed. The difference is the level of abstraction at which the construction is thought to take place. Social constructionism attributes it to the activity of collectives (which also includes the multiple interactions between individuals within those collectives). Constructivism attributes it to the individual. Another way to understand this distinction is in terms of a disciplinary distinction. Social

²⁰⁶ Hacking, I. (1999) *The Social Construction of What?* Harvard University Press; Pg. 6

²⁰⁷ Boghossian, P. (2001) What is Social Construction? *Times Literary Supplement*, Pp: 1-12

²⁰⁸ Mallon, Ron, "Naturalistic Approaches to Social Construction", *The Stanford Encyclopedia of Philosophy* (Winter 2014 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/win2014/entries/social-construction-naturalistic/> (last accessed (19/01/2019))

²⁰⁹ Burr, V. (2015) *Social Constructionism (3rd edition)*. Routledge: New York

constructionism is mainly concerned with matters of sociology (macro and micro) whereas constructivism is mainly concerned with matters of psychology.^{210 211 212}

Social Constructionism

The basic premise of social constructionism is found in Berger and Luckman's seminal book, *The Social Construction of Reality*. They claim that because knowledge constitutes our understanding of reality, yet is dependent on contingent social/cultural facts, reality and knowledge must therefore be treated as sociological phenomena (i.e. socially constructed). Thus, a "sociology of knowledge" is necessary for us to understand how reality is socially constructed.²¹³

It is our contention, then, that the sociology of knowledge must concern itself with whatever passes for 'knowledge' in a society, regardless of the ultimate validity or invalidity (by whatever criteria) of such 'knowledge'... In other words, we contend that the sociology of knowledge is concerned with the analysis of the social construction of reality. (Berger and Luckman, 1966; Pg. 15)

Their thesis begins with the view that social order can only exist due to human activity and so long as human beings are not "closed in a sphere of quiescent interiority", social order necessarily emerges. They refer to this as "externalization". Subsequent habitualisation of social activity leads to "institutionalisation" of those activities, which are therefore structurally external to the individual and it is only in this sense that they are "objective". The objectivity of the institutional world is therefore socially constructed, which they refer to as "objectivation". They claim that every single institution is the result of this "objectivation", and it is in virtue of this process that "any body of 'knowledge' comes to be socially established as 'reality'". Furthermore, as human beings immerse and adapt themselves into various institutions, they become "socialized" by those institutions and thus subjectively identify with them. Berger and Luckman refer to this as "internalization", which in conjunction with "externalization" and "objectivation", constitute "three dialectical moments in social reality".²¹⁴

²¹⁰ Raskin, J. D. (2002) Constructivism in Psychology: Personal Construct Psychology, Radical Constructivism, and Social Constructionism, *American Communication Journal*, Vol. 5(3); Pp: 1-17

²¹¹ Andrews, T. (2012) What is Social Constructionism? *Grounded Theory Review: An International Journal*, Vol 11(1); Pp: 39-46

²¹² Allport, G. W. (1968) *The Person in Psychology: Selected Essays*. Beacon Press; Thoits, P. A. (1995) Social Psychology: The Interplay Between Sociology and Psychology, *Social Forces*, Vol. 73(4); Pp: 1231-43

²¹³ Berger, P. L. and Luckman, T. (1966) *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. Penguin Books; Pg. 12

²¹⁴ Berger, P. L. and Luckman, T. (1966) *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. Penguin Books; Pp: 70-78

The same fundamental idea is also found in Latour and Woolgar's book, *Laboratory Life: The Construction of Scientific Facts*. They claim that what we regard as scientific facts, reflect the particular practices of the relevant scientific community rather than reflecting a socially independent or objective reality.^{215 216} More recently, Kenneth Gergen has reiterated this view stating that because science itself is essentially a particular type of practice within the tradition of the scientific community, it implies that scientific knowledge has no special epistemic status that justifies any claims to representing objective facts about the world.²¹⁷

According to Vivian Burr, there are several key assumptions that social constructionist theories have in common. They take a "critical stance" towards knowledge and the ways in which we understand the world (e.g. the conventions associated with positivism and empiricism), they appreciate the significance of historical/cultural specificity and relativity of our categories and concepts, they recognise that knowledge is sustained by a social process (as opposed to being derived from the world "as it really is") and that knowledge and social action go together to create norms of action and behaviour.²¹⁸

The particular forms of knowledge that abound in any culture are therefore artefacts of it, and we should not assume that our ways of understanding are necessarily any better, in terms of being any nearer the truth, than other ways. Looking at knowledge this way challenges the idea of scientific progress, that through science we are advancing toward a more and more accurate understanding of the physical and psychological world. Social constructionists argue that this way of thinking has led to the imposition of our own systems of knowledge upon other cultures and nations. (Burr, 2015; Pg. 4)

This is why social constructionists have a general reluctance to assume that knowledge derived from any one particular disciplinary tradition has epistemic primacy over another. They view many of the established disciplines as seeking to impose their views on others, and thus are inclined to critique or challenge those views. It is in this regard that social constructionism can be thought of as a contemporary iteration of two distinct though related intellectual movements in the 20th century, postmodernism and poststructuralism. Postmodernism emerged as a counter-tradition to the

²¹⁵ Latour, B. and Woolgar, S. (1979) *Laboratory Life: The Construction of Scientific Facts*. Princeton University Press: New Jersey

²¹⁶ However, in more recent years Latour has tried to distance himself from the legacy of "Laboratory Life", not going so far as to repudiate its claims, but to clarify them as a critique of the way in which scientific facts are taken for granted, and advocating for critical theorists to "return to the realist attitude". See Latour, B. (2004) Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern, *Critical Inquiry*, Vol. 30(2); Pp: 225-48

²¹⁷ Gergen, K. J. (2011) The Self as Social Construction, *Psychological Studies*, Vol. 56(1); Pp: 108-16

²¹⁸ Burr, V. (2015) *Social Constructionism (3rd edition)*. Routledge: New York

enlightenment, rejecting its tenets and ideals on all sorts of grounds (metaphysical, epistemological, moral and aesthetic). For example, it rejects and denounces the idea that there is a true nature of the world underpinned by general laws/structures, that we can apply reason, rationality and the methods of science to discover and understand those general laws/structures, that we can acquire knowledge of the true nature of the world, and therefore that there is an objectively “good”, “right” or “better” way of investigating the world.

Centuries of philosophical, scientific, political and moral “progress” have yielded a great number of general theories describing certain laws/structures within various disciplines. Postmodernists label them pejoratively as “grand narratives” or “metanarratives”, claiming that they dominate and control our approach towards understanding the world while also oppressing alternative views.²¹⁹ They reject the idea that those metanarratives represent facts about nature that have been discovered, because discovery presupposes an existing stable structure. This is why many postmodernists believe that self-improvement, moral progress and social change cannot come from investigation and discovery within the parameters of such metanarratives. Rather, it requires a creative vision and active involvement in a creative process. As a result, postmodernists tend to play the role of contrarian, challenging certain norms, and offering radical alternative views within a wide variety of disciplines that are traditionally grounded in those enlightenment tenets and “grand narratives” (particularly the arts, literature, philosophy and the social sciences).²²⁰

The term “postmodernism” is sometimes used interchangeably with “poststructuralism” (and I too use them interchangeably for my purposes), however, there is indeed an important distinction. Poststructuralism as a formal discipline is primarily concerned with semiotics, which is the study of signs and their role in meaningful communication. Of particular relevance is Ferdinand de Saussure’s approach (known as “semiology”) in which he regarded language as a system of signs, consisting of “signifiers” and the “signified”. The former refers to words or speech utterances, and the latter refers to the respective concepts. He claimed that the words in language have no meaning in and of themselves (this is his principle of “arbitrariness” of signs) but only have meaning in virtue of being part of a system of language that is underpinned by collective behaviour and/or convention (this is his

²¹⁹ Lyotard, J-F. (1984) *The Postmodern Condition: A Report on Knowledge*, In Bennington, G. and Massumi, B. (trans.) Manchester: Manchester University Press. Trans. of *La Condition postmoderne: rapport sur le savoir* (Paris: Minuit, 1979)

²²⁰ For example, in art and literature it denies the possibility that one form of work can be better than another, that one person’s interpretation is better than another’s, and that the original author’s intended meaning is relevant to a reader’s understanding of the work. In architecture it manifests as weird and unusual designs that seem to disregard the principles or norms of good architectural design. See Burr, V. (2015) *Social Constructionism (3rd edition)*. Routledge: New York; Pp: 13-14

principle of “conventionality” of signs).²²¹ Hence the difference lies in the fact that poststructuralism (fuelled by the work of de Saussure and the so called “linguistic turn” in analytic philosophy) specifically emphasises the role of symbols or language as the medium of experience, observation and knowledge acquisition (as well as the relationships between power, language, symbols and knowledge).²²²

Nevertheless, such a difference belies an important commonality and kinship between the two. One of the most famous examples of poststructuralist thought is Jacques Derrida’s theory of “deconstruction” (which was his translation of Heidegger’s term “destruktion”).²²³ Though it begins as a critique of de Saussure’s “logocentrism” (privileging of speech over text), it is generally aimed at describing how one can discover the divisions or ambiguities within key concepts, which reveal the privileging and repression of certain meanings and definitions over others. In exposing such privileging and repression one is thereby able to overturn or reverse established traditions, dichotomies and hierarchies.²²⁴ Though de Saussure is considered a structuralist, what poststructuralists like Derrida have in common with him is that they view knowledge, meaning and our understanding of reality, as only made possible by the linguistic conventions or discursive practices of a particular community. Therein lies the kinship between postmodernism and poststructuralism and why a contemporary sociologist like Simon Susen describes poststructuralism as part of “the ‘postmodern turn’ in the social sciences”.²²⁵

Not only do we need to recognize that our relation to the world is linguistically constituted and conceptually organized; but, in addition, we need to acknowledge that every symbolically mediated representation of reality is a reality in itself. Put differently, linguistic realities are hyperrealities in the sense that, although they emerge in relation to an objectively existing outside world, they constitute irreducible realms of interpretation. (Susen, 2015; Pg. 80)

This also explains how and why poststructuralism as a movement converges with the broader postmodernist movement in terms of the goal of challenging the established theoretical foundations of various disciplines (i.e. “grand narratives” or “metanarratives”). Poststructuralism challenges the “structuralist” ontologies of the social and psychological sciences in which there is also much emphasis

²²¹ Noth, W. (1990) Handbook of Semiotics, Indiana University Press: Bloomington and Indianapolis; Pg. 58

²²² Hacker, P. M. S. (2013) The Linguistic Turn in Analytic Philosophy, In Beaney, M. (Ed) *The Oxford Handbook of The History of Analytic Philosophy*, Oxford University Press

²²³ “Deconstruction” is essentially Derrida’s re-interpretation of Heidegger’s renunciation of the “project of and the word ontology”. See Derrida, J. (1974) *Of Grammatology (Corrected Edition)*, In Spivak, G. C. (Trans) Baltimore, MD: Johns Hopkins University Press; Pg. 22

²²⁴ Lawlor, Leonard, "Jacques Derrida", *The Stanford Encyclopedia of Philosophy* (Spring 2014 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/spr2014/entries/derrida/> (last accessed 19/05/2019)

²²⁵ Susen, S. (2015) *The ‘Postmodern Turn’ in the Social Sciences*, Palgrave MacMillan UK

on the way such ontologies unnecessarily constrain the possibilities of human knowledge and action.²²⁶ It challenges the view that social, cultural and political phenomena are underpinned by a deeper reality consisting in stable and unchanging economic, political and psychological structures and rules.²²⁷

In sociology, the search for rules and structure was exemplified by Marx, who explained social phenomena in terms of society's underlying economic structure, and psychologists such as Freud and Piaget each postulated the existence of underlying psychic structures to account for psychological phenomena. In each case the hidden structure or rule is seen as the deeper reality underlying the surface features of the world, so that the truth about the world could be revealed by analysing these underlying structures. Theories in the social sciences and humanities that postulate such structures are known as 'structuralist', and the later rejection of the notion of rules and structures underlying forms in the real world is thus known as 'poststructuralism', the terms 'postmodern-ism' and 'poststructuralism' being sometimes used interchangeably. (Burr, 2015; Pg. 13)

This is also why the application of poststructuralist methodology in the social and psychological sciences is typically based on phenomenology and hermeneutics (sometimes referred to as "humanistic interpretationism" and "discourse analysis"), wherein understanding a social/psychological phenomenon requires one to understand how individuals subjectively and inter-subjectively interpret or make sense of their experiences (what psychologists often refer to as "meaning making").²²⁸ ²²⁹ Investigation from a poststructuralist perspective is thus a discursive, interpretive and creative process, rather than a discovery process.

In a strict sense, it appears that, from a poststructuralist perspective, there are no non-discursive realms. On this account, reality presents itself to human actors, unavoidably, as a discursively mediated form of existence. Given that we are meaning-producing entities able to relate to the world through the conceptualizing power of linguistic reflection, our most immediate experience of reality cannot be separated from the mediating function of interpretation. (Susen, 2015; Pg. 80)

²²⁶ Fox, N. J. (2014) 'Post-structuralism and postmodernism.' In Cockerham, W. C., Dingwall, R. and Quah, S.R. (Eds) *The Wiley-Blackwell Encyclopedia of Health, Illness, Behavior and Society*. Chichester: Wiley

²²⁷ Burr, V. (2015) *Social Constructionism (3rd edition)*, Routledge: New York

²²⁸ Park, C. L. (2010) Making sense of the meaning literature: An integrative review of meaning making and its effects on adjustment to stressful life events, *Psychological Bulletin*, Vol. 136(2); Pp: 257-301

²²⁹ Zittoun, T. and Brinkmann, S. (2012) Learning as Meaning Making. In: Seel, N. M. (Eds) *Encyclopedia of the Sciences of Learning*. Springer, Boston, MA; Pp: 1809-11

Self as a Social Construction

Social constructionism focuses on the way in which broad populations, cultures, social systems and institutions shape our understanding of reality (e.g. the scientific community) and thus it can be understood as a theory of macrosociology. However, the idea that the self is a social construction is typically explained at a lower level of abstraction (i.e. microsociology) in terms of how interactions between people and small groups give rise to selfhood (or more precisely, self-concept and personal identity).²³⁰ It originates from the work of the American pragmatists and sociologists of the early 20th century (namely George Herbert Mead and Charles Horton Cooley),^{231 232} whose ideas would form the basis of an influential theory in microsociology developed by Herbert Blumer known as “symbolic interactionism”.²³³

In his book *Human Nature and the Social Order*, Cooley proposed that the self is constituted by what we imagine others to think of us. He called this idea the “looking-glass self” and described it as consisting of three components - The imagination of our appearance to the other person, the imagination of that person’s judgment of that appearance, and some sort of self-feeling such as pride or mortification. While the emphasis is on the interaction between the individual and others it is also interesting to note that Cooley goes further to articulate a normative ideal of the self as a relatively stable entity that is “not immediately dependent upon what others think” but one that also requires “variability, openness, freedom, on a basis of organization”.²³⁴

In the posthumously published *Mind, Self and Society*, Mead elaborates on Cooley’s ideas of interaction and interlocution. According to Mead, the self is not a physiological entity that is innate or present at birth. Rather, the self is understood in terms of reflective self-awareness, i.e. as an object that one can experience or become aware of. According to Mead, this self (“an object to himself”) can only emerge from mechanisms associated with the use of symbolic language during social interaction. Mead identifies three stages of symbolic communication/activity that lead to the realisation and emergence of this self. The first stage points to the necessity of language to facilitate communication whereby the individual is necessarily “an object to himself”. The second stage refers to the individual adopting the role or taking the attitude of the other (interlocutor), i.e. role playing, which enables the

²³⁰ For a further elaboration of this distinction see Leeds-Hurwitz, W. (2006) Social Theories: Social Constructionism and Symbolic Interactionism. In Braithwaite, D. O. and Baxter, L. A. (Eds) *Engaging Theories in Family Communication: Multiple Perspectives*. SAGE Publications, Inc.; Pp: 229-42

²³¹ Mead, G. H. (1934) *Mind, Self, and Society: From the standpoint of a social behaviorist*. Edited with introduction by Charles W. Morris. Chicago, IL: University of Chicago Press

²³² Cooley, C. H. (1902) *Human nature and the social order*. New York: Scribner

²³³ Blumer, H. (1969) *Symbolic interactionism: Perspective and method*. Englewood Cliffs, NJ: Prentice-Hall

²³⁴ Cooley, C. H. (1902) *Human nature and the social order*. New York: Scribner; Pg. 236

individual to become what Mead refers to as a “specific other”. The third stage requires that the individual adopt the role/attitude of all relevant others (interlocutors and potential interlocutors), which he refers to as the “generalized other”. Mead points out that this is what occurs when one is playing a game involving many others. One must be aware of the roles and attitudes of those playing the game. This enables the individual to view themselves from the perspective of others as a symbolic unity and thus confers the individual with a sense of self and purpose.²³⁵

Inspired by the work of Cooley and Mead, Herbert Blumer devised a framework for the study of human behaviour and social life which he called “symbolic interactionism”. Blumer’s framework consists of three basic tenets – Firstly, that humans act toward things on the basis of the meanings they ascribe to those things. Secondly, the meaning of those things is derived from, or arises out of, the social interaction that one has with others and broader society. Thirdly, meanings are handled in, and modified through, an interpretative process used by the person in dealing with the things they encounter.²³⁶ This implies that meaning is not inherent to people or objects but emerges from social interaction and is continuously created and recreated through interpretive processes. Carter and Fuller (2015) describe this idea in the following way.²³⁷

Symbolic interactionists are often less concerned with objective structure than with subjective meaning – how repeated, meaningful interactions among individuals come to define the makeup of ‘society.’ (Carter and Fuller, 2015; Pg. 1)

What is important about Blumer’s theory is that it portrays people as having some degree of freedom and flexibility in the way in which they interact with one another in their communities without *structural* influence. Therefore, rather than addressing how social institutions influence and impact individuals’ understanding of the world within those structures, or how antecedent psychological mechanisms explain behaviour, Blumer’s symbolic interactionism focuses on understanding the subjective interpretations of individuals within particular social situations (i.e. meaning-making).²³⁸ It is the individual’s subjective interpretation of things in the world that guides actions (as opposed to the view that people merely behave in accordance with objective truths or broader macro-level institutional/social norms). Here we see more explicitly that the concept of self that symbolic

²³⁵ Mead, G. H. (1934) *Mind, Self, and Society: From the standpoint of a social behaviorist*. Edited with introduction by Charles W. Morris. Chicago, IL: University of Chicago Press; Section: 154-155

²³⁶ Blumer, H. (1969) *Symbolic interactionism: Perspective and method*. Englewood Cliffs, NJ: Prentice-Hall

²³⁷ Carter, M. J. and Fuller, C. (2015) Symbolic interactionism, *Sociopedia.isa*, doi: 10.1177/205684601561

²³⁸ Ibid.

interactionism assumes, aligns closely with the psychological notion of “self-concept” I described previously.²³⁹

...it is to these reflexively applied positional designations that the concept of self is typically intended to refer – and in so doing they create their own internalized expectations with respect to their own behaviour. (Stryker, 1968; Pg. 559)

A more recent social constructionist theory of the self has been proposed by Kenneth Gergen, according to which the self is constructed by the structure of language itself, i.e. how self-concept is shaped by linguistic/discursive structure and ongoing interactive/conversational practices (what he refers to as “relational processes”). With regard to the former, of particular importance is the way in which language determines our concepts. For example, the binary structure of language is claimed to contribute to the dichotomy between self and other, and more generally, discursive structure contributes to narrative conceptions of self. With regard to the latter, interactive conversational processes have the effect of positioning or defining interlocutors in a way that affects their self-concept. Therefore, instead of accepting the view of the self as individualised or bounded (“as the atom of the social world”), Gergen’s theory characterises the self as something that is constituted by the “relational process out of which the very idea of the psychological self could emerge”. This view is based on an application of the Wittgensteinian idea of language obtaining its meaning through its use in discourse. Thus, as per Wittgenstein, any references to an inner private self, or personal reports of one’s state of mind, are meaningless due to such reports being essentially discursive, performative or relational in their function (or in Wittgensteinian terms, “public”).²⁴⁰

In contrast to this emphasis on micro-level interactions between individuals, Berger and Luckman offer a more integrative theory that incorporates broader macro-level sociological phenomena. According to their view, the self emerges from the process of “internalization” (as discussed above). Individuals are born into particular institutional social structures, which impose socialisation upon the individual. The nature of socialisation is itself determined by the action and attitudes of “significant others” and therefore the individual is socialised in a manner that reflects the social idiosyncrasies of the “significant others” (e.g. class and socio-economic status and the characteristic attitudes/behaviours). Insofar as the individual identifies with those social structures, he/she internalises them and adopts the roles and attitudes of the “significant others”. From this basic mechanism, a dialectic between

²³⁹ Stryker, S. (1968) Identity salience and role performance: The relevance of symbolic interaction theory for family research, *Journal of Marriage and the Family*, Vol. 30(4); Pp: 558-64

²⁴⁰ Gergen, K. J. (2011) The Self as Social Construction, *Psychological Studies*, Vol. 56(1); Pp: 112-13

identification by “significant others” and self-identification occurs to give rise to the individual’s particular identity and place in the social structure.²⁴¹

Social constructionism’s critical stance towards established views and traditions, brings the explanatory focus back to the level of macrosociology, which we see in the critique of the various ideas of self, particularly the idea of an “individualized” self. Gergen is eager to point out that non-Western cultures view the self in a more socially/communally embedded way, whereas, this is not the case in the West. Such are the discursive practices in the West, that “a world of individual, self-contained selves” have been constructed, from which he argues social isolation, alienation, and other existential symptoms of “Western individualism” arise.²⁴² Thus, for social constructionists like Gergen some of the focus shifts to evaluating or critiquing particular social constructions of selfhood that are seen to be imposed on us in the West.

This is typical of the broad approach of the literary and sociocultural movements associated with postmodernism, poststructuralist, and some kinds of feminism. They all advocate for people to stand up to such an oppressive state of affairs so as to achieve a more authentic vision of the self, visions that typically consists of various alternative creative, literary and aesthetic notions of the self. For example, Michel Foucault who is considered an important founding figure in poststructuralism, points to the influence of history, culture, politics, morality and what he calls “truth games”, on how we conceive of the self. He argued that a particular “culture of the self” is imposed on us by others, fundamentally as a result of an exercise of institutionalised power over individuals. In response he advocates for an ethic of the self (“care of the self”) which is primarily concerned with promoting individual freedom, autonomy and resisting those institutional forces, so as to enable new ideas of the self to be realised. This requires careful study and critique of the power relations that yield particular views of the self (“technologies of the self”).^{243 244 245} Similarly, the late feminist philosopher Sandra Bartky, drawing from Foucault, emphasises the role of patriarchal standards that are both bounded and unbounded by institutions in the social construction of a form of femininity that subordinates women. She argues that women become complicit in their very own subordination by

²⁴¹ Berger, P. L. and Luckman, T. (1966) *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. Penguin Books; Pg. 150

²⁴² Gergen, K. J. (2011) The Self as Social Construction, *Psychological Studies*, Vol. 56(1); Pp: 108-16

²⁴³ Foucault, M. (1979) *Discipline and Punish*. New York: Vintage

²⁴⁴ Foucault, M. (1997) The ethics of the concern for self as a practice of freedom. In P. Rabinow (Ed.), *Essential works of Foucault 1954-1984, volume I: ethics: subjectivity and truth* (Pp: 281–302). New York, NY: New Press

²⁴⁵ Foucault, M. (1983) *The Culture of the Self: Lectures and UC Berkely*
<http://foucaultnews.com/2013/10/30/the-culture-of-the-self/> (last accessed 19/05/2019)

unconsciously “internalising” or incorporating those patriarchal standards into “the structure of the self”.²⁴⁶

Constructivism

As stated previously, constructivism distinguishes itself from social constructionism in terms of attributing a causal role to the individual in the constructive process. However, as Raskin (2002) points out, the term “constructivism” does not refer to a single, coherent, theoretically consistent discipline, but rather, is used in various idiosyncratic and inconsistent ways.²⁴⁷ Here I want to highlight an important distinction between three different conceptions of constructivism. Firstly, the term “constructivism” is most often used to describe psychological theories of learning and cognitive development, in particular, those proposed by Jean Piaget and Lev Vygotsky. Secondly, there is also what is referred to as “radical constructivism”, which posits that an object is constructed from the internal properties of the object itself rather than properties of the environment. Radical constructivism is typically understood as an epistemological thesis that rejects the idea that knowledge is gained through internalising or representing mind-independent objects in the world. Instead, it assumes a Kantian distinction between a phenomenal world and an unknowable noumenal world and posits that knowledge is mind-dependent, subjective, and derived from individuals interpreting and constructing meaning out of their experiences. Thirdly, “constructivism” can also be used somewhat metaphorically to describe complex processes of natural development during early childhood, that are not captured by either of the above ways of understanding construction.

Piaget’s theory posits that a child’s general capacity and predisposition to learn from and adapt to its environment is due to the existence of internal sensorimotor reflexes and cognitive structures that model the world (“schemas”). Learning is a process that involves the application of existing schemas (e.g. sensorimotor interactions with the environment) to *assimilate* new information and the transforming or creating of new schemas to *accommodate* the new information with the aim of achieving a state of *equilibrium* between the two. Learning and development is uniform across domains and is essentially a progression from domain specific instinctive responses in the early stages

²⁴⁶ Bartky, S. L (1990) *Femininity and Domination: Studies in the Phenomenology of Oppression*. Routledge: New York and London.

²⁴⁷ Raskin, J. D. (2002) Constructivism in Psychology: Personal Construct Psychology, Radical Constructivism, and Social Constructionism, *American Communication Journal*, Vol. 5(3); Pp: 1-17

of development to domain general conceptual thought in the latter stages of development.^{248 249} Piagetian constructivism is frequently discussed in the context of childhood education and learning where it is claimed that children learn best when they are constructing their own understanding independently rather than being given explicit explanation or guidance by teachers. The role of the teacher, rather than simply conveying information to children, is to nurture and support their natural ability to inquire and learn independently.²⁵⁰

In contrast Vygotsky's theory posits that learning and cognitive development are achieved through interaction with their environment, with emphasis on the social environment. Interactions are mediated by various objects/tools that alter the environment. Such tools might include physical artefacts (such as pens, paper, books and computers) or social phenomena (such as language, signs, other persons and social activities). A child learns about their environment, particularly their social environment through the use of such tools, after which knowledge is internalized as a psychological function. In this regard, Vygotsky's theory posits that cognitive development occurs due to social learning which is dependent on cultural and historical factors. Hence Vygotsky's theory is described as a "social constructivist" theory. Vygotsky's also describes the contribution of the external/social factors during development as a form of scaffolding. This scaffolding is provided by social interaction, which supports and guides learning and cognitive development (much like the scaffolding that is used to support and guide the construction of a building). Scaffolding also describes the various ways in which we might enhance certain cognitive functions by the use of artefacts (such as pen and paper) or in some way modifying our environment.^{251 252} Furthermore, Vygotsky's theory posits that the most effective way a child can learn is by focusing on topics/skills that are beyond the child's existing capabilities (i.e. too difficult for the child to master on their own) but are achievable with the appropriate guidance and instruction (scaffolding) from a "more knowledgeable other" (such as a

²⁴⁸ According to Piaget's theory there are four stages of development from birth to the age of 16 years. See Wood, K. C., Smith, H. and Grossniklaus, D. (2001) Piaget's Stages of Cognitive Development. In M. Orey (Ed.), *Emerging perspectives on learning, teaching, and technology*. <http://projects.coe.uga.edu/epltt/> (last accessed 7/4/2017)

²⁴⁹ Smith, L. (2005) *Critical Readings on Piaget*. Routledge: Taylor & Francis e-Library

²⁵⁰ Mooney, C. G. (2013) *Theories of Childhood: An Introduction to Dewey, Montessori, Erikson, Piaget, and Vygotsky (Second Edition)*. Redleaf Press

²⁵¹ Clark, A. (1997) *Being there: Putting brain, body, and world together again*. Cambridge: MIT Press

²⁵² Sterelny, K. (2010) Minds; extended or scaffolded? *Phenomenology and the Cognitive Sciences*, Vol. 9(4); Pp: 465-481

teacher or parent). This “space” between existing competence and potential competence is what Vygotsky referred to as the “zone of proximal development” (ZPD).^{253 254}

According to Vygotsky, cognitive development stems from social interactions from guided/scaffolded learning within the ZPD where children and their teachers co-construct knowledge. In contrast, Piaget’s theory posits that social learning occurs as a result of the four specific stages of cognitive development, which are assumed to be universal and thus independent of cultural and historical context. Thus, on Piaget’s theory, learning is largely independent from social context, whereas on Vygotsky’s theory, learning is dependent on scaffolding from social and environmental context. While this inevitably leads to questions about the degree to which the individual is autonomous in the way they construct their reality and their selves, constructivism in this sense still emphasises the role of the individual as an agent of construction.

It should be noted that insofar as some of the social constructionist theories attribute a causal role to the individual, those theories can be considered partly constructivist. Thus, Blumer’s prototypical version of symbolic interactionism is partly a constructivist theory because the theory assumes the existence of an individual (an agent, no less) for whom social interaction facilitates the kind of subjective interpretations (or meaning-making) that underpin the construction of meaningful self-concepts. The individual is assumed to be motivated to act in accordance with his/her own subjective interpretations as they navigate their world. Symbolic interactionists generally assume the presence of agency as the key link between individual discursive behaviour and the social order. Cooley’s theory is also partly constructivist as it posits an innate capacity of an individual to form judgements about other’s opinions of them from which the individual constructs a self-concept through an ongoing dialectic between the individual and society. Furthermore, the theory also presupposes a capacity for rational and practical agency which functions to integrate self-concept with behaviour.

Radical Constructivism

One of the best known versions of radical constructivism is given by Ernst von Glasersfeld. He posits that individuals are not “born into a ready-made world, which they must try to discover and ‘represent’ to themselves”. Rather, they must organise and interpret their experiences using pre-existing “sensory

²⁵³ Vygotsky, L. S. (1978) *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press

²⁵⁴ Jacobs, G. (2001) Providing the Scaffold: A Model for Early Childhood/Primary Teacher Preparation. *Early Childhood Education Journal*, Vol. 29(2); Pp: 125-130

motor or conceptual structures” and thereby construct knowledge of the world in a way that enables them to adapt to and accommodate certain perturbations within experiential existence.^{255 256} His theory draws from an analogy with Darwinian theory as well as a radical and epistemological interpretation of Piagetian constructivism. He claims that constructions of knowledge serve an adaptive/pragmatic function with regard to the organisation of one’s conceptual schemas, as opposed to adapting to or representing/internalising a mind-independent external world (which many believe is what Piagetian constructivism assumes).^{257 258 259}

Once this is understood, it follows that what matters is not to match an ontic world, but to fit into the experiential one, in the sense of being able to avoid whatever obstacles or traps it might present... this means that 'to know' is not to possess true representations of reality, but rather to possess ways and means of acting and thinking that allow one to attain the goals one happens to have chosen. (von Glasersfeld, 2001; Pg.9)

With regard to the self, von Glasersfeld’s radical constructivism can be understood as positing a rudimentary self (as an “experiencer”) from which a “self” understood as an experience of self (i.e. sense of self) is constructed. This echoes Piaget’s constructivist theory which posits that a child undergoes a developmental transition (a “miniature Copernican revolution”) from a world of sensorimotor experiences to a world of permanent objects among other objects (“externalization”) whereby the self is one of those objects.^{260 261}

If we assume that our picture of the world, the knowledge that constitutes our experiential reality, is constructed by us piece by piece on the basis of experience, then we must also assume that the picture/knowledge we have of ourselves must be constructed in a similar way. In other words, just as we construct a model of a world, externalize it, and then treat it as though its existence were independent of our doing, so we construct a model of the entity that we call

²⁵⁵ von Glasersfeld, E. (1995) *Radical constructivism: A way of knowing and learning*. Falmer Press: London; Pp: 1-2; 63

²⁵⁶ Raskin, J. D. (2002) Constructivism in Psychology: Personal Construct Psychology, Radical Constructivism, and Social Constructionism, *American Communication Journal*, Vol. 5(3); Pp: 1-17

²⁵⁷ von Glasersfeld, E. (1990) An Exposition of Constructivism: Why some like it radical. In R. B. Davis, C. A. Maher, and N. Noddings (Eds) *Monographs of the Journal for Research in Mathematics Education, #4*. Reston, VA: National Council of Teachers of Mathematics, Pp: 19–29

²⁵⁸ von Glasersfeld, E. (2001) The radical constructivist view of science. In A. Riegler (Ed.) *Foundations of Science, special issue on "The Impact of Radical Constructivism on Science"*, Vol. 6, no. 1–3: 31–43

²⁵⁹ von Glasersfeld, E. (1982) An Interpretation of Piaget’s Constructivism, *Review Internationale de Philosophie*, Vol. 36(4); Pp: 612-35

²⁶⁰ Piaget, J. (1967) *Six Psychological Studies*, Vintage: New York

²⁶¹ von Glasersfeld (1989) Facts and the Self from a Constructivist Point of View, *Poetics*, Vol. 18(4–5); Pp: 435-48

our “self” and externalize it so that it ends up as “a thing among other things”. (von Glasersfeld, 1989; Pg. 443)

Presumably, an important aspect of experiential reality relates to social/interpersonal experiences which contribute to a more complex concept of self (as both object and as agent). In this context, von Glasersfeld argues that constructive adaptation and accommodation is mediated by language and he invokes the idea of Wittgensteinian “language games” to argue that words do not represent things that have an independent objective existence, but merely refer to subjective constructs relating to particular ideas or concepts that we use when we engage in language.²⁶²

When it first strikes a child that particular sounds may be linked with other parts of experience, these parts are usually fuzzy and either larger or smaller than they would be for an adult speaker of the language. They gradually become adapted in the course of interactions with others. That is how the impression is generated that meanings are the result of convention. After a while, when the child has begun to produce imitations of the sound-images of words in order to obtain things, they function so well that they create the belief that the association that links these sounds to specific experiences is shared by everyone. This kind of development is best explained by what Wittgenstein described as “language games”. (von Glasersfeld, 2010; Pg. 5)

Humberto Maturana and Francisco Varela have also offered a version of radical constructivism, one that is based on an application of the biological concept of autopoiesis (which refers to the self-creation/maintaining of biological systems). Their central claim is that changes to biological systems are essentially determined by the system’s structural properties rather than properties of the environment.^{263 264 265 266}

It seems obvious to us, that the interactions between unit and environment... create reciprocal perturbations. During these interactions, the structure of the environment only triggers

²⁶² Von Glasersfeld (2010) A Radical Constructivist View of Meaning and the Problem of Communication, In Raskin, J. D., Bridges, S. K. and Neimeyer, R. A. (Eds) *Studies in Meaning 4: Constructivist Perspectives on Theory, Practice, and Social Justice*. Pace University Press: New York

²⁶³ Maturana, H. R. (1978) Biology of Language: The Epistemology of Reality. *Psychology and Biology of Language and Thought: Essays in Honor of Eric Lenneberg*, In Miller, G. and Lenneberg, E. (Eds), New York: NY: Academic Press

²⁶⁴ Maturana, H.R. and Varela, F.J. (1980), *Autopoiesis and Cognition: The Realization of the Living*, Dordrecht, Holland: Kluwer Academic Publishers

²⁶⁵ There are some fundamental distinctions between Maturana’s theory and von Glasersfeld’s which are discussed in Kenny, V. (2007) Distinguishing Ernst von Glasersfeld’s “Radical Constructivism” from Humberto Maturana’s “Radical Realism”, *Constructivist Foundations*, Vol. 2, nos. 2–3; Pp: 58-64

²⁶⁶ Siebert, H. (2002) Constructivism: An Epistemological Change. In Bron, A and Schemmann, M. (Eds) *Social Science Theories in Adult Education Research*, Munster: LIT

*structural changes in the autopoietical units, it neither determines nor instructs them.
(Maturana and Varela, 1987; in Siebert, 2002; Pg. 111)*

Their theory also contains an epistemological claim, which is that knowledge emerges from the process of maintaining autopoietic structural coherence within various environments or domains of interaction, rather than being a representation of an objective reality. We can have no access to an “objective” reality because knowledge is constructed from those interactive processes in ways that are necessarily subject-dependent and relative to the observer.^{267 268}

...if a supposed transcendental reality were to become accessible to description then it would not be transcendental, because a description always implies interactions and, hence, reveals only a subject-dependent reality. (Maturana, 1978; Pg. 18)

Thus, with regard to human knowledge, radical constructivism is the outcome of an epistemological stance that focuses on the relevant processes by which humans create knowledge and meaning rather than acquiring knowledge or discovering meaning. Thus, knowledge and understanding are hermeneutical in nature and the emphasis is subsequently placed on understanding the perspective of the individual and the factors that influence their perspective rather than whether their perspective corresponds to an independent reality. This in turn has the effect of changing the goal or purposes of human investigation/inquiry towards the pragmatic goals of the individual.

In this regard, epistemological constructivism sees knowledge schemes as being classifiable as more or less viable rather than more or less accurate. People cannot know for certain if their constructions correspond to an independent reality, but they can know if their constructions work well for them. (Raskin, 2002; Pg. 4)

In this regard, radical constructivism can also serve as a critique of the behaviourist and cognitivist traditions in psychology and psychotherapy. Proponents claim that those traditions viewed the mind as more or less a passive system (based on perceptual processes), that gathers its content from the environment and uses this to represent objects and phenomena in the world in a way that assumes those objects have an essential nature (i.e. associationism).²⁶⁹

²⁶⁷ Maturana, H. R. (1978) *Biology of Language: The Epistemology of Reality. Psychology and Biology of Language and Thought: Essays in Honor of Eric Lenneberg*, In Miller, G. and Lenneberg, E. (Eds), New York: NY: Academic Press

²⁶⁸ Maturana, H. R. and Varela, F. J. (1987) *The tree of knowledge: The biological roots of human understanding*. New Science Library: Boston; Pg. 26

²⁶⁹ Balbi, J. (2008) Epistemological and theoretical foundations of constructivist cognitive therapies: Post-rationalist developments, *Dialogs in Philosophy, Mental and Neuro Sciences*, Vol. 1(1); Pp: 15-27

...constructivist therapists set off on a fundamental revision of the epistemological premises that serve as the groundwork of their colleagues' models. Their critique is aimed at the fundamental underpinning of these models, especially the "associationist" postulate of empiricism, by which the mind is conceived as a passive system that gathers its contents from its environment and, through the act of knowing, produces a copy of the order of reality. In contrast, constructivism is an epistemological premise grounded on the assertion that, in the act of knowing, it is the human mind that actively gives meaning and order to that reality to which it is responding. (Balbi, 2008; Pg. 16)

The critique extends towards what is pejoratively labelled as "positivist" conceptions of mental disorder, therapeutic methods that assume an objective standard or norm of mental function and the view of the therapist as a privileged knower or authority who can critique and persuade or impose such norms onto their patients.²⁷⁰ Hence, radical constructivism is seen as having psychotherapeutic potential by enabling people to critically reflect on their constructed understandings and encouraging them to construct "alternative understandings that potentially open up new life possibilities".²⁷¹ It advocates for an alternative approach to psychotherapy, which recognizes the myriad ways in which patients can viably/meaningfully construe their sense of reality and involves a non-authoritarian collaborative effort between therapist and patient where both actively cooperate in facilitating therapeutic change.²⁷²

In light of this, it should be noted that radical constructivism does have some things in common with social constructionism. First and foremost, they both regard knowledge of reality as a mind-dependent construction, differing only on whether individuals or collectives are responsible for the construction. This might lead some to argue for a range of controversial epistemological and metaphysical views (e.g. anti-realism, scepticism, idealism, subjectivism, pragmatism and relativism). Secondly, they both challenge the enlightenment tenets of positivism, empiricism, realism, structuralism, and the notion of objective truth. Thirdly, they both take a critical stance towards established disciplines and paradigms of inquiry, while advocating for new ways of constructing an understanding of the world from which new possibilities will emerge (i.e. meaning making).

²⁷⁰ According to Bridges and Raskin (2008) constructivist therapists regard the DSM as "a complex professional construct system that is helpful at times and harmful at others." See Bridges, S. K. and Raskin, J. D. (2008) *Constructivist Psychotherapy in the Real World*, in Raskin, J. D. and Bridges, S. K. (Eds) *Studies in Meaning 3: Constructivist Psychotherapy in the Real World*, Pace University Press; Pg. 21

²⁷¹ Bridges, S. K. and Raskin, J. D. (2008) *Constructivist Psychotherapy in the Real World*, in Raskin, J. D. and Bridges, S. K. (Eds) *Studies in Meaning 3: Constructivist Psychotherapy in the Real World*, Pace University Press; Pg.3

²⁷² Balbi, J. (2008) Epistemological and theoretical foundations of constructivist cognitive therapies: Post-rationalist developments, *Dialogs in Philosophy, Mental and Neuro Sciences*, Vol. 1(1); Pg. 25

Conclusion

It is important to understand what we are actually referring to when we use the language of “the self”, given the plurality of definitions of selfhood, and the different aspects, dimensions, or phenomena related to the self. In our ordinary everyday discourse, it remains highly intuitive to regard the referent of “the self” as a single, essential, unified, monolithic, entity. This was the kind of self that Descartes broadly conceived of and is also the kind of self that Locke argued was necessary for attributing personal responsibility. However, the ontological status of this intuitive conception of self is controversial as highlighted by Hume, and this has motivated several contemporary views that regard the self as merely an illusion, an abstraction, or a fiction, views which I will discuss in more detail in a later chapter.

Nevertheless, there are two important ways in which this does not significantly mitigate against the intuitive conception of self. Firstly, the fact that there is an irresistible phenomenological experience that compels one to believe in the intuitive conception, gives it some ontological traction at the level of phenomenology and also forces us to take such phenomenology into account when investigating the self. The phenomenological perspective highlights several important dimensions of selfhood, such as the existential, situated, embodied, experiential, humanistic and hermeneutical dimensions. Secondly, such is the compelling nature of the phenomenology, that the intuitive conception of self is tacitly assumed and practically applied in our “every day” lives and discourse. It underpins the view that humans are subjects and agents to whom certain properties and responsibilities are attributed. As human beings, we naturally identify with those attributes and responsibilities and are compelled to act accordingly. If there is no stable, persistent and unchanging subject to whom we can attribute responsibility, interests and motivations, we are faced with significant practical dilemmas and the prospect of having to radically change the way we live our lives. This is why the persistence question of personal identity is of great practical significance, the outcome of which will determine whether the intuitive conception of self, or some semblance of it, is the correct one.

Most naturalistic philosophers hold the view that the mental phenomena supervene on the physical world, thus implying a relationship of co-instantiation and isomorphism.²⁷³ However, some naturalistic philosophers and cognitive neuroscientists forgo the idea that the self, as intuitively conceived, exists in any real or ontological sense. They are sceptical of the possibility of there being a specific, appropriately circumscribed, neurobiological substrate that we can point to and identify as the self.

²⁷³ Guttenplan, S. (1994) Reduction of Mind, in *A Companion to Philosophy of Mind*, Oxford: Blackwell Publishers; Pp: 412-31

Instead, they focus on understanding how such phenomenology is realised by the relevant neurocognitive processes in the brain.²⁷⁴ Thus, if we are to take both Hume and the phenomenology seriously, then the intuitive conception leads us to a view such as Metzinger's Phenomenal Self Model, which describes more of a "virtual" self than an "actual" self, which correlates with the idea of the self as an abstraction or fiction (to be discussed in more detail in a later chapter).

Naturalistic philosophers also investigate the self by trying to understand various forms of self-representation that underpin different dimensions of selfhood. While there are important self-representational processes that are linked to biological functions in all organisms, it is the more complex, higher order, conceptual forms of self-representation and metarepresentation that underpin our reflective sense of self that confers on us a self-concept and sense of personal identity. We can relate this back to the fundamental distinction between pre-reflective and reflective self-awareness in contemporary phenomenological approaches towards investigating conscious experience. The former refers to a kind of self-awareness that is implicit and consists in the immanence or first-personal "given-ness" of phenomenal experience that many sentient creatures possess. The latter refers to an explicit and conceptual form of self-awareness that only human beings possess. It is what enables us to have a sense of who we are, i.e. a sense of personal identity.

Sense of personal identity is a psychological notion and consists in a person's subjective interpretation and appropriation of their beliefs, values and experiences. It can be understood as the response one might offer to the question "who am I?". It also captures the idea that human beings are not merely objects, but also subjects and thus offers a more precise way in which we might describe human selfhood. After all, to be a human self is to be a subject of a certain special kind, which I will discuss in the following chapter. Furthermore, this psychological notion of personal identity also offers us an alternative way in which we might address the persistence question of personal identity if it can be demonstrated that having a sense of personal identity confers a unity of self or subject over time. I will also discuss this idea in more detail in a later chapter.

Some of the views that I have surveyed in this chapter also remind us that we need to give due consideration to the significance of the social environment within which human selfhood is embedded. Even if one does not agree with idea that the self is merely a social construction, clearly the social environment plays a crucial role throughout one's life. Hence, we need to think of human beings not just as biological organisms endowed with various biological and psychological traits, but also as social organisms. In other words, human beings are also psychosocial beings and our selfhood is a

²⁷⁴ Churchland, P. S. (2011) The Brain and Its Self, *Proceedings of the American Philosophical Society*, Vol. 155(1); Pp: 41-50

psychosocial phenomenon. This is something that I reiterate and elaborate on throughout each subsequent chapter.

Before I can discuss any of those important topics, it is important to have a clearer understanding of the self in its most fundamental and rudimentary form. This will be the subject of the next chapter in which I will discuss in detail, some highly influential models of selfhood from philosophy of mind, cognitive neuroscience and contemporary phenomenology, i.e. the “proto-self” and the “minimal self”. These models of selfhood are very useful in helping us understand the fundamental elements that comprise selfhood in a wide variety of living organisms including humans. However, the self as it pertains to human beings is a lot more complex, so the aim of discussing those models is mainly to describe the preconditions for the emergence of a rudimentary form of human selfhood that I refer to as the “minimal human self”, an idea that will be further elaborated on in subsequent chapters.

Chapter 2 - Foundations of Human Selfhood

Introduction

In the context of a naturalistic approach towards investigating selfhood, the traditional conception of the self as a single, stable, unified, monolithic entity is the subject of much contention. Those who doubt that such an entity exists will tend to adopt the Humean view that there is only a bundle of experiences and sensations, from which we mistakenly infer the existence of such a self. Hence, the focus of investigation of selfhood shifts onto the most fundamental and rudimentary phenomena associated with such experiences and sensations. For example, one of the most fundamental aspects of selfhood is being able to distinguish between self and other. Such a distinction is crucial for basic biological function of an organism, i.e. functions associated with survival and self-preservation. A range of complex molecular, cellular, physiological and cognitive mechanisms enable an organism to make self/other distinctions at various microscopic and macroscopic levels. Perhaps most relevant are the mechanisms that enable an organism to represent various bodily and mental states, particularly states of self-awareness, self-consciousness and associated phenomenology.

In the first part of this chapter, I begin by discussing the role of the self/other distinction, self-representation, metarepresentation, self-consciousness and phenomenal experience. I then discuss an important and influential theory of selfhood that highlights an important fact about phenomenal experience, which is that subjectivity is an inherent feature of phenomenal experience. For some, this constitutes a basic theory of self, which enables them to offer a minimal definition of selfhood. However, such a definition is limited in its scope when it comes to understanding the unique, complex and multidimensional nature of selfhood in human beings. The discussion in the second part of this chapter therefore focusses on selfhood in human beings as opposed to selfhood in non-human animals. I discuss how such a selfhood is underpinned by a range of cognitive functions that are fundamentally associated with metarepresentation, decontextualization and offline cognitive processing. I describe how those functions confer on human beings certain capacities that are more commonly understood and described at a higher level of abstraction, namely, diachronic agency and normative self-government. I then describe how those capacities are necessary for the attainment of personal goals, and the upholding of values, morality, virtue and integrity. This discussion reflects the way in which human selfhood is complex, multidimensional and unique to the human species. It also sets the stage for the discussions in subsequent chapters of how such a self emerges during early development and how it continues to develop throughout human lifespan.

Proto-selves and Minimal Selves

Self-Representation

One way to approach the task of understanding the self is to begin by trying to understand the difference between self vs non-self (self/other) and how biological organisms make this distinction. It is a distinction that plays out at both the microscopic and macroscopic levels. How we conceive of this distinction and how we subsequently describe the way in which organisms themselves make such a distinction is a crucial part of understanding biological function, in particular survival and self-preservation. For example, at the microscopic level, the immune system consists of complex molecular and cellular processes that distinguish an organism's own cells from external pathogens (e.g. bacteria and viruses) involving molecular markers (antigens) that identify cells and tissues that are part of the organism.²⁷⁵ At the macroscopic level, the organism as a whole must be able to recognise when it is in danger and respond in ways that promotes self-preservation (e.g. protecting itself from predators and other dangers within its environment) as well as behave in ways that facilitate survival and reproduction. An "awareness" of self versus other is typically implicit in those kinds of responses. Thus, Dennett claims that evolution has produced creatures and systems that are fundamentally concerned with preserving a "distinction between everything on the *inside* of a closed boundary and everything in the *external* world".²⁷⁶ We might therefore think of selfhood, in this basic biological sense, as "an organization which tends to distinguish, control and preserve portions of the world, an organization that thereby creates and maintains boundaries".²⁷⁷

Selfhood in this very basic biological sense might be associated with self-representation whereby the organism is somehow able to represent its components or itself as a whole, as part of itself and as distinct from other (or non-self). While there is a sense in which self-representation occurs at the micro-level (i.e. the level of cells and molecules), it is more commonly associated with macro-level functions (i.e. the level of an organism's brain, nervous system and behaviour). The nervous system performs the crucial role of monitoring internal bodily signals and external environmental signals, coordinating relevant autonomic responses (i.e. involuntary/unconscious responses such as breathing and digestion) as well as somatic responses (e.g. voluntary/conscious movement). For example,

²⁷⁵ Of course, this is not as straightforward as it seems given the presence of complex symbiotic relationships which challenge the idea of a clear demarcation between the immune self and non-self. This has prompted some to offer ecological conceptions of an "immune self". See Tauber, Alfred, "The Biological Notion of Self and Non-self", *The Stanford Encyclopedia of Philosophy* (Summer 2015 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/sum2015/entries/biology-self/> (last accessed 20/05/2019)

²⁷⁶ Dennett, D. C. (1993) *Consciousness Explained*. Harmondsworth: Penguin Books; Pg. 174

²⁷⁷ Dennett, D. C. (1989) The Origin of Selves. In Kolak, D. and Martin, R. (Eds) *Self & Identity: Contemporary Philosophical Issues*. Macmillan; <http://cogprints.org/257/1/originss.htm> (last accessed 10/5/2019)

perception of danger from predation must be coordinated with the relevant fight/flight response (autonomic) and relevant conscious behaviour such a climbing up into a tree or blending into the herd (somatic). Hunger and thirst signals need to be coordinated with internal homeostatic responses (autonomic) as well as food/water seeking behaviour (somatic). Responses are also hierarchically ordered (depending on which functions have priority) and integrated within an organism as a whole.²⁷⁸

Body-state signals have to be integrated, options evaluated and choices made, since the organism needs to act as a coherent whole, not as a group of independent systems with competing interests. (Churchland, 2003; Pg. 35)

One way to understand forms of self-representation associated with monitoring internal bodily signals is to consider the function of the hypothalamus and autonomic nervous system. It is responsible for regulating digestion, respiration, perspiration, metabolism, and blood-pressure in both humans and many non-human animals. Patricia Churchland (2003) describes this as “representing the internal milieu and viscera via chemical and neural pathways”.²⁷⁹ Similarly, Antonio Damasio (2010) describes basic homeostatic functions of the body as a form of self-representation (“body-mapping”) located in the sub-cortical region of the brain (namely, the upper brain stem), which he refers to as the “proto-self”.²⁸⁰

Another basic form of self-representation occurs in somatic nervous system function (i.e. voluntary control/movement of body) with regard to representing musculoskeletal structures. This form of self-representation is associated with proprioception and kinaesthetic awareness (a body’s unconscious awareness of where they are in space). Self-representation in this regard occurs in virtue of embodiment and this is also how Damasio’s idea of the “proto-self” is framed, i.e. as inextricably attached to the body. Such “proto-self” structures are, according to Damasio:

...attached to the parts of the body that bombard the brain with their signals, at all times, only to be bombarded back by the brain and, by so doing, creating a resonant loop... As a result of this arrangement, the protoself structures have a privileged and direct relationship to the body. (Damasio, 2010; Pg. 21)

It makes little sense to attribute values to non-human animals beyond those that are associated with basic survival and reproduction. Similarly, the values that we might attribute to the “proto-self” would also appear to be primarily associated with behavioural and affective tendencies, acquired through

²⁷⁸ Churchland, P. S. (2003) Self-Representation in Nervous Systems, *Annals of the New York Academy of Sciences*, Vol. 1001(1); Pp: 31-8

²⁷⁹ Ibid. Pg. 34

²⁸⁰ Damasio, A. (2010) *Self comes to mind: Constructing the conscious brain*. New York: Pantheon Books

evolutionary adaptation, which serve biological and ecological functions. We can think of these as constituting certain basic or core values that all living organisms possess.²⁸¹

Metarepresentation

Patricia Churchland states that the integration of autonomic nervous system function with somatic nervous system function, which is shared across many species “is the nonconscious neurobiological platform for higher levels of self-representation”.²⁸² Higher levels of self-representation are those which are associated with higher cognitive function such as memory, conscious control, planning, decision making, and conscious self-awareness (which are underpinned by brain structures such as the medial temporal lobe, amygdala and prefrontal cortex). A basic example that Churchland offers is “knowing that my need to flee is more urgent than my need for water”. In this case there is a higher level form of self-representation (associated with the organism’s survival goals and survival behaviour) operating over basic self-representations (associated with danger signals and thirst signals). This capacity to represent various internal states (which themselves are basic forms of self-representation) constitutes a higher level form of self-representation known as metarepresentation. According to Churchland then, “the self” refers to self-representational capacities of nervous systems in terms of both lower-level representations and higher-level representations, i.e. metarepresentations.²⁸³

The best hypothesis is that it involves a complex idea (representation) that the brain generates through activity in various different regions, including the regions representing the body and a representation using memory of the past. The brain activity that we know introspectively as “myself” is probably part of a set of larger patterns of activity the brain deploys for making sense of and getting by in its world. Given these considerations, it is preferable to talk about the problem of self-representation rather than the problem of the self. (Churchland, 2011; Pg. 45)

Damasio has attributed to the “proto-self” the function of generating “primordial feelings”, which give an organism a direct experience of their body in various forms of sentience (e.g. pleasure, pain and

²⁸¹ Paul Maclean’s “four F’s” (feeding, fleeing, fighting and for the sake of politeness, “reproduction”) aptly describe the kind of values that a “proto-self” type of organism might have and it is often cited by Patricia Churchland. See Churchland, P. S. and Sejnowski, T. J. (2017) *The Computational Brain*, Bedfordshire Historical Record Society. MIT Press; Pg. 331

²⁸² Churchland, P. S. (2003) Self-Representation in Nervous Systems, *Annals of the New York Academy of Sciences*, Vol. 1001(1); Pg. 36

²⁸³ Churchland, P. S. (2011) The Brain and Its Self, *Proceedings of the American Philosophical Society*, Vol. 155(1); Pp: 41-50

emotions). Subsequent interactions between proto-self and other objects yields a higher level of self-representation (or metarepresentation) in which the proto-self is represented as a protagonist playing a role in the interaction. This higher level of self-representation yields a different kind of self, which Damasio refers to as the “core-self”. The highest level of representation is what Damasio describes as “pulses of core self whose aggregate constitutes an autobiographical self”, which I discuss in more detail in a later chapter.²⁸⁴

There is much convergence between Damasio’s model and our current understanding of the neurocognitive mechanisms underpinning interoception (the sense of one’s internal bodily states), emotional awareness and the experience of bodily ownership. A prevalent view is that the mechanisms are based on neurocomputational processes associated with “predictive coding” mediated by a region of the brain known as the anterior insular cortex (AIC). The AIC is responsible for integrating bottom-up interoceptive and affective responses with top-down (inferential) predictions to generate a state of emotional and bodily self-awareness.^{285 286 287 288 289} Interoceptive signals and affective responses can be thought of as examples of those “primordial feelings” that Damasio refers to, which are generated at the level of the “proto-self”. The top-down/inferential aspect of the predictive coding account can be thought of as the “higher level representational states of the protoself-object interaction” at the level of the “core-self”. Further processing enables integration of instances of emotional and bodily self-awareness (i.e. core selves) over time to yield an “autobiographical self”.²⁹⁰ I expand on this notion of selfhood in more detail in later chapters.

Here I want to make an important clarification of the idea of metarepresentation. It should be noted that the term metarepresentation used thus far is ambiguous with regard to whether it denotes tacit/unconscious forms of knowledge/awareness or explicit/conscious forms of knowledge/awareness. Churchland’s use of the term “metarepresentation” in the example of “knowing that my need to flee is more urgent than my need for water” is a broader use of the term that also includes unconscious or tacit knowledge/awareness of internal and external/contextual

²⁸⁴ Damasio, A. (2010) *Self comes to mind: Constructing the conscious brain*. New York: Pantheon Books

²⁸⁵ Craig, A. D. B. (2009) How do you feel-now? The anterior insula and human awareness, *Nature Reviews Neuroscience*, Vol. 10(1); Pp: 59-70

²⁸⁶ Seth, A. K., Suzuki, K. and Critchley, H. D. (2012) An interoceptive predictive coding model of conscious presence, *Frontiers in Psychology*, Vol. 2(395); Pp: 1-16

²⁸⁷ Gu, X., Hof, P. R., Friston, K. J. and Fan, J. (2013) Anterior Insular Cortex and Emotional Awareness, *The Journal of Comparative Neurology*, Vol. 521(15); Pp: 3371-88

²⁸⁸ Seth, A. K. (2013) Interoceptive inference, emotion, and the embodied self. *Trends in Cognitive Sciences*, Vol. 17(11); Pp: 565-573

²⁸⁹ Critchley, H. D. and Garfinkel, S. N. (2017) Interoception and emotion, *Current Opinion in Psychology*, Vol. 17; Pp: 7-14

²⁹⁰ Damasio, A. (2010) *Self comes to mind: Constructing the conscious brain*. New York: Pantheon Books

states of affairs. Similarly, while Damasio states that the core-self is associated with explicit/conscious knowledge, presumably it is also associated with tacit/unconscious states of awareness too. Both forms of knowledge/awareness can be understood as metarepresentational phenomena in the broad sense. However, it is explicit/conscious states of knowing/awareness that are more frequently denoted as metarepresentational.²⁹¹

One can imagine a biological or artificial device that could detect the presence of representations but not at all their content properties. It could detect, say, mental representations by being sensitive to the appropriate manifestations of brain activity or it could detect public representations such as utterances by being sensitive to their phonetic properties. Such a device, lacking access to the content properties of the representations it would represent, would not have a metarepresentational capacity in the sense intended. (Sperber, 2000; Pg. 118)

Hence the term metarepresentation is more frequently used to refer to higher cognitive capacities that contain representational content, e.g. explicit/conscious representations of ideas, concepts and mental states. This is why Dan Sperber refers to tacit/unconscious metarepresentational states as “metarepresentational only in a rudimentary way”.²⁹² Furthermore, the terms “conscious” and “awareness” are ambiguous in the same regard and this requires clarification. The ambiguity arises from the sense in which non-conscious self-representational states confer on a system an “awareness” or “knowledge” of itself in the same way that the immune system can be thought of as being “aware” or “knows” of self versus other (as discussed above). Similarly, “rudimentary” metarepresentational states, such as those associated with an organism’s physiological response to danger (e.g. the fight or flight response), can also be understood in terms of an organism being “aware” of or “knowing” about itself (e.g. “aware” of or “knowing” its position in relation to a nearby predator). In both cases there is a sense in which an organism is “aware” of itself, but it is an implicit or non-conscious form of self-awareness. The molecular, cellular and physiological states associated with the biological self/other distinction, or the fight or flight response, do not refer to conscious states of awareness.

There is also a need for clarification with regard to the term “consciousness”. An important distinction was made by Ned Block (1995) between what he refers to as “access” vs “phenomenal” consciousness.²⁹³ The latter refers to *qualitative* experience understood in terms of Thomas Nagel’s

²⁹¹ Sperber, D. (2000) Metarepresentations in an Evolutionary Perspective. In Sperber, D. (Ed) *Metarepresentations: A Multidisciplinary Perspective*. Oxford University Press: New York; Pp: 117-134

²⁹² Ibid. Pg. 118

²⁹³ According to Block (1995) patients with neurological deficits (e.g. blindsight, epilepsy, prosopagnosia) lack the relevant phenomenal conscious experiences but are still able to execute appropriate (rational) functions. He

famous “what it is like” sense of consciousness. Here, the notion of self-representation is also invoked by many in order to try and explain how the qualitative and phenomenal aspect of consciousness is achieved by physical mechanisms (i.e. the brain).²⁹⁴ ²⁹⁵ In contrast, the latter, “access” consciousness, refers only to the *functional* nature of consciousness, which can be understood in terms of information (i.e. a representation of an internal bodily state or external environmental state) that is “poised for use as a premise in reasoning” by an organism.²⁹⁶ In other words, it describes the process in which information or knowledge is used to guide rational function/action whether or not it has any associated qualitative or phenomenal feel in the Nagel sense.²⁹⁷ Hence the term “consciousness” might refer to either *access* or *phenomenal* consciousness. However, I will use “consciousness” to refer to *phenomenal* consciousness (whereby the *access* aspect is also often present).

A prevailing feature of consciousness is that instances of it necessarily pertain to a subject. In other words, consciousness only exists insofar it is experienced by a subject (whether a human or a non-human animal). As John Searle states, consciousness has a first-person mode of existence or a “first person ontology”.²⁹⁸ This is understood by some to constitute a form of self-awareness that is inherent and implicit in conscious experience and so offers scope for a minimal definition of selfhood, which I discuss in more detail in the following section.

The Minimal Self

Shaun Gallagher and Dan Zahavi describe consciousness or phenomenal experience as consisting of two different levels associated with two kinds of self-consciousness or self-awareness. They refer to the first level as “pre-reflective self-consciousness”, which is a minimal form of self-consciousness that

argues these examples (amongst others) demonstrate that the term “consciousness” often conflates two potentially dissociable dimensions of consciousness, namely the functional and phenomenal dimensions. See Block, N. (1995) On a confusion about the function of consciousness, *Behavioral and Brain Sciences*, Vol. 18; Pp: 227–47

²⁹⁴ This topic nowadays is popularised and promoted as the “hard problem” of consciousness. See Chalmers, D. J. (1996) *The Conscious Mind: In Search of a Fundamental Theory*. New York and Oxford: Oxford University Press

²⁹⁵ For example, Lycan and Zalta describe phenomenal consciousness as “represented properties of represented objects”. See Lycan, William, “Representational Theories of Consciousness”, *The Stanford Encyclopedia of Philosophy* (Summer 2015 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/sum2015/entries/consciousness-representational/> (last accessed 19/05/2019)

²⁹⁶ Block, N. (1995) On a confusion about the function of consciousness, *Behavioral and Brain Sciences*, Vol. 18; Pg. 231

²⁹⁷ Van Gulick, Robert, “Consciousness”, *The Stanford Encyclopedia of Philosophy* (Spring 2014 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/spr2014/entries/consciousness/> (last accessed 19/05/2019)

²⁹⁸ Searle, J. R. (2000) The Self as a Problem in Philosophy and Neurobiology. In T.E. Feinberg and J.P. Keenan (Eds) *The Lost Self: Pathologies of Brain and Identity*. Oxford: Oxford University Press; Pg. 11

is a constant structural feature of phenomenal experience. It is experienced in an immediate way whereby the subjectivity of such experiences is implicitly represented in those experiences. It can be understood as a kind of “first-order” consciousness or a “first-order” self-awareness.²⁹⁹

When I experience an occurrent pain, perception, or thought, the experience in question is given immediately and noninferentially. I do not have to judge or appeal to some criteria in order to identify it as my experience. (Gallagher and Zahavi, 2015).

Therefore, self-awareness at the most fundamental level consists in the immediate and implicit subjectivity of pre-reflective self-consciousness. At this pre-reflective level, selfhood is conceived of, not as an “object” of experience, but rather, selfhood is the subjective experience itself, embodied in location, posture and action. In this context, awareness of one’s body is not an experience of one’s body as an object, but rather it is an implicit self-awareness of one’s body (and possible bodily actions).

I may have to look or feel around in order to find where the tool is; but, under normal circumstances, I never have to do that in regard to my body. I am tacitly aware, not only of where my hands and feet are, but also of what I can do with them... If, as I am walking down the street, I am pushed from behind, I am instantly aware of my body moving in a way that I did not intend. The fact that I feel a loss of control over my actions suggests that there had been an implicit sense of agency or control in my walking prior to being pushed. (Gallagher and Zahavi, 2015)

The second level of phenomenal experience is referred to as “reflective self-consciousness”. It is a form of self-consciousness that comes about from introspection or reflection on one’s experiences (which include first order pre-reflective conscious experiences). It is experienced in a reflective way whereby the subjectivity of the experience is explicitly represented. It can be understood as a conceptual form of self-awareness or a “second-order” awareness.³⁰⁰

One can get a bearing on the notion of pre-reflective self-consciousness by contrasting it with reflective self-consciousness. If you ask me to give you a description of the pain I feel in my right foot, or of what I was just thinking about, I would reflect on it and thereby take up a certain perspective that was one order removed from the pain or the thought. Thus, reflective self-consciousness is at least a second-order cognition. It may be the basis for a report on one's

²⁹⁹ Gallagher, Shaun and Zahavi, Dan, "Phenomenological Approaches to Self-Consciousness", The Stanford Encyclopedia of Philosophy (Winter 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2016/entries/self-consciousness-phenomenological/> (last accessed 19/05/2019)

³⁰⁰ Ibid.

experience, although not all reports involve a significant amount of reflection. (Gallagher and Zahavi, 2015)

At the level of reflective self-consciousness, we become aware of the fact that we are having pre-reflective experiences (as well as reflective ones) and are able to reflect on those experiences, evaluate them and form judgments. It is at this level that both the pre-reflective self and reflective self can become an “object” of awareness and experience. However, the stable feature common to both the pre-reflective and reflective levels of self-consciousness is immediate and implicit pre-reflective subjectivity. Zahavi points out that when one compares two successive experiences of different events, what remains the same is the “first-person givenness” of both kinds of experience and to deny this is to fail to recognize an essential constitutive aspect of experience, namely the first-person subjective nature of experience. For both Zahavi and Gallagher, this is a way of describing selfhood in its most basic or rudimentary form, which they refer to as the “minimal self”.^{301 302 303}

Zahavi has considered various other accounts and definitions of selfhood and subjectivity as potential alternatives to the “minimal self” and argues that they do not succeed in displacing it. The most interesting though obvious objection to the theory is the view that it trivializes selfhood in human beings and leaves out an important dimension, which is that we are often in a position to reflect on our experiences and thoughts, to evaluate and arbitrate over them, and ultimately to endorse them as our own. For example, consider the fact that many of our conscious experiences, whether they are thoughts, desires or passions, often occur automatically or “willy-nilly”. While there is inherent first-personal givenness in those experiences, it is possible for us to reflect on them and decide whether we wish to endorse them or act on them. In this regard, it is possible for us to “disown” those experiences or choose not to “identify” with them. We can understand this idea when we consider the meaning of statements such as “that is not who I am”, or statements made by others such as “that’s not who you are”. Of course, this is not to say that those experiences cannot be attributed to us (for who else would they belong to?). It is simply pointing out that we can choose to endorse or repudiate those experiences in a way that is relevant to how we understand ourselves. This reflects a psychological dimension of selfhood in human beings that consists in an idealized sense of who we are (or the type of person we wish to be), which is not captured by the “minimal self”.

³⁰¹ Gallagher, S. (2000) Philosophical conceptions of the self: implications for cognitive science, *Trends in Cognitive Sciences*, Vol. 4(1); Pg. 15

³⁰² Zahavi, D. (2005) *Subjectivity and Selfhood: Investigating the First-Person Perspective*. Cambridge, MA: The MIT Press

³⁰³ Zahavi, D. (2009) Is the Self a Social Construct? *Inquiry*, Vol. 52(6); Pg. 556

However, we do not need to frame this debate in terms of competing theories of selfhood. The type of objection discussed above does not dispute the existence of minimal forms of selfhood nor is it an objection to the “minimal self” *per se*. Rather, it highlights the limited scope of the theory when it comes to understanding human selfhood. A minimal theory of self that is based on the first-personal givenness or implicit subjectivity of phenomenal experience may capture the essence of selfhood among all sentient creatures, but it does not capture what is interesting, unique, complex and perhaps essential about selfhood in human beings. We have to go beyond the first-personal givenness or implicit subjectivity of phenomenal experience in order to understand what it typically means for a human being to be a self.³⁰⁴ Therefore, when Zahavi claims that a minimal self is present in infants, and persists in people with Alzheimer’s disease (an important observation that is supported by empirical evidence),³⁰⁵ ³⁰⁶ it belies the complexity of human selfhood and the impact that deficits associated with Alzheimer’s disease have on the self in human beings, such as deficits of autobiographical memory, sense of identity and agency (which I will discuss in more detail in the final chapter).

Thus, if we are interested in human selfhood, and if we want to understand what it means to promote or maintain continuity of self in the context of person-centred care (PCC), we need a definition that captures the dimensions associated with reflective self-awareness. This is precisely what Robert Nozick (1981) had in mind when he defined selfhood in the following way.³⁰⁷

To be an I, a self, is to have the capacity for reflexive self-reference. Something X which could refer, even to X, but not reflexively, is not an I, not a self... When I reflexively self-refer, I intentionally produce a token with the knowledge that its sense is such that in any possible world, any producer X of it refers to X in virtue of a property (being the producer) bestowed upon him in the producing of token “I”. (Nozick, 1981; Pp: 78-79)

The capacity for reflective self-awareness is necessary for us to reflectively endorse our beliefs, desires and actions, and thus take an evaluative stance towards ourselves. It also confers on us an explicit awareness of our having a past, present and future, i.e. diachronic self-awareness. This in turn enables us to transcend the immediacy of the present and of consciousness experience, so as to comport ourselves according to our beliefs, desires, and values over time. In other words, it enables us to

³⁰⁴ When I refer to the self in human beings, I am typically describing human selfhood in its more developed or mature form. Clearly, newborn babies and very young infants lack this kind of selfhood.

³⁰⁵ Zahavi, D. (2009) Is the Self a Social Construct? *Inquiry*, Vol. 52(6); Pg. 558-59

³⁰⁶ Caddell, L. S. and Clare, L. (2010) The impact of dementia on self and identity: A systematic review, *Clinical Psychology Review*, Vol. 30(1); Pp: 113-26

³⁰⁷ Nozick, R. (1981) *Philosophical Explanations*. Harvard University Press; Pg. 78

become rational agents, capable of autonomy and self-determination. However, because our lives are situated and embedded within social contexts, our beliefs, desires, values and actions are also influenced by those contexts. Thus, the actions that we perform as rational agents, situated within complex social environments, will shape the life we live and the person we become. It is upon reflection that we are able to gain a sense of this and ultimately a sense of who we are, i.e. a sense of personal identity.³⁰⁸ In this regard, we are more than just subjects of consciousness or biological loci for conscious experience. We are agents who have the ability to reflect on and evaluate our beliefs, desires, values, actions and lived experiences, which provides the basis for us to construct our sense of personal identity. Therefore, I would argue that the capacity for reflective self-awareness, that is associated with our sense of personal identity, must play a central role in any account of human selfhood.

In the following sections I want to discuss some of the cognitive functions associated with reflective self-awareness. Clearly, there are important differences between the brains of human beings and non-human animals, in terms of size, structure and function, particularly with regard to the prefrontal cortex. Those neuroanatomical differences underpin important differences pertaining to certain cognitive functions and I will describe how the integration of those cognitive functions confer on human beings the capacity for reflective self-awareness, and thus the capacity to develop and construct a sense of personal identity.

The Elements of Human Selfhood

Human Uniqueness

The discussion of how a unique form of human selfhood is underpinned by certain cognitive functions as alluded to above, raises a broader question about whether those functions are unique to humans, and if so, whether they are unique in a *qualitative* or a *quantitative* sense. The former refers to the idea that human beings possess different *kinds* of capacities to non-human animals, whereas the latter suggest that the differences are not in *kind* but of *degree*. Some might argue that if there are certain features that distinguish humans from non-human animals in a qualitative sense, then those features must be essential to humankind, and that therefore, human beings are exceptional to all other species. The phrase “human exceptionalism” has been used to denote such a difference, and such a view has

³⁰⁸ As discussed in the previous chapter, the phrase “sense of personal identity” describes personal identity from a first-person or subjective perspective.

been propounded by a number of influential philosophers, including Descartes and Kant.^{309 310 311 312} Nowadays, the differences between human beings and non-human animals are also considered from an evolutionary perspective and such differences might be seen as part of an evolutionary continuum, which for some, might suggest that the differences between humans beings and non-human animals are quantitative and not qualitative. It is interesting to read that Charles Darwin himself believed the difference between humans and non-human animals to be “one of degree and not of kind”.^{313 314}

As I discussed in the introductory chapter, the unique status of human beings (particularly the idea of human exceptionalism) is thought by many to confer on human beings a special moral status, moral worth and/or dignity. This implies that we have certain moral obligations towards human beings that we do not have towards non-human animals. If human selfhood reflects the unique or exceptional nature of humankind, then the presence or absence of human selfhood may have the same kind of moral implications. However, this is a complex issue that is beyond the scope of the present discussion (though I return to it briefly in the final chapter). My goal here is to describe what I believe are the most important cognitive capacities that underpin the kind of complex multidimensional selfhood that is unique to human beings.

Language and Conceptual Thought

An important capacity is language (or more specifically, symbolic language). Language gives rise to complex forms of representation, reflection and expression. It also enables us to communicate with others, facilitating social interaction and ultimately facilitating the emergence of culture. While non-human animals do indeed communicate with conspecifics (and thus in a sense have language) only human beings are able to create and use a vast number of abstract symbols and phonemes, in various

³⁰⁹ Hatfield, Gary, "René Descartes", *The Stanford Encyclopedia of Philosophy* (Summer 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/sum2016/entries/descartes/> (Last accessed 19/07/2018)

³¹⁰ Loudon, R. B. (2011) *Kant's Human Being: Essays on his theory of human nature*. Oxford University Press

³¹¹ Marc Hauser refers to this as “humaniqueness”. See Hauser, M. D. (2008) *The Seeds of Humanity* - The Tanner Lectures on Human Values; Delivered at Princeton University, November 12, 2008; Pg. 124; and Hauser, M. D. (2009) Origin of the mind, *Scientific American*, Vol. 301(3); Pg. 46

³¹² Human exceptionalism is also an important part of religious belief based on the idea that God created human beings as exceptional from all other species. For example, see Salisbury, J. E. (2014) Do Animals Go to Heaven? Medieval Philosophers Contemplate Heavenly Human Exceptionalism, *Athens Journal of Humanities & Arts*, Vol. 1(1); Pp: 79-85

³¹³ Gross, R. (2012) *Being Human: Psychological and Philosophical Perspectives*, Routledge: New York; Pg. 100

³¹⁴ For an objection to this idea see Penn, D. C., Holyoak, K. L. and Povinelli, D. J. (2008) Darwin's mistake: Explaining the discontinuity between human and nonhuman minds, *Behavioral and Brain Sciences*, Vol. 31(2); Pp: 109-30

ways to represent features of the world (including ourselves) and produce new meanings.³¹⁵ Humans are also able to arrange and rearrange those symbols/phonemes to create large vocabularies of words, which can in turn be combined in an infinite number of ways to produce complex sentences, stories, essays and dissertations, etc.³¹⁶

The only way to generate limitless variation in expression is by means of recursive and combinatorial operations. Recursion is a looping operation, where a rule is called up over and over again, adding new expressions, be they longer sentences, new musical scores, or tools within tools (think Swiss army knife). The combinatorics allow us to combine and recombine discrete elements to create new representations. (Hauser, 2008; Pg. 124)

In contrast, communication in non-human animals does not involve symbols but rather it involves a limited number of signals (e.g. gestures, grunts and screams) which are coupled to immediate contextual/perceptual information in a biologically determined way.³¹⁷

We spontaneously convert analog representations to digital symbols, providing discrete elements for our recursive-combinatoric operations, and achieving great economy of computation... Unlike animals, whose conceptual representations are anchored in sensory and perceptual experiences, many of our representational resources are highly abstract, with no clear connection to sensation and perception; language is one of many such systems. (Hauser, 2008; Pg. 124)

The variety of languages that can be produced by human beings is thought to be constrained in a way that means human beings will develop language with certain particular properties. This is what Noam Chomsky refers to as “universal grammar”. More specifically, universal grammar provides not only the source of our capacity for linguistic expression but also a system of constraints on the range of possible languages associated with recursive and combinatorial operations.³¹⁸

There appears to be a crucial relationship between language and metarepresentation. Some hold the view that language itself is the fundamental metarepresentational capacity on which all other metarepresentational capacities depend, particularly thought or thinking (which is understood in the reflective or conceptual sense, e.g. “thinking about thinking”). For example, Dan Sperber believes that it is precisely the combinatorial and recursive operations associated with language that distinguishes

³¹⁵ Eliot, L. (1999) *Early Intelligence*. London: Penguin Books.

³¹⁶ Hauser, M. D. (2009) Origin of the mind. *Scientific American*, Vol. 301(3); Pg. 46

³¹⁷ Gross, R. (2013) *Being Human: Psychological and Philosophical Perspectives*, Routledge: New York; Pg. 133

³¹⁸ Chomsky, N. (1965) *Aspects of the Theory of Syntax*. Cambridge, MA: MIT Press

metarepresentation “proper” (which is associated with conceptual thought) from more rudimentary forms of metarepresentation (as discussed in the previous section).³¹⁹

Consider first the case of a species with a system of internal representations consisting, roughly, of a small list of representation types that can occasionally be tokened (and indexed to the situation). Then, the internal representations of members of this species could be metarepresented by means of a rudimentary metarepresentational system with a different mental symbol for each metarepresentable representation type. Consider now a species with a system of internal representations that is - or is equivalent to - a mental language with compositionality and recursion. Then, the internal representations of members of this species could be metarepresented only by means of metarepresentational system consisting in - or equivalent to - a meta-language no less rich than the language the expressions of which it serves to metarepresent. (Sperber, 2000; Pg. 119)

Similarly, on Dennett’s account of “florid representing” (i.e. “beliefs about beliefs” or “thinking about thinking”), there is also a requirement of language.³²⁰

What strikes me as clear enough is that there is one pathway to such florid thinking about thinking that moves from the outside in. It begins with the overt, public use of symbols and tokens of one sort or another (spoken words will do, perhaps, but only if they are used selfconsciously), and creates practices that later can be internalized and rendered private. Since chimpanzees, for instance, lacking language, cannot play these external games any more than lions can, they cannot use this path as a route to private or covert thinking about thinking. (Dennett, 2000; Pg. 21)

Jose Bermudez addresses this issue at some length in his book, *Thinking Without Words*. He argues that while non-linguistic animals are in a sense capable of “thinking” (i.e. non-conceptual thought), it is only the linguistically capable ones that are capable of conceptual thought, which requires metarepresentation. Bermudez describes conceptual thought as “intentional ascent”, which in turn requires “semantic ascent” (i.e. thinking about words). He argues that only language, in the form of expressible sentences, can provide the structure for this to occur because language acts as the *vehicle* by which higher order thought can be directed at first order thoughts.³²¹

³¹⁹ Sperber, D. (2000) Metarepresentations in an Evolutionary Perspective. In Sperber, D. (Ed) *Metarepresentations: A Multidisciplinary Perspective*. Oxford University Press: New York; Pp: 117-138

³²⁰ Dennett, D. C. (2000) Making Tools for Thinking. In Sperber, D. (Ed) *Metarepresentations: A Multidisciplinary Perspective*. Oxford University Press: New York; Pp: 17-30

³²¹ Bermudez, J. L. (2003) *Thinking without words*. Oxford University Press

Natural language sentences are the only proxies that will permit thoughts to function as the objects of thought in this manner. To put the matter in the form of a slogan, there can be no intentional ascent without semantic ascent. We think about thoughts through thinking about sentences through which those thoughts might be expressed. (Bermudez, 2003; Pg. 164)

As far as non-human animals (e.g. apes) and human children are concerned, Bermudez believes that apparent “thinking” (or what he refers to as “non-linguistic reasoning”) is more accurately and parsimoniously explained in terms of either hard wired behavioural patterns dynamically linked to contextual/perceptual information, or learned/conditioned behaviours based on sensitivity to environmental regularities that the organism represents or abstracts as a whole (i.e. what is referred to as “behavioural abstraction”).³²² It is only in this sense that Bermudez thinks non-human animals or human infants are capable of “thought” (which is non-conceptual).^{323 324 325}

Conceptual Self-Awareness

If language is necessary for conceptual thought, and only human beings are capable of language, then only human beings are capable of conceptual thought. Regarding human selfhood, of particular importance is conceptual thought directed at oneself. This yields a form reflective self-awareness that is abstract and conceptual in nature, which I refer to as conceptual self-awareness, and this is what ultimately enables us to develop a self-concept and sense of personal identity. An interesting question is whether the ability to recognise oneself in the mirror indicates a basic form of conceptual self-awareness (e.g. given by thoughts such as “that’s me!”). Gordon Gallup pioneered the so called “mirror self-recognition test” as a way to determine whether non-human animal subjects had the ability recognize themselves in this conceptual sense.³²⁶ The test typically involves placing a mark or a sticker on the animal’s body and placing the animal in front of a mirror to see if they react specifically to the mark on their body (e.g. by repositioning themselves to better observe the mark or attempting

³²² For Bermudez, the relationship between language and behaviour is given by Quine’s idea of “reification”. See Quine, W. V. O. (1960) *Word and Object*. Cambridge, MA: MIT Press

³²³ Bermudez, J. L. (2003) Ascribing Thoughts to Non-linguistic Creatures, *Facta Philosophica*, Vol. 5(2); Pp: 313-334

³²⁴ Bermudez, J. L. (2006) Thinking Without Words: An Overview For Animal Ethics, *The Journal of Animal Ethics*, Vol. 11(3); Pp: 319 - 335

³²⁵ Bermudez, J. L. (2010) Two arguments for the language dependence of conceptual thought’, *Grazer Philosophische Studien*, Vol. 81; Pp: 37-54

³²⁶ Gallup Jr., G. G. (1970) Chimpanzees: Self-Recognition, *Science*, Vol. 167(3914); Pp: 86-87

to touch or remove it). He has suggested that if an animal can pass the test then it indicates a pre-existing self-concept.^{327 328}

However, some dispute whether the ability to perform “mirror self-recognition” indicates that subjects have the metarepresentational capacities required for a basic form of conceptual self-awareness. According to Robert Mitchell, mirror self-recognition need not imply the existence of mental states associated with a conceptual sense of self. He claims that an operationalised form of self-awareness can be achieved by what has been referred to as the “kinaesthetic-visual matching theory”.³²⁹

The kinaesthetic-visual matching theory,... claims that passing the mark test is a result of kinaesthetic, proprioceptive and somesthetic sensations of one's own body's position and one's own bodily feeling, and visual images of one's own body and others' bodies. In this view, the organism's ability for kinaesthetic-visual matching is an explanation for its passing the mark test. (Mitchell, 1997; Pg. 41)

Similarly, Daniel Povinelli claims that mirror-self recognition in both chimpanzees and young toddlers (under the age of two) can be explained in terms of a having a “kinaesthetic” sense of self in which behavioural responses are linked to perception rather than a conceptual sense of self given by psychological or conceptual states associated with metarepresentation.³³⁰

³²⁷ Gallup Jr., G. G., Anderson, J. R. and Shillito, D. J. (2002) The mirror test. In M. Bekoff, C. Allen and G.M. Burghardt (Eds) *The Cognitive Animal*. Cambridge, MA: MIT Press

³²⁸ To date many species other than chimpanzees have been able to pass the test (though not all members of each species can pass the test). See Westergaard, G. C. and Hyatt, C. W. (1994) The responses of bonobos (*Pan paniscus*) to their mirror images: Evidence of self-recognition, *Human Evolution*, Vol. 9(4); Pp: 273–279; Walraven, V., van Elsacker, L. and Verheyen, R. (1995) Reactions of a group of pygmy chimpanzees (*Pan paniscus*) to their mirror images: evidence of self-recognition, *Primates*, Vol. 36; Pp: 145–150; Suarez, S. D. and Gallup Jr., G. G. (1981) Self-recognition in chimpanzees and orangutans, but not gorillas, *Journal of Human Evolution*, Vol. 10(2); Pp: 175–188; Patterson, F. and Gordon, W. (1993) The case for personhood of gorillas. In Cavalieri, P. and Singer, P. (Eds) *The Great Ape Project*. St. Martin's Griffin; Pp: 58–77; Plotnik, J. M., de Wall, F. B. M. and Reiss, D. (2006) Self-recognition in an Asian elephant, *Proceedings of the National Academy of Sciences*, Vol. 103(45); Pp: 17053–17057; Reiss, D., Marino L. (2001) Mirror self-recognition in the bottlenose dolphin: a case of cognitive convergence, *Proceedings of the National Academy of Sciences*, Vol. 98(10); Pp: 5937–42; Marten, K. and Pasarakos, S. (1994) Evidence of self-awareness in the bottlenose dolphin (*Tursiops truncatus*). In Parker, S. T. Mitchell, R. W. and Boccia, M. L. (Eds) *Self-awareness in animals and humans: Developmental perspectives*. Cambridge University Press: NY; Pp: 361–379; Delfour, F. and Marten, K. (2001) Mirror image processing in three marine mammal species: killer whales (*Orcinus orca*), false killer whales (*Pseudorca crassidens*) and California sea lions (*Zalophus californianus*), *Behavioural Processes*, Vol. 53(3); Pp: 181–90; and Prior, H. Schwarz, A. and Gunturkun, O. (2008) Mirror-Induced Behavior in the Magpie (*Pica pica*): Evidence of Self-Recognition, *PLoS Biology*, Vol. 6(8); Pp: 1642–50.

³²⁹ Mitchell, R. W. (1997) A Comparison of the Self-awareness and Kinaesthetic-visual Matching Theories of Self-recognition: Autistic Children and Others', *Annals of the New York Academy of Sciences*, Vol. 818; Pp: 39–62

³³⁰ Povinelli, D. J. (1998) Can Animals Empathize? Maybe not, *Scientific American Presents: Exploring Intelligence*, Vol. 9(4); Pp: 67, 72–5

...our research suggests that self recognition in chimpanzees and human toddlers is based on a recognition of the self's behavior, not the self's psychological states. When chimpanzees and orangutans see themselves in a mirror, they form an equivalence relation between the actions they see in the mirror and their own behavior. Every time they move, the mirror image moves with them. They conclude that everything that is true for the mirror image is also true for their own bodies, and vice versa. Thus, these apes can pass the mirror test by correlating colored marks on the mirror image with marks on their own bodies. But the ape does not conclude, "That's me!" Rather the animal concludes, "That's the same as me!" (Povinelli, 1998)

Mental Time Travel

Mental time travel (MTT) refers to the capacity to mentally project oneself into the past or future by remembering or imagining first-personal experiences, respectively.³³¹ Current understanding of MTT traces back to Endel Tulving's research into memory, in particular, his distinction between semantic vs episodic memory.^{332 333 334} Semantic memory refers to facts or events that are explicitly stored and retrieved such as general knowledge about the world (e.g. knowledge that Paris is the capital of France). Semantic memory is therefore propositional in form, objective (third-person) and context independent. Tulving coined the term "noetic consciousness" (knowing) to describe semantic memory. It is worth noting that semantic memory can also be autobiographical in content where such content consists of personally relevant autobiographical information.^{335 336}

In contrast, episodic memory refers to memory of autobiographical events that were experienced and thus consists in a feeling of reliving the past (e.g. remembering a birthday celebration and the location, people, events and emotions). Episodic memory is therefore phenomenological in form, subjective (first-person) and context specific. Tulving coined the term "autonoetic consciousness" (self-knowing/remembering) to describe episodic memory. Hence, while semantic memory provides the basis for semantic prospection (in the form of inferential and analogical reasoning), episodic memory is what enables one to flexibly imagine specific events in the future with the same kinds of emotional

³³¹ Suddendorf, T. and Corballis, M. C. (1997) Mental time travel and the evolution of the human mind, *Genetic Social and General Psychology Monographs*, Vol. 123(2); Pp: 133–67

³³² Tulving, E. (1972) Episodic and semantic memory. In Tulving, E., Donaldson, W. (Ed) *Organization of memory*. Academic Press; New York: Pp: 381–403

³³³ Tulving, E. (1983) *Elements of episodic memory*. Oxford University Press

³³⁴ Tulving, E. (1985) Memory and consciousness. *Canadian Psychology/Psychologie Canadienne*, Vol. 26(1); Pg.3

³³⁵ Grilli, M.D. and Verfaellie, M. (2014) Personal semantic memory: Insights from neuropsychological research on amnesia, *Neuropsychologia*, Vol. 61(1); Pp: 56-64

³³⁶ Renoult, L., Davidson, P. S. R., Palombo, D. J., Moscovitch, M. and Levine, B. (2012) Personal semantics: At the crossroads of semantic and episodic memory, *Trends in Cognitive Sciences*, Vol. 16(11); Pp: 550-558

or phenomenal particularities that characterise past events. Therefore, episodic memory combined with imagination (prospection) is what gives rise to MTT.^{337 338 339}

However, it should be noted that in more recent times, neuroimaging studies demonstrate a functional dissociation between episodic recall of personally relevant events, episodic recall of listed information (in a laboratory setting) and retrieval of semantic information about the world in general. Those dissociations correlate with differential activation within the left medial-temporal lobe and thus respective distinctions are made between autobiographical, episodic and semantic memory.^{340 341} Tulving's notion of "episodic memory" therefore refers to autobiographical memory (though to avoid confusion, I refer to this as "autobiographical-episodic memory"). This gives rise to a contention about whether episodic memory is sufficient for MTT or whether "autobiographical-episodic memory" is necessary.^{342 343} I return to this issue later because it is relevant to how we might understand selfhood in human beings.

Whether non-human animals are capable of episodic recall and thus performing MTT remains controversial. In a famous experiment by Clayton and Dickinson (1998), the behaviour associated with caching and retrieving food (worms and peanuts) in scrub jays was investigated in order to determine whether they were capable of episodic memory and therefore MTT. In the experiment individual scrub jays were made to cache worms and peanuts on one side of separate ice cube trays. After 120 hrs, where there were worms initially cached on one side of the tray, they were made to cache the other type of food (i.e. peanuts) on the other side of the tray (and vice versa where there were peanuts initially cached on one side of the tray). Four hours later they were allowed to select and eat from the entire tray. Scrub jays demonstrated a preference for worms (i.e. seeking the side in which worms were cached) if and only if the worms were cached more recently and thus still fresh (as opposed to being cached 124 hours prior to selection when the worms would be rotten). According to Clayton and Dickinson this demonstrated that scrub jays can form memories of *what* was cached, *where* it was

³³⁷ Suddendorf, T. and Corballis, M. C. (1997) Mental time travel and the evolution of the human mind, *Genetic Social and General Psychology Monographs*, Vol. 123(2); Pp: 133–67

³³⁸ Suddendorf, T. and Corballis, M. C. (2007) The evolution of foresight: what is mental time travel, and is it unique to humans? *Behavioral and Brain Sciences*, Vol. 30(3); Pg. 299

³³⁹ Schacter, D. L., Addis, D. R. and Buckner, R. L. (2007) Remembering the past to imagine the future: the prospective brain, *Nature Reviews Neuroscience*, Vol. 8(9); Pp: 657-661

³⁴⁰ Gilboa, A. (2004) Autobiographical and Episodic Memory—One and the Same? Evidence from Prefrontal Activation in Neuroimaging Studies, *Neuropsychologia*, Vol. 42(10); Pp: 1336–49

³⁴¹ Burianova, H. and Grady, C. L. (2007) Common and unique neural activations in autobiographical, episodic, and semantic retrieval, *Journal of Cognitive Neuroscience*, Vol. 19(9); Pp: 1520-34

³⁴² Zarpentine, C. (2017) Moral judgement, agency and affect: A response to Gerrans and Kennett, *Mind*, Vol. 126(501); Pp: 233-257

³⁴³ Gerrans, P. and Kennett, J. (2017) Mental time travel, dynamic evaluation, and moral agency, *Mind*, Vol. 126(501); Pp: 259-268

cached and *when* it was cached and thus conclude that they demonstrate all the behavioural criteria for episodic-like memory.^{344 345}

In response Suddendorf and Busby (2003) claim that while scrub jays may be able to encode information about *what*, *where* and *when* into memory, it does not imply that this is anything like episodic memory, whereby scrub jays are remembering autobiographical events of the past (let alone experiencing the feeling of reliving it). They argue that while there may be a process that mediates between retrieval and caching of food, it is not necessarily a process that represents information about past caching activity.³⁴⁶

Theory of Mind

Theory of mind (ToM) (also known as “mind-reading”) refers to the ability to reflect on the contents of one’s own and other minds and to attribute mental states to ourselves and others (e.g. beliefs, desires, intentions and emotions). It also enables one to understand and predict the behaviour of others in virtue of the causal role that mental states play. ToM therefore plays a crucial role, not just in relation to conceptual self-awareness, but also in facilitating social interaction, which confers on one a sense of social identity. ToM is thought to be one of the quintessential abilities of human beings.^{347 348 349} As an aside, it is worth noting that there is still much debate and disagreement about the mechanisms underpinning ToM. Some believe that ToM is underpinned by a dedicated innate neural mechanism (a module).^{350 351} Others posit less circumscribed mechanisms involving either the simulation of other people and the projecting onto others of one’s own mental states arising from

³⁴⁴ Clayton, N. S. and Dickinson, A. (1998) Episodic-like memory during cache recovery by scrub jays, *Nature*, Vol. 395; Pp: 272–278

³⁴⁵ Clayton and Dickinson (1998) use the term “episodic-like” memory because it remains unknown and perhaps unknowable whether scrub jays experience the phenomenal qualities associated with episodic memory.

³⁴⁶ Suddendorf, T. and Busby, J. (2003) Mental time travel in animals? *Trends in Cognitive Sciences*, Vol. 7(9); Pp: 391-96

³⁴⁷ Nichols, S. and Stich, S. (2003) *Mindreading*. Oxford, Oxford University Press

³⁴⁸ Baron-Cohen, S., Leslie, A. M. and Frith, U. (1985) Does the autistic child have a "Theory of mind"? *Cognition*, Vol. 21(1); Pp: 37-46

³⁴⁹ Baron-Cohen, S. (2001) Theory of mind in normal development and Autism, *Prisme*, Vol. 34; Pp: 174-183

³⁵⁰ Scholl, B. J. and Leslie, A. M. (1999) Modularity, development and ‘theory of mind’, *Mind and Language*, Vol. 14(1); Pp: 131–153

³⁵¹ Baron-Cohen, S. (1998) Does the study of autism justify minimalist innate modularity? *Cognitive Development*, Vol. 10(3); Pp: 179–191

simulation (“Simulation theory”)^{352 353}, or abstract theorizing about the relation between other’s actions and their mental states (“Theory theory”).^{354 355}

Michael Tomasello and his colleagues have argued that chimpanzees have a ToM (even though it may not be the kind of fully-fledged ToM that humans have) and cite several decades of research evidence in support of their view.^{356 357} The research typically involves experiments in which competition for food takes place between subordinate and dominant chimpanzees. For example, in one experiment food was placed/hidden in a room whereby the subordinate could monitor whether the dominant saw where the food was placed/hidden (as well as where it was moved from original place). The results indicated that when dominants were either uninformed or misinformed about the location of food, the subordinates were more likely to approach and retrieve the food. According to them this indicates that chimpanzees know what conspecifics have and have not seen, which they interpret as “do and do not know”. Thus, it was thought that the subordinate was able to attribute mental states (beliefs or knowledge about location of food) to the dominant, which is thought to indicate ToM ability.³⁵⁸ Similar results have also been found in experiments with scrub jays.³⁵⁹

However, Povinelli and colleagues remain sceptical about the way in which those researchers interpret the evidence. They claim that nothing in the results of those experiments demonstrates that chimpanzees or scrub jays actually reason about their conspecifics’ mental states or understand that they have mental states at all.³⁶⁰ In fact Povinelli and Vonk (2003) offer the following explanation as to why we might be tempted to attribute capacity for ToM to non-human animals.³⁶¹

³⁵² Gallese, V. and Goldman, A. (1998) Mirror neurons and the simulation theory of mind-reading, *Trends in Cognitive Sciences*, Vol. 2(12); Pp: 493–501

³⁵³ Goldman, A. (2009) Mirroring, simulating, and mindreading, *Mind and Language*, Vol. 24(2); Pp: 235–252

³⁵⁴ Gopnik, A. and Wellman, H. M. (1994) The theory theory, In Hirschfeld, L. and Gelman, S. (Eds) *Mapping the Mind*. Cambridge University Press, New York; Pp: 257–293

³⁵⁵ Mahy, C. E. V., Moses, L. J. and Pfeifer, J. H. (2014) How and where: Theory-of-mind in the brain, *Developmental Cognitive Neuroscience*, Vol. 9; Pp: 68-81

³⁵⁶ Tomasello, M. (2003) Chimpanzees understand psychological states: the question is which ones and to what extent, *Trends in Cognitive Sciences*, Vol. 7(4); Pp: 153–156

³⁵⁷ Call, J. and Tomasello, M. (2008) Does the chimpanzee have a theory of mind? 30 years later, *Trends in Cognitive Sciences*, Vol. 12(5); Pp: 187-192

³⁵⁸ Hare, B., Call, J. and Tomasello, M. (2001) Do chimpanzees know what conspecifics know? *Animal Behavior*, Vol. 61(1); Pp: 139–151

³⁵⁹ Dally, J. M., Emery, N. J. and Clayton, N. S. (2006) Food-caching western scrub-jays keep track of who was watching when, *Science*, Vol. 312(5780); Pp: 1662–65

³⁶⁰ Penn, D. C. and Povinelli, D. J. (2007) On the lack of evidence that non-human animals possess anything remotely resembling a “theory of mind”, *Philosophical Transactions of the Royal Society B*; Vol. 362(1480); Pp: 731–44

³⁶¹ Povinelli, D. J. and Vonk, J. (2003) Chimpanzee minds: suspiciously human? *Trends in Cognitive Sciences*, Vol. 7(4); Pp: 157-60

...our folk psychology interprets certain behaviors as prima facie evidence that other individuals possess a theory of mind. This is why most researchers – and the public – are comfortable with a default hypothesis granting chimpanzees, and other animals, a theory of mind. (Povinelli and Vonk, 2003; Pg. 158)

Povinelli and Vonk (2003) believe that Tomasello and colleagues, in claiming that their evidence suggests chimpanzees possess a ToM, are conflating behavioural abstraction with ToM. They argue instead that ToM may have uniquely evolved in humans such that humans now have ToM capacity in addition to the more evolutionarily primitive capacities associated with behavioural abstraction, conditioned responding and habituation, which we share in common with our primate relatives. These more primitive capacities may give rise to intelligent behaviours, practical skills, and apparent “knowledge” (understood in the tacit/unconscious sense) pertaining to the behaviour of conspecifics. However, only humans are able to explain the behaviour of conspecifics (including other members of the research community) in terms of attributing mental states to them (i.e. ToM) and such knowledge of the mental states of conspecifics is explicit/conscious propositional knowledge.

Summary

It seems that the major point of contention in all of these debates is whether intelligent behaviour in non-human subjects indicates that they have the same kinds of cognitive capacities that human beings have, or whether such behaviours are actually achieved by means other than the exercise of those capacities (e.g. those associated with learned or conditioned responding and/or behavioural abstraction). Ironically, as alluded to above, the possibility that researchers may be misinterpreting the data and misattributing such capacities to non-human subjects, may itself reflect a uniquely human capacity. Povinelli and colleagues describe this as the capacity for “systematically reinterpreting first-order perceptual relations in terms of higher-order, role-governed relational structures”.³⁶² They refer to this as the “reinterpretation hypothesis”, which describes the way in which our ability to reinterpret first order perceptual relations underpins a broad range of unique human capacities (such as those I have described so far).^{363 364}

³⁶² Penn, D. C., Holyoak, K. L. and Povinelli, D. J. (2008) Darwin’s mistake: Explaining the discontinuity between human and nonhuman minds, *Behavioral and Brain Sciences*, Vol. 31(2); Pg. 111

³⁶³ Povinelli, D. J. and Vonk, J. (2003) Chimpanzee minds: suspiciously human? *Trends in Cognitive Sciences*, Vol. 7(4); Pp: 157-60

³⁶⁴ Penn, D. C. and Povinelli, D. J. (2009) On Becoming Approximately Rational: The Relational Reinterpretation Hypothesis. In Watanabe, S., Blaisdell, A. P., Huber, L. and Young, A. (Eds) *Rational Animals, Irrational Humans*. Tokyo: Keio University Press; Pp 23-43

...animals of many taxa employ functionally compositional, particular-involving, syntactically structured mental representations about observable features, entities, and relations in the world around them. Furthermore, they form abstract representations about statistical regularities they perceive in the behavior of certain classes of physical objects (e.g., observable causal relations) and other animate agents (e.g., affiliative interactions) and are capable of using these representations off-line to make decisions in a flexible, reliable, and ecologically rational (i.e., adaptive) fashion. Human animals alone, however, possess the additional capability of reinterpreting these perceptually grounded representations in terms of higher-order, role-governed, inferentially systematic, explicitly structural relations. (Penn et al, 2008; Pg. 127)

Thus, according to the reinterpretation hypothesis, the ability to attribute mental states to conspecifics (i.e. ToM) requires the inhibition of outputs associated with representations of learned causal regularities and behavioural abstractions. Such outputs may be a default response (as part of an antecedent evolutionary adaptation) coupled to first-order perceptual representations or observations. So, if one is to reinterpret the behaviour of conspecifics as being caused by particular mental states it will require the inhibition or decoupling of such outputs.

Similarly, the capacity for symbolic language in humans is distinct from the capacities of non-human animals precisely because it is not necessarily linked to any particular environmental/social context like it is for non-human animals, in which certain signals, gestures and noises are coupled to immediate contextual/perceptual circumstances. Mirror self-recognition in chimpanzees might simply reflect kinaesthetic self-awareness, which is a lower-order form of self-awareness that is coupled with immediate contextual and perceptual observations of itself in relation to a mirror. To demonstrate conceptual self-awareness the chimpanzee must be able to transcend or “stand outside” the kinaesthetic relationship between itself and the mirror, and then recognize that such a kinaesthetic relationship exists.

The capacities discussed so far all reflect our unique human ability to be unbound by environmental stimuli (or first-order perceptual observations), which would otherwise commit us to behave in prepotent and predetermined ways (e.g. through conditioned responding). This is why we need not wait until we are *in situ* faced with specific stimuli to perform the relevant cognitive operations. For example, we need not wait until we are confronted with an actual predator to determine the best route for escape. As a result, a multitude of relevant information can be brought to bear on decision making, planning and behavioural responding. This confers on us a degree of flexibility and control in our decision-making and behaviour that non-human animals do not have. Clearly these capacities play

a crucial role in how we live our lives and how we come to understand ourselves. It also highlights the relationship that exists between action and identity, which enables the kind of complex, multidimensional selfhood to emerge during the human lifespan.

Diachronic Selves and Diachronic Agents

Decontextualization and Offline Cognition

Intelligent behaviour in non-human animals can be achieved in a variety of ways. Certain behavioural responses might be innately coupled to perceptual representations in an automatic or reflexive way (e.g. negative phototaxis in nematode worms in response to light perception), or in an instinctive way (e.g. the instinct to flee in response to perceptions of danger). As discussed above, behavioural responses can become coupled to perceptual representations as a result of assimilating appropriate behaviour towards perceptual regularities observed over a period of time (i.e. learned/conditioned behaviour and behavioural abstraction). However, there may be instances where such behaviours are not appropriate or conflict with other behavioural tendencies. In such cases an animal will need to be able to break the link between perception and behavioural tendencies and choose an alternative from within its repertoire of behavioural responses or develop/learn a new behavioural response. This not only requires the inhibition of behavioural tendencies, but also the inhibition of other perceptual information (or stimuli) and the ability to focus attention on other relevant information and behavioural options. Non-human animals are generally only capable of developing or acquiring new behavioural responses (facilitated by inhibitory and attentional control) through *in situ* trial and error. In other words, non-human animals have to learn from specific “real life” contexts, which call for actually responding to actual stimuli or perceptual representations of actual states of affairs in real-time, in the “here-and now”, with real (and potentially dire) consequences. This type of decision making or problem solving is a function of what is referred to as “online cognition”.

What is unique to humans is that we can exercise control over our behavioural tendencies, which in turn enables us to reflect, plan and decide in a context independent manner (i.e. without the need to be in the presence of the actual stimuli, environment, or context). The process of exercising control over our behavioural tendencies is referred to as inhibitory control, which also includes controlling where attention is directed (hence inhibitory control is closely related to attentional control). These processes alongside others (such as working memory, problem solving and planning) constitute what

neuropsychologists refer to as executive function, whose neural substrate is the prefrontal cortex.³⁶⁵
³⁶⁶ ³⁶⁷ Inhibitory control enables us to decouple behavioural responding from context specific stimuli and this is referred to as decontextualized processing or “decontextualization”. The ability to reflect, plan and decide in a context-independent manner is referred to as “offline cognition”. Various modes of offline cognition are associated with varying degrees of decontextualization.³⁶⁸

Mental time-travel (MTT) is an important example of decontextualization and offline cognition. During MTT, autobiographical events that were experienced at a particular time in one’s life and subsequently stored as autobiographical-episodic memory, can be recalled and re-lived or re-experienced (with associated sensory/affective qualities) at any particular time and place, and used to guide future actions and decisions. Hence, one need not be confronted by actual sensory/perceptual stimuli (i.e. in real time and *in situ*), in order to exercise relevant planning and decision making. Sensory, perceptual and affective stimuli associated with episodic memory and imagination (prospection) can be voluntarily elicited independently of environmental context during MTT. This enables a great degree of flexibility of behavioural options.³⁶⁹

Thus the essential feature of mental time travel is the ability to create and recreate these experiences under voluntary control rather than via the presentation of an eliciting situation or object...The consequences for planning are enormous. Mental time travel gives humans a database of situations and responses to them which can be safely rehearsed offline. (Gerrans and Kennett, 2010; Pg. 599)

Gerrans (2006) describes how greater levels of inhibitory control and decontextualization are associated with two other modes of offline cognition, i.e. “declarative processing” and “procedural rationality”. Both involve explicit reasoning, but unlike MTT they do not utilise episodic recall or imagination. Instead, relevant information is represented in a more abstract manner involving

³⁶⁵ Executive function refers to a set of cognitive functions that are necessary for cognitive control of behaviour.

³⁶⁶ Pennington, B., Bennetto, L., McAleer, O. and Roberts, R. (1996) Executive functions and working memory. In G. Lyon and N. Krasnegor (Eds) *Attention, Memory, and Executive Function*. Baltimore: Paul H Brookes Publishing; Pp: 327-346

³⁶⁷ Welsh, M. C. (2002) Developmental and clinical variations in executive functions. In D. L. Molfese and V. J. Molfese (Eds) *Developmental variations in learning: Applications to social, executive function, language, and reading skills* (Pp: 139-185). Mahawah, NJ: Lawrence Erlbaum Associates

³⁶⁸ Gerrans, P. (2006) Mechanisms of madness: evolutionary psychiatry without evolutionary psychology, *Biology and Philosophy*, Vol. 22; Pp: 35–56

³⁶⁹ Gerrans, P. and Kennett, J. (2010) Neurosentimentalism and Moral Agency, *Mind*, Vol. 119(475); Pp: 585-614

linguistic representation (i.e. semantic memory) without the sensory/affective qualities associated with autobiographical-episodic memory.³⁷⁰

Offline processing is not monolithic but involves a hierarchy of progressively more abstract operations which enable the subject to detach from the stimulus and mobilise representations relevant to the explanation of experience. Mental time travel requires less inhibition than declarative cognition and declarative cognition requires less inhibition than procedural rationality. The progressively greater inhibitory demands of each type of cognition go hand in hand with their cognitive complexity. (Gerrans, 2006; Pg. 43)

Declarative processing, as the name suggests, involves the use of declarative knowledge or declarative representations which are not indexed to autobiographical episodes (like episodic memories are). They may be *about* autobiographical episodes, but they are *not* autobiographical episodes. In many cases, however, it can be difficult to think in purely declarative mode without being influenced by episodic information. For example, the task of objectively assessing a student's paper can be unduly influenced by irrelevant episodic information (e.g. recalling how one felt when the student was rude or complimentary in class). In this example (and many others), declarative processing requires inhibitory and attentional control to prevent irrelevant episodic information unduly influencing the outcome of a task. Given that declarative processing is something that occurs independently of episodic context, it must therefore involve a further degree of decontextualisation than MTT.

Full decontextualization occurs when one reasons purely in accordance with the norms of procedural rationality. Examples of this include mathematical calculations, operations of formal logic and application of Bayesian decision theory. However, the evidence for human reasoning (particularly from the "heuristics and biases" research program), indicates that most people are unable to apply the norms of procedural rationality to many reasoning tasks that involve logical or probabilistic calculations.³⁷¹ ³⁷² This may be because most of us are unable to perform the type of abstract decontextualized processing that is required for many of those tasks, which then raise questions about the extent to which human beings are rational.³⁷³ ³⁷⁴ However, whether we successfully exercise those capacities in accordance with the various normative standards that exist is beside the point. Obviously,

³⁷⁰ Gerrans, P. (2006) Mechanisms of madness: evolutionary psychiatry without evolutionary psychology, *Biology and Philosophy*, Vol. 22; Pp: 35–56

³⁷¹ Tversky, A. and Kahneman, D. (1983) Extensional versus intuitive reasoning: The conjunction fallacy in probability judgment, *Psychological Review*, Vol. 90(4); Pp: 293–315

³⁷² Evans, J. St. B. T. and Over, D. E. (1996) *Rationality and reasoning*. Hove, England: Psychology Press

³⁷³ Stanovich, K. E. (1999) *Who is rational?* Mahwah, NJ: Erlbau

³⁷⁴ Stanovich, K. E. and West, R. F. (2000) Individual differences in reasoning: Implications for the rationality debate? *Behavioral and Brain Sciences*, Vol. 23(5); Pp: 665-726

not all humans operate at the height of procedural rationality, but there is clearly a level of rationality that humans are capable of, which exceeds that of non-human animals (such as chimpanzees who are perhaps our closest rival).³⁷⁵ It is our capacity for inhibitory control and decontextualization, operative in various modes of offline cognition, that underpins the kind of intelligence and rationality that enables us to stand at a reflective distance from it all and momentarily break free from the dynamical interplay between stimulus and response.

Human cognition has been characterised as consisting of two fundamentally distinct systems. This is known as the “dual process theory” of human cognition. One of the earlier versions of the theory was proposed by Wason and Evans to account for the results of a deductive reasoning task known as the “Wason selection task”.^{376 377 378} It was developed further and reformulated by Evans and Over as a theory which states that human cognition consists of:

...two distinct cognitive systems: implicit processes which are computationally powerful, context-dependent and not limited by working memory capacity; and explicit processes which permit general purpose reasoning but are slow, sequential and constrained by working memory capacity. (Evans and Over, 2002; Pg. 196)

While not all dual process theories describe the distinguishing features of the two cognitive systems in identical ways, a general consensus exists based on those features of the two systems that tend to cluster together. Cognitive processes that are fast, automatic, and unconscious are referred to as “System 1” processes, while those that are slow, deliberative and conscious are referred to as “System 2” processes. Furthermore, System 1 processes are thought to be evolutionarily ancient, whereas many System 2 processes evolved more recently and some may be unique to humans.^{379 380} The overriding of prepotent responses (whether they are learned/conditioned behaviours or affect-laden episodic representations) associated with inhibitory control and decontextualization, are paradigmatic System 2 process. Keith Stanovich has suggested that System 1 function gives rise to a “fundamental computational bias” that inclines us to automatically contextualize problems, resulting

³⁷⁵ Cherniak, C. (1981) Minimal Rationality, *Mind*, Vol. 90(358); Pp: 161-183

³⁷⁶ It was suggested that the non-normative responses offered by subjects to the Wason selection task (a test of deductive reasoning) were the result of an unconscious “matching bias” and that the verbal justifications for their choices were due to conscious rationalizations that constitute a different kind of thinking. See Wason, P. C. (1966) "Reasoning" in Foss, B. M. (Ed) *New horizons in psychology*. Harmondsworth: Penguin

³⁷⁷ Evans, J. St. B. T. and Over, D. E. (1996) *Rationality and Reasoning*. Hove, UK: Psychological Press

³⁷⁸ Evans, J. St. B. T. (2002) The influence of prior belief on scientific thinking. In Carruthers, P., Stich, S. and Siegal, M. (Eds) *The Cognitive Basis of Science*. Cambridge University Press; Pp: 193-210

³⁷⁹ Evans, J. St. B. T. (2002) Dual-Processing Accounts of Reasoning, Judgment, and Social Cognition, *Annual Review of Psychology*, Vol. 59; Pp: 255–78

³⁸⁰ Evans, J. St. B. T. and Frankish, K. (2009) *In Two Minds: Dual Processes and Beyond*. Oxford University Press

in non-normative or sub-optimal outcomes.^{381 382} In his book, *The Robot's Rebellion*, he discusses at length why this “fundamental computational bias” conferred by System 1 processes has become maladaptive in the modern world.

Unfortunately, the modern world tends to create situations where some of the default values of evolutionarily adapted cognitive systems are not optimal. Many of these situations implicate the fundamental computational biases... These biases serve to radically contextualize problem-solving situations. In contrast, modern technological societies continually spawn situations where humans must decontextualize information — where they must deal abstractly and in a depersonalized manner with information. (Stanovich, 2004; Pg. 122)

While not all System 1 processes are necessarily maladaptive, the point that Stanovich makes is that in a modern society, we are presented with challenges that place a great demand on our System 2 capacities, particularly inhibitory control, decontextualization, analytic reasoning and critical thinking. However, as Gerrans and Kennett (2010) have pointed out, the limitation of the dual process theory is that it frames human reasoning and decision making as more or less a synchronic capacity, i.e. based on the application of declarative and procedural norms of rationality within temporally isolated contexts.³⁸³ While this may sufficiently characterise some modes of offline cognition discussed in the previous section (i.e. declarative cognition and procedural rationality) it cannot accommodate mental time travel (MTT), which involves reflection and deliberation across a temporally extended time frame and implies the existence of a temporally extended self, i.e. a diachronic self.

Therefore, it is more precisely the integration of System 2 processes with diachronic selfhood that equips us with the ability to navigate the complexities of the modern world and comport ourselves in a manner that fulfils both our short term and longer term goals. Ultimately this is what it means to be a rational agent, which is a feature of human selfhood that appears to be unequivocally unique to human beings. What this suggests is that the capacities that underpin a uniquely human self are associated with diachronic function.

³⁸¹ That is “normative” in accordance with the norms of procedural rationality, though some have argued that they are in fact normative on other grounds. See Gigerenzer, G. (1991) How to make Cognitive Illusions Disappear: Beyond “Heuristics and Biases”, *European Review of Social Psychology*, Vol. 2(1); Pp: 83-115; Gigerenzer, G. and Todd, P. M. (1999) *Simple heuristics that make us smart*. New York: Oxford University Press

³⁸² Stanovich, K. E. (2004) *The robot's rebellion: Finding meaning in the age of Darwin*. Chicago: University of Chicago Press

³⁸³ Gerrans, P. and Kennett, J. (2010) Neurosentimentalism and Moral Agency. *Mind*, Vol. 119(475); Pp: 585-614

Normative Self-Government

As discussed at the start of this chapter, the proto and minimal conceptions of self, cannot distinguish between human and non-human selfhood for various reasons, in particular because it excludes considerations of rational agency. Likewise, any conception of agency that simply describes a basic capacity to act in the world cannot capture what is unique about agency in human beings who are able to reflect on their beliefs, desires and values, weigh up competing options, and decide on a relevant course of action. This is what Korsgaard refers to as “normative self-government”.³⁸⁴

Normative self-government is our capacity to assess the potential grounds of our beliefs and actions, to ask whether they constitute good reasons, and to regulate our beliefs and actions accordingly. (Korsgaard, C. M. 2010; Pg. 8)

Non-human animals might be capable of basic forms of normative self-government but this belies the significance of the kind of normative self-government that only human beings are capable of. Normative self-government requires transcending one’s immediate desires, inclinations and other stimulus bound responses. As discussed above, this is achieved through decontextualized processing and offline cognition, not just within isolated moments in time, but across those moments in time. This is especially the case when short term goals conflict with long term goals. Thus, normative self-government implies the existence of a temporally extended subject (i.e. a diachronic self) who has a temporally extended sense of reflective self-awareness (i.e. diachronic self-awareness). This is what enables human beings to live their life more or less in accordance with their beliefs, desires and longer term goals, and to exist with a degree of autobiographical unity over time.³⁸⁵ In this regard, rational agency as it pertains to human beings is meant to be understood in terms of diachronic agency, and normative self-government is more specifically an expression of diachronic agency.

One of the most important functions of normative self-government is that it enables us to strive to have the lives we wish to have and be the type of person we wish to be. It enables us to achieve and uphold many of our goals, values and ideals. Not only does this have an effect on other people, but it also affects our own lives and the kind of person we become. In this regard normative self-government plays a crucial role in morality and ethics. For example, according to Kantian moral philosophy, moral judgment or moral reasoning is conceived of as a form of practical reason, which only diachronic

³⁸⁴ Korsgaard, C. M. (2010) Reflections on the evolution of morality. Amherst Lecture in Philosophy. The Department of Philosophy at Amherst College - <http://www.amherstlecture.org/korsgaard2010> (last accessed 19/05/2019)

³⁸⁵ Wallace, R. J. (1999) Three Conceptions of Rational Agency, *Ethical Theory and Moral Practice*, Vol. 2; Pp: 217–242

agents are capable of.^{386 387} Kant argued that actions which are guided by free choice, autonomy and reason (in Kantian terms, the *will*) are the only morally relevant actions. In other words, the *will* must be governed by the capacity for reason, for if we did not possess such a capacity then we would be at the mercy of our whims and motivated purely by desires or impulses, or what Kant referred to as “inclination”.³⁸⁸ Therefore, moral duty is a demand on our *will* and according to Kant we apply this demand in virtue of the maxims we adopt to pursue some ends by some means, which are in turn subject to the requirements of practical reason. The capacity for practical reason can be understood in Kantian terms as the capacity for conscious subjective *willing*, i.e. adopting a maxim.^{389 390}

In contrast to Kantian moral theory, morality has been described alternatively as consisting in hypothetical imperatives, in which moral judgments prescribe action only insofar as such action is thought to achieve a particular end.³⁹¹ Our values, ideals and virtues often constitute those ends and recent empirical research in moral psychology demonstrates that for many people, they are underpinned by tacit intuitive processes associated with emotional/affective responding. Moral judgment in this regard can be conceived of as an expression of a sentiment of approbation/disapprobation, and moral reasoning functions primarily as a way of justifying those sentiments and advocating for others to act accordingly.^{392 393 394}

Aristotle regarded the good (eudemonia) as inextricably linked with the highest fulfilment of essential nature/function, and that the good of a human being must therefore be concerned with our capacity for reason. This is because while the functions of growth, nutrition and perception were shared with non-human animals, what is unique and thus essential to humankind was the capacity for reason. According to Aristotle, doing anything well requires virtue or excellence, thus in order to live well and

³⁸⁶ Korsgaard, C. M. (2010) Reflections on the evolution of morality. Amherst Lecture in Philosophy. The Department of Philosophy at Amherst College - <http://www.amherstlecture.org/korsgaard2010> (last accessed 19/05/2019)

³⁸⁷ Kennett, J. and Fine, C. (2009) Will the real moral judgment please stand up? The implications of social intuitionist models of cognition for meta-ethics and moral psychology, *Ethical Theory & Moral Practice*, Vol. 12(1); Pp: 77-96

³⁸⁸ Kant, I. *Metaphysics of Morals*, 6: 213-4

³⁸⁹ Kant had famously proposed that one should act only according to a maxim by which one can at the same time *will* that it should be a universal law. This is Kant’s famous “Formula of Universal Law”, the first formulation of Kant’s “Categorical Imperative”.

³⁹⁰ Kant, I. *Foundations of the Metaphysics of Morals*. Translated by Lewis White Beck. Library of Liberal Arts, 1956

³⁹¹ Foot, P. (1972) Morality as a System of Hypothetical Imperatives, *The Philosophical Review*, Vol. 81(3); Pp: 305-316

³⁹² Haidt, J. (2001) The emotional dog and its rational tail: A social intuitionist approach to moral judgment, *Psychological Review*, Vol. 108(4); Pp: 814–834

³⁹³ Greene, J. and Haidt, J (2002) How (and where) does moral judgment work? *Trends in Cognitive Sciences*, Vol. 6(12); Pp: 517–23

³⁹⁴ Prinz, J. J. (2006) The emotional basis of moral judgments, *Philosophical Explorations*, Vol. 9(1); Pp: 29–43

achieve virtue or excellence of character a human being must excel in reason. Weakness of will (“akrasia”) demonstrates an inability to act in accordance with reason and thus falls short of achieving moral virtue (excellence of character). According to Aristotle, practice and habituation are required in order to achieve moral virtue.^{395 396}

Integrity is a foundation of moral virtue. It is concerned with the ability to stay true to the commitments and values that one identifies with and to uphold one’s moral obligations.³⁹⁷ This requires an ability to integrate various aspects of one’s personality and life into a harmonious and intact whole. For example, Gabrielle Taylor states that a person of integrity is someone who “keeps his inmost self intact” or whose “self is whole and integrated” and this consists in doing what one believes one ought to do (i.e. being true to oneself or one’s principles) according to a set of moral virtues such as honesty, uprightness and loyalty.³⁹⁸

When we ascribe integrity to him who behaves in socially acceptable ways, or to him who sticks to his principles however adverse the circumstances, then we do so on the assumption that he who behaves in these sorts of ways is he who keeps his self intact. (Taylor, 1981; Pg. 144)

However, this may not be the only sense of integrity that exists. Raymond Gaita points out that the difficulty of equating integrity with the notion of keeping “one’s self intact” is that there may be cases where integrity exists without an “intact” self (due to mental illness, complex and chaotic events from one’s past and conflicting desires and motives). According to Gaita, what constitutes integrity is a capacity to judge and act “in a spirit of truthfulness” with regard to maintaining order in one’s life, despite mental illness, conflicts and chaotic life history.³⁹⁹

...his fantasies and delusions periodically lay waste to whatever he had patiently and painfully achieved in understanding. Each time that happens, he has to begin again. He does. What has to be emphasized is not merely that he tried to restore order to his life, but that he does so in an uncompromising spirit of truthfulness. (Gaita, 1981; Pg. 161)

³⁹⁵ Sihvola, J. (2008) Aristotle on the Individuality of Self, In “[Ancient Philosophy of the Self](#)”, Volume 64 of the series, *The New Synthese Historical Library*; Pp: 125-137

³⁹⁶ Kraut, Richard, "Aristotle's Ethics", *The Stanford Encyclopedia of Philosophy* (Summer 2014 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/sum2014/entries/aristotle-ethics/> (last accessed 19/05/2019)

³⁹⁷ Cox, Damian, La Caze, Marguerite and Levine, Michael, "Integrity", *The Stanford Encyclopedia of Philosophy* (Fall 2013 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/fall2013/entries/integrity/> (last accessed 19/05/2019)

³⁹⁸ Taylor, G. and Gaita, R. (1981) Integrity, *Proceedings of the Aristotelian Society, Supplementary Volumes*, Vol. 55(1); Pp: 143-159; Gaita’s response: Pp: 161-176

³⁹⁹ Ibid. Pp: 162-63

Integrity in this regard, as the uncompromising attempt of an individual to restore order, is not about successfully constructing or expressing an “intact self” (for this is impossible due to mental illness) but rather it can be thought of as upholding a particular ideal that one identifies with. It can be thought of as an ideal concerned with trying to restore diachronic selfhood. Integrity, in this sense, is achieved in virtue of having the right kind of desires or motives regardless of whether one’s goals have been achieved. It reflects a certain type of character that is steadfast and committed to an ideal even in the face of defeat, much like a captain going down with their ship.

The point of the above overview I have just given is to highlight how difficulties in achieving certain ideals of self often arise, whether they are concerned with values, morality, virtue, or integrity. This is largely due to the fact that we need to make important judgments and decisions in the face of conflicting desires, motives, and values. Harry Frankfurt’s account helps to clarify the nature of this type of conflict by highlighting the distinction between what he calls “first-order desires” and “second-order desires”.⁴⁰⁰

Besides wanting and choosing and being moved to do this or that, men may also want to have (or not to have) certain desires and motives. They are capable of wanting to be different, in their preferences and purposes, from what they are. Many animals appear to have the capacity for what I shall call "first-order desires" or "desires of the first order," which are simply desires to do or not to do one thing or another. No animal other than man, however, appears to have the capacity for reflective self-evaluation that is manifested in the formation of second-order desires. (Frankfurt, H. 1971; Pg. 7)

A person who is unable to reflect upon and evaluate their first-order desires to determine whether it is worthwhile to indulge them (i.e. to reflectively endorse or repudiate them) is what Frankfurt refers to as a “wanton”. In other words, the wanton cannot inhibit their first-order desires so as to fulfil second-order desires, particularly those that are associated with long term goals. Thus, their behaviour mirrors those of non-human animals in the sense I described in the previous section, i.e. behaviour that is coupled with first-order perceptions/observations within specific contexts. In this regard, the wanton is a synchronic agent (the antithesis of the diachronic agent) beholden to their first-order desires. Synchronic agents or wantons may still have integrity and certain values. However, achieving those ideals of integrity, upholding those values, reconciling conflicting values and pursuing new ones throughout their lifespan, requires diachronic agency.

⁴⁰⁰ Frankfurt, H. G. (1971) Freedom of the Will and the Concept of a Person, *The Journal of Philosophy*, Vol. 68(1); Pp: 5-20

Ultimately, diachronic agency is what enables us to manifest throughout our lives some degree of consistency, coherence and unity between our beliefs, desires and actions, giving rise to an intact, integrated, temporally unified and practically rational self. Thus, practical reason, morality, virtue and integrity would be impossible/unachievable ideals of the self without diachronic agency. This also highlights the close relationship between diachronic agency and diachronic selfhood. In essence it demonstrates how action and selfhood in human beings are closely related. This is an important idea that has been referred to as our “practical identity” or “narrative identity” and I discuss this in a later chapter. For now, I want to briefly discuss some important insights into the nature of diachronic selfhood and MTT from the perspective of cognitive neuroscience. Such insights provide us with an understanding of the cognitive basis of our practical or narrative identity.

Diachronic Agency and Mental Time-Travel

As discussed in the previous section, there are a unique set of cognitive functions in human beings associated with decontextualization and offline cognition, which underpin our capacity for diachronic agency and normative self-government. According to Gerrans and Kennett (2010), it is more specifically underpinned by MTT.^{401 402 403}

Our diachronic reasons, made salient to us via our capacity for mental time travel, are thus in a position to compete with synchronically occurring wants. In effect they become normative for us. (Gerrans and Kennett, 2010; Pg. 602)

MTT enables us to recall a particular event about ourselves by mentally reliving it (i.e. autobiographical-episodic memory) and then mentally projecting ourselves into the future to imagine possible scenarios that relate to those past events (i.e. prospection). We can also integrate other relevant semantic or declarative knowledge (autobiographical and non-autobiographical) into prospection as well. All of this allows the individual to imagine, with a degree of novelty, detail, and affective tonality, a variety of potential future scenarios and outcomes in which they are implicated, and apply it in practical reasoning, planning and decision making (i.e. normative self-government).

⁴⁰¹ Gerrans, P., Kennett, J. (2010) Neurosentimentalism and Moral Agency. *Mind* Vol. 119(475); Pg. 589

⁴⁰² Gerrans, P. and Kennett, J. (2017) Mental time travel, dynamic evaluation, and moral agency. *Mind*, Vol. 126(501); Pp: 259-268

⁴⁰³ Hardt, R. (forthcoming) Storytelling agents: why narrative rather than mental time travel is fundamental, *Phenomenology and the Cognitive Sciences*, (published online 24 August 2017) <https://doi.org/10.1007/s11097-017-9530-2> (last accessed 20/5/2018)

The fact that memory of past events and representations of potential future scenarios are imbued with relevant affective tonality serves two closely related functions that are particularly important for planning and decision making. Firstly, at a fundamental level, it enables the individual to identify with those past events and future imagined scenarios in a particularly important way. That is, they identify with them not merely in a declarative or propositional way, but also in a visceral, evaluative and value-laden way. According to Gerrans and Kennett (2017), the affective tonality or value-ladenness of those autobiographical-episodic memories confers a “feeling of ‘mineness’”, which, as alluded to previously, is what distinguishes autobiographical-episodic recall from merely episodic recall.⁴⁰⁴

As discussed in the first section of this chapter, an emerging view is that this embodied sense of self-awareness is mediated by neurocomputational mechanisms associated with predictive coding, which is underpinned by the function of the anterior insular cortex (AIC). On this account, the “feeling of mineness” describes the visceral experience of embodied self-awareness that results from affective processing of lower level self-representational interoceptive states.⁴⁰⁵ However, this embodied sense of self-awareness is merely synchronic, i.e. it describes instances of autobiographical-episodic recall and prospection in temporal isolation.⁴⁰⁶ According to Damasio’s model, this constitutes an intermediate level of self-representation which he refers to as the “core-self”. The highest level of self-representation is what he refers to as the “autobiographical self” which is generated by “pulses” of core self.

This self is defined in terms of biographical knowledge pertaining to the past as well as the anticipated future. The multiple images whose ensemble defines a biography generate pulses of core self whose aggregate constitutes an autobiographical self. (Damasio, 2010; Pg. 23)

What is necessary for conferring a sense of diachronic self is a mechanism (or mechanisms) that integrates those instances of autobiographical-episodic memory and prospection (imagination) over time. Damasio postulates a role for the posteromedial cortex (PMC) in what he describes as “coordination mechanisms” or “coordinating devices”, which enable multiple pulses of core self to be integrated or coordinated in a transient manner for purposes associated with an “autobiographical mode” of function during a certain window of time where key episodes are recalled and brought to

⁴⁰⁴ Gerrans, P. and Kennett, J. (2017) Mental time travel, dynamic evaluation, and moral agency. *Mind*, Vol. 126(501); Pg. 262

⁴⁰⁵ Gerrans, P. (2015) All the self we need. In T. Metzinger and J. M. Windt (Eds) *Open MIND*: 15(T). Frankfurt am Main: MIND Group. Pp: 1-19

⁴⁰⁶ Craig, A. D. B. (2009) How do you feel now? The anterior insula and human awareness, *Nature Reviews Neuroscience*, Vol. 10(1); Pp: 59-70

bear on a current episode.⁴⁰⁷ However, this only describes the “autobiographical self” in particular functional contexts (e.g. social contexts). A more congenial and parsimonious account has been offered by Gerrans (2015) who describes the diachronic self as emerging from the integration of synchronic embodied self-awareness (generated by the AIC) with representations of our past and future, in either autobiographical-episodic form or semantic form, occurring during MTT. This suggests that the phenomenological experience of diachronic selfhood is an implicit feature of MTT.⁴⁰⁸

Simulations involved in planning and episodic memory are associated with activation of the AIC to provide sense of extended self. In other words it is the integration of the metarepresentations of body state produced by the AIC with representations of episodes of a temporally extended autobiography that produces the feeling that we are a self with a past and future, rather than a series of disconnected selves, moment to moment. (Gerrans, 2015; Pg. 13)

As discussed previously, autobiographical information (associated with both semantic and episodic memory) can serve as inputs for metarepresentational functions associated with MTT, decontextualisation and offline cognition. This enables an individual to form higher order self-representations which are associated with judgments about self and identity, as well as judgments about future contingencies and decision making. As far as self and identity are concerned, the embodied/phenomenological sense of diachronic selfhood can be represented in an abstract/linguistic manner (e.g. use of first-person pronouns such as “I” or “me”), which confers on one, a reflective, explicit and propositional or conceptual sense of diachronic selfhood. As discussed above, the recursive and combinatorial functions of language enable one to have a large vocabulary of words that can be combined in various ways to produce complex linguistic self-representations, i.e. autobiographical narratives. It is this way of linguistically representing and abstracting from the experience of being an implicit embodied diachronic self, that forms the basis of a narrative and hermeneutical sense of self that characterises our self-concepts and first-person subjective sense of personal identity (I will have more to say about this in a later chapter).

The issue of judgments about future contingencies and decision making brings me to the second related function of the affective tonality of autobiographical-episodic memory. It is in virtue of our being able to identify with past events and future imagined scenarios in this visceral and value-laden way, that we are also naturally inclined or motivated towards action. Semantic or propositional

⁴⁰⁷ Damasio, A. (2010) *Self comes to mind: Constructing the conscious brain*. New York: Pantheon Books; Pp: 212-13

⁴⁰⁸ Gerrans, P. (2015) All the self we need. In T. Metzinger and J. M. Windt (Eds) *Open MIND*: 15(T). Frankfurt am Main: MIND Group. Pp: 1-19

knowledge lacks this affective character and is therefore, in and of itself, motivationally inert. This is why Gerrans and Kennett (2017) argue that it is the application of autobiographical-episodic recall in MTT that is necessary for normative self-government.⁴⁰⁹

Episodic representations unaccompanied by affective response are like declarative representations such as words or symbols. They need to be supplemented by affective feeling to incline us to action. (Gerrans and Kennett, 2017; Pg. 261)

The Emergence of Human Selfhood

The Minimal Human Self

This chapter started off with a discussion of proto-selves and minimal selves. The former, describes Damasio's idea of a rudimentary form of selfhood that is associated with lower-order self-representations linked to homeostatic functions (including the self/other distinction) as well as implicit forms of self-awareness (such as proprioceptive and kinaesthetic bodily awareness). The latter describes a minimal definition of self in which the self is thought to consist in the immediacy or first-personal givenness of pre-reflective self-consciousness, based on the fact that there is a subjectivity that is an implicit or inherent part of phenomenal consciousness. Interestingly, this is how the developmental psychology literature regards human selfhood during the earliest stages of development (i.e. pre-natal and neonatal stages), also referring to it as a kind of "proto" or "minimal" self.

For example, Phillipe Rochat (2011) describes newborns (neonates) as "minimal selves" whose selfhood consists in the proprioceptive sense of their own body as distinct from other entities in the environment (i.e. a self/other distinction), and a body schema that enables the coordination of meaningful behaviour (such as hand to mouth coordination in feeding, imitation, and exploration). Similarly, according to Mary Lazaridis' (2013) three stage model of the development of self-awareness, the capacity to implicitly distinguish between self and other, and the capacity for implicit agency, constitute the first stage of development.⁴¹⁰ These forms of self-awareness reflect the function of the proto-self in Damasio's model. However, recall that proto-selves also function to generate "primordial

⁴⁰⁹ Gerrans, P. and Kennett, J. (2017) Mental time travel, dynamic evaluation, and moral agency. *Mind*, Vol. 126(501); Pp: 259-268

⁴¹⁰ Lazaridis, M. (2013) The Emergence of a Temporally Extended Self and Factors that Contribute to its Development: From Theoretical and Empirical Perspectives, *Monographs of the Society for Research in Child Development*, Vol. 78(2); Pp: 1-29

feelings”, which give an organism a direct experience of their body through various forms of sentience (e.g. pleasure, pain and emotions). Similarly, Rochat (2011) describes the bodily movements and actions of newborns as underpinned by a “rich palette of distinct affective motives”.⁴¹¹ These “primordial feelings” or “affective motives” remind us that phenomenal experience is also an integral part of neonatal life and thus both the idea of proto-selfhood and the minimal definition of selfhood are crucial dimensions of selfhood in newborns.

However, I argued that we need to go beyond the proto-self and minimal self in order to understand what is unique and complex about human selfhood in its more developed or mature form. I argued that a theory of human selfhood must account for the dimensions associated with reflective self-awareness (self-concept and sense of personal identity). Clearly, newborns lack the cognitive capacities necessary for those dimensions of selfhood, which I’ve discussed in this chapter (i.e. capacities associated with language and metarepresentation). Therefore, an important question I want to address is when those capacities develop, because it is at that point that proto or minimal selfhood develops into a rudimentary form of human selfhood, one that is unique to human beings in the way I have described in this chapter. Furthermore, such a rudimentary form of human selfhood provides us with a minimal conception of selfhood that pertains specifically to human beings and thus I refer to it as the “minimal human self”.

The development of language, memory, and reflective self-awareness is an important first step in the transition from proto/minimal selfhood to minimal human selfhood. Children are first able to express grammatical phrases at around two years of age.⁴¹² Autobiographical memory and non-verbal episodic-like recall in children is thought to emerge as early as two years of age.^{413 414} At 18-24 months, children are able to perform mirror-self recognition^{415 416}, and this has been linked to first person pronoun use and pretend play at two and a half years of age.⁴¹⁷ They are also able to recognise

⁴¹¹ Rochat, P. (2011) What is it Like to be a Newborn? In Gallagher, S. (Ed) *The Oxford Handbook of the Self*. Oxford University Press

⁴¹² Claire H. Noble, Caroline F. Rowland, Julian M. Pine. (2011) Comprehension of Argument Structure and Semantic Roles: Evidence from English-Learning Children and the Forced-Choice Pointing Paradigm, *Cognitive Science*, Vol. 35 (5); Pg. 963

⁴¹³ Meltzoff, A. N. (1995) What infant memory tells us about infantile amnesia: Long-term recall and deferred imitation, *Journal of Experimental Child Psychology*, Vol. 59(3); Pp: 497–515

⁴¹⁴ Howe, M. L., Courage, M. L. and Edison, S. C. (2003) When autobiographical memory begins, *Developmental Review*, Vol. 23(4); Pp: 471–494

⁴¹⁵ Povinelli, D. J. (1998) Can Animals Empathize? Maybe not, *Scientific American Presents*, Vol. 9(4); Pp: 72-5

⁴¹⁶ Nielsen, M. Suddendorf, T. and Slaughter, V. (2006) Mirror Self-Recognition Beyond the Face, *Child Development*, Vol. 77(1); Pp: 176–85

⁴¹⁷ Lewis, M. and Ramsay, D. (2004) Development of Self-Recognition, Personal Pronoun Use, and Pretend Play During the 2nd Year, *Child Development*, Vol. 75(6); Pp: 1821-31

themselves and their parents in video and photographic images.⁴¹⁸ Therefore, it would appear that at around the age of two, children have acquired a rudimentary self-concept, which essentially consists of a basic capacity for reflective self-awareness linked to an ability to refer to themselves using the first person pronoun “I”. However, the referent of the first-person pronoun “I” is not merely a biological entity or a physical body performing lower-order self-representations linked to homeostatic functions. The referent “I” is an object that takes on a psychological and conceptual nature. It describes a conceptual self-awareness and a rudimentary first-person sense of personal identity. This marks the second stage of development of self-awareness in Lazaridis’ three stage model, in which self-awareness consists in the ability to form basic conceptual representations, which she refers to as “secondary representations”.⁴¹⁹

Despite a limited capacity for symbolic language, autobiographical memory, and reflective self-awareness developing at around the age of two, this does not yet constitute minimal human selfhood. Two year old children have an ability to represent themselves in the past and future but they are unable to integrate those representations along a temporal progression. Thus, the only operative representations are those in the present, resulting in what Lazaridis describes as their being “stuck in the present moment” and behaving accordingly.^{420 421} This is more of an intermediary stage in which a two year old child may have a basic self-concept but still lacks a temporally extended sense of self or a diachronic self. Selfhood at this stage reflects Damasio’s idea of the “core self”, which arises from the dynamic interaction between the “proto self” and an object. According to this idea, multiple representations of the interactions in close proximity (“images”) are assembled and coordinated spontaneously to produce a “biography” (which Damasio refers to as a “pulse” of core self). However, as Damasio states, conscious self-awareness in this context is “unencumbered by much past and by little or no future”.^{422 423}

⁴¹⁸ Bigelow, A. E. (1981) The correspondence between self and image movement as a cue to self-recognition for young children, *The Journal of Genetic Psychology*, Vol. 139(1st half); Pp: 11-26

⁴¹⁹ Lazaridis, M. (2013) The Emergence of a Temporally Extended Self and Factors that Contribute to its Development: From Theoretical and Empirical Perspectives, *Monographs of the Society for Research in Child Development*, Vol. 78(2); Pp: 1-29

⁴²⁰ Ibid.

⁴²¹ Povinelli, D. J. (1995) The unduplicated self. In P. Rochat (Ed) *The self in infancy: Theory and research*. Amsterdam: Elsevier; Pp: 161–192

⁴²² Damasio, A. (2010) *Self comes to mind: Constructing the conscious brain*. New York: Pantheon Books; Pg. 125

⁴²³ It should be noted that Damasio’s theory is given in the context of evolutionary/phylogenetic development. However, it is apt to draw parallels with theories of childhood development insofar as “ontogeny recapitulates phylogeny”.

It isn't until around the age of three that a significant confluence of abilities associated with minimal human selfhood emerges, in particular, a temporally extended self,^{424 425} autobiographical-episodic memory and prospection.^{426 427 428} While these capacities are associated with MTT, the current evidence indicates that the emergence of MTT itself is more protracted, typically emerging somewhere between the ages of three to five.^{429 430} According to Lazaridis' model, the development of a temporally extended self, or a diachronic self, marks the third and final stage of the development of a child's capacity for self-awareness.⁴³¹ However, it should be noted that diachronic selfhood is not merely associated with an abstract or propositional sense of awareness of self as extended in time. It is also embodied, felt, and motivationally charged. As discussed in the previous section, autobiographical-episodic memories are imbued with affective tonality, which enables one to identify with past events in a visceral, evaluative and value-laden sense. Likewise, imaginative prospection (which draws from autobiographical-episodic memories) is also imbued with affective tonality, which enables one to identify with possible future events in a visceral, evaluative and value-laden sense. Furthermore, this affective component is also closely linked to the capacity for interoception or embodied self-awareness. According to predictive coding models of sensory perception, it is the integration of affective states (or "primordial feelings") with top-down representational states (inferential or predictive states) that produce interoceptive or embodied states of self-awareness and

⁴²⁴ Povinelli, D. J., Landau, K. R. and Perilloux, H. K. (1996) Self-recognition in young children using delayed versus live feedback: Evidence of a developmental asynchrony, *Child Development*, Vol. 67(4); Pp: 1540-54

⁴²⁵ Povinelli, D. J. and Simon, B. B. (1998) Young children's reactions to briefly versus extremely delayed images of the self: Emergence of the autobiographical stance, *Developmental Psychology*, Vol. 34(1); Pp: 188-194

⁴²⁶ Atance, C. M. and Meltzoff A. N. (2005) My future self: Young children's ability to anticipate and explain future states, *Cognitive Development*, Vol. 20(3); Pp: 341-361

⁴²⁷ Scarf, D., Gross, J. Colombo, M. and Hayne, H. (2013) To have and to hold: episodic memory in 3- and 4-year-old children, *Developmental Psychobiology*. Vol. 55(2); Pp: 125-32

⁴²⁸ Ghetti, S. and Bunge, S. A. (2012) Neural Changes Underlying the Development of Episodic Memory During Middle Childhood, *Developmental Cognitive Neuroscience*, Vol. 2(4); Pp: 381-95

⁴²⁹ Busby, J. and Suddendorf, T. (2005) Recalling yesterday and predicting tomorrow, *Cognitive Development*, Vol. 20(3); Pp: 362-72

⁴³⁰ Atance, C. M. (2008) Future Thinking in Young Children, *Current Directions in Psychological Science*, Vol. 17(4); Pp: 295-98

⁴³¹ Lazaridis, M. (2013) The Emergence of a Temporally Extended Self and Factors that Contribute to its Development: From Theoretical and Empirical Perspectives, *Monographs of the Society for Research in Child Development*, Vol. 78(2); Pp: 1-29

a sense of bodily ownership.^{432 433 434 435} The outcome of this process is a sense of identity that is not just abstract or propositional but also embodied, felt and affectively laden (i.e. a feeling of “mineness”).

The further integration of those embodied states of self-awareness with representations of our past and future during MTT effectively extends the temporal range of those instances of embodied states of self-awareness and this is what yields a temporally extended self. Firstly, this gives us an embodied, felt and affectively laden sense of self that is temporally extended and this is what it means to be diachronic self in the implicit phenomenological sense described above. Furthermore, this is why we have a natural inclination to “feel” a certain way and be motivated towards certain actions when identifying with past events and future imagined scenarios during MTT, which is an important aspect of diachronic agency.⁴³⁶ Secondly, the combinatorial operations of linguistic self-representation during MTT also enables us to develop an abstract or propositional sense of temporally extended self. This is what it means to have a diachronic self in the conceptual and linguistic sense, which in turn confers on us a sense of autobiographical self-awareness. This kind of self-awareness also involves increasingly complex social interactions, which highlights the fact that there is also an important social dimension to consider. Perhaps the most crucial cognitive capacity for social interaction is the capacity to attribute mental states to other individuals i.e. “theory of mind” (ToM). Children develop this ability at about three to four years of age.^{437 438 439} Other important social cognitive abilities also emerge at this stage such as knowledge of conversational norms (i.e. Gricean maxims and ability to recognise faux pas).^{440 441}

⁴³² Seth, A. K., Suzuki, K. and Critchley, H. D. (2012) An interoceptive predictive coding model of conscious presence, *Frontiers in Psychology*, Vol. 2(395); Pp: 1-16

⁴³³ Seth, A. K. (2013) Interoceptive inference, emotion, and the embodied self. *Trends in Cognitive Sciences*, Vol. 17(11); Pp: 565-573

⁴³⁴ Gerrans, P. (2015) All the self we need. In T. Metzinger and J. M. Windt (Eds) *Open MIND: 15(T)*. Frankfurt am Main: MIND Group. Pp: 1-19

⁴³⁵ Critchley, H. D. and Garfinkel, S. N. (2017) Interoception and emotion, *Current Opinion in Psychology*, Vol. 17; Pp: 7-14

⁴³⁶ This is why some have argued that MTT is necessary for the kind of practical rationality associated with rationalist or Kantian conceptions of morality. See Gerrans, P. and Kennett, J. (2010) Neurosentimentalism and Moral Agency. *Mind*, Vol. 119(475); Pp: 585-614; Gerrans, P. and Kennett, J. (2017) Mental time travel, dynamic evaluation, and moral agency. *Mind*, Vol. 126(501); Pg. 262

⁴³⁷ Nichols, S. and Stich, S. (2003) *Mindreading*. Oxford, Oxford University Press

⁴³⁸ Baron-Cohen, S., Leslie, AM, and Frith, U. (1985) Does the autistic child have a "Theory of mind"? *Cognition*, 21(1); Pp: 37-46

⁴³⁹ Carpendale, J. I. M. and Lewis, C. (2004) Constructing an understanding of the mind: The development of children's social understanding within social interaction, *Behavioral and Brain Sciences*, Vol. 27(1); Pp: 79-151

⁴⁴⁰ Grice, H. P. (1975/1957) Logic and conversation. In R. Cole and J. Morgan (Eds) *Syntax and Semantics: Speech Acts*. New York: Academic Press

⁴⁴¹ Baron-Cohen, S., O'Riordan, M., Stone, V., Jones, R. and Plaisted, K. (1999) Recognition of faux pas by normally developing children and children with Asperger Syndrome or high-functioning autism, *Journal of Autism and Developmental Disorders*, Vol. 29(5); Pp: 407-18

It is at around the ages of three to four that a child's capacity for reflective, diachronic, linguistic and conceptual self-awareness, is poised to take on a narrative or autobiographical quality, as demonstrated by their ability to articulate simple narratives that describe their lives.⁴⁴² This constitutes the basis for the further development of an increasingly complex form of selfhood, particularly during adolescence and early adulthood (which is the focus of the following chapter). Thus, it is at this stage of development that a child can be said to have acquired minimal human selfhood. I discuss this in more detail in the following and final section of this chapter.

Autobiographical Selves and Diachronic Agents

To further illustrate the developmental transition from minimal/proto self to minimal human selfhood, I want to discuss briefly how moral capacity develops in young children. This is because there are many parallels between the developmental account I have just described and what is currently known about moral development in children.⁴⁴³ During infancy, from the ages of one to two, moral emotions and intuitions provide early foundations for morally relevant behavioural tendencies (particularly pro-social behaviour).⁴⁴⁴ At the age of three children are able to distinguish between moral norms and conventional norms, as well as authority-dependent and authority-independent norms, and behave accordingly.^{445 446 447 448} In some cases, they are able to explicitly apply certain moral rules or judgments in their own behaviour.^{449 450} At three to four years of age, coinciding with the emergence of social cognitive abilities (particularly ToM), they are able to integrate moral judgment with specific

⁴⁴² Nelson, K. (2003) Narrative and the Emergence of a Consciousness of Self. In Fireman, G. D., McVay Jr, T. E. and Flanagan, O. J. (Eds) *Narrative and Consciousness*, New York: Oxford University Press

⁴⁴³ This is particularly so according to the Kantian conception of morality, which is predicated on rational agency and normative self-government. See Korsgaard, C. M. (2010) Reflections on the evolution of morality. Amherst Lecture in Philosophy. The Department of Philosophy at Amherst College -

<http://www.amherstlecture.org/korsgaard2010> (last accessed 19/05/2019); and Gerrans, P. and Kennett, J. (2010) Neurosentimentalism and Moral Agency. *Mind*, Vol. 119(475); Pp: 585-614

⁴⁴⁴ Davidov, M., Zahn-Waxler, C., Roth-Hanania, R. and Knafo, A. (2013) Concern for others in the first year of life: Theory, evidence, and avenues for research, *Child Development Perspectives*, Vol. 7(2); Pp: 126-31

⁴⁴⁵ Nado, J. Kelly, D. and Stich, S. (2009) Moral Judgment. In Symons, J. and Calvo, P. (Eds) *Routledge Companion to the Philosophy of Psychology 4th edition*. Routledge: Taylor and Francis

⁴⁴⁶ Turiel, E. (1983) *The Development of Social Knowledge*. Cambridge: Cambridge University Press

⁴⁴⁷ Smetana, J. (1984) Toddlers' social interactions regarding moral and conventional transgressions, *Child Development*, Vol. 55(5); Pp: 1767-76

⁴⁴⁸ Smetana, J. and Braeges, J. (1990) The Development of Toddlers' Moral and Conventional Judgements, *Merrill-Palmer Quarterly*, Vol. 36(3); Pp: 329-346

⁴⁴⁹ Hamlin, J. K. (2012) A developmental perspective on the moral dyad, *Psychological Inquiry*, Vol. 23(2); Pp: 166-71

⁴⁵⁰ Heiphetz, L. and Young, L. (2014) A social cognitive developmental perspective on moral judgment, *Behaviour*, Vol. 151(2-3); Pp: 315-35

emotions such as guilt or shame.^{451 452 453} From the age of four and onwards, children demonstrate a basic capacity for conscious deliberative evaluation of morally relevant situations. Elliot Turiel describes a set of studies that demonstrate how children from the age of four are able to articulate narratives that describe events in which they had either inflicted harm on others or were victims of harm by others. The narratives describe experiences of guilt, remorse, regret, and an awareness of mutual expectations to adhere to norms of social interaction and conduct.⁴⁵⁴

As discussed in the previous section, the capacity for inhibitory control enables one to inhibit prepotent behavioural tendencies and thus decouple automatic behavioural responding from context specific stimuli. These capacities are part of the set of cognitive functions that comprise executive function, which develop at around the age of three.^{455 456 457} They are associated with decontextualisation and offline cognition, which is what underpins the capacity for diachronic agency and normative self-government. However, at the age of three to four these capacities are still nascent and will take many more years to mature. This is why children at that age are still incapable of the type of rational and prudential decision making and normative self-government that mature adults are capable of. They have difficulty with delaying gratification, regulating emotional reactions, and generally speaking, constraining their behaviour in accordance with appropriate norms (e.g. ethical and prudential norms) in various private, family, school and public settings.⁴⁵⁸

Though children may have basic knowledge of moral norms they often fail to follow through with appropriate action and thus they cannot be said to possess the same moral ability as mature adults. Their nascent capacity for diachronic agency limits their ability to exercise normative self-government and thus they cannot but function more or less as synchronic agents for the time being. Combined with a minimal human selfhood that consists in a limited diachronic self and a limited capacity for

⁴⁵¹ Kochanska, G., Gross, J. N., Lin, M. H. and Nichols, K. E. (2002) Guilt in young children: Development, determinants, and relations with a broader system of standards, *Child Development*, Vol. 73(2); Pp: 461-82

⁴⁵² Malti, T. and Krettenauer, T. (2013) The relation of moral emotion attributions to prosocial and antisocial behavior: A meta-analysis, *Child Development*, Vol. 84(2); Pp: 397-12

⁴⁵³ Malti, T. and Ongley, S. F. (2014) The development of moral emotions and moral reasoning. In Killen M. and Smetana J. G. (Eds) *Handbook of Moral Development*. New York: Psychology Press; Pp: 163–183

⁴⁵⁴ Turiel, E. (2015) Moral Development, In Lerner, R. M. (Ed) *Handbook of Child Psychology and Developmental Science (7th edition), Volume 1: Theory and Method*. John Wiley & Sons: New Jersey; Pg. 510

⁴⁵⁵ Carlson, S. M. and Moses, L. J. (2001) Individual differences in inhibitory control and children's theory of mind, *Child Development*, Vol. 72(4); Pp: 1032–53

⁴⁵⁶ Lewis, M. and Todd, R. (2007) The self-regulating brain: Cortical-subcortical feedback and the development of intelligent action, *Cognitive Development*, Vol. 22(4); Pp: 406-30

⁴⁵⁷ Zelazo, P. D., Muller, U., Frye, D. and Marcovitch, S. (2003) The development of executive function in early childhood, *Monographs of the Society for Research in Child Development*, Vol. 68(3); Pp: vii-137

⁴⁵⁸ McClelland, M. M., Geldhoff, J. G., Cameron, C. E. and Wanless, S. B. (2015) Development and Self-regulation, In Lerner, R. M. (Ed) *Handbook of Child Psychology and Developmental Science (7th edition), Volume 1: Theory and Method*. John Wiley & Sons: New Jersey; Pp: 523-565

linguistic and conceptual self-awareness, their self-concept and sense of personal identity remain relatively limited in terms of autobiographical and conceptual content. Nevertheless, they have reached a pivotal developmental stage in which their minimal human selfhood and nascent capacity for diachronic agency are poised to take on more complex, socially situated and hermeneutical forms.

Conclusion

In the first part of this chapter, I discussed the biological capacity to make a functional self/other distinction at both microscopic and macroscopic levels, an organism's core values, the cognitive capacity to form self-representations, and the inherent subjectivity of phenomenal experience (i.e. the minimal self). Selfhood in this form is pre-reflective, implicit and embodied, which are some of the most important dimensions of selfhood in all sentient creatures. However, it is not clear how those dimensions relate to the more complex, multidimensional form of selfhood that is unique to human beings, one that is associated with our sense of identity and agency, and our unique lived experiences.

In order to understand selfhood in human beings we need to clarify precisely what it is that makes it unique and distinct from the kinds of selfhood that might exist in non-human animals. Thus, in the second part of this chapter, I discussed a number of uniquely human capacities that I think underpin the complex and multidimensional form of selfhood that is unique to human beings. I argued that such a selfhood is underpinned by the complex integration of various metarepresentational capacities (i.e. language, reflective self-awareness, MTT, ToM), linked to inhibitory and attentional control, decontextualized processing and offline cognition. In the absence of conclusive or compelling evidence that non-human animals possess such capacities, I think we can accept that those capacities may be unique to human beings and quite possibly unique in a qualitative sense. However, the goal here was not to argue for a qualitative distinction (or justify a claim to human exceptionalism). Rather, it was to identify what I believe to be the most important cognitive capacities on which a scientifically rigorous theoretical framework for understanding human selfhood can be based. It may turn out that non-human animals do have a ToM or do possess a capacity for symbolic language, among other capacities, and as such any theory about the uniqueness of human selfhood must be revised accordingly.

We can understand the function of those metarepresentational capacities at a more abstract level in terms of giving rise to the unique human capacity for diachronic agency, which encompasses our abilities for hypothetical reasoning, practical reasoning and normative self-government. More generally, diachronic agency enables us to pursue our goals and uphold our values, morality, virtue,

and integrity. In other words, it enables us to be the type of person we wish to be and lead the lives we wish to lead. All of these activities are associated with our ability to reflect on ourselves over time and develop conceptualisations of ourselves, which in turn forms the basis of our self-concepts and our first-person subjective sense of personal identity. These considerations set the stage for what I described as the “minimal human self”, which as discussed above, refers to a rudimentary form of human selfhood that emerges during early childhood development.

In the following chapter, I describe the role that the social environment plays in the development of minimal human selfhood and the more complex, socially situated, hermeneutical selfhood that subsequently develops during adolescence. This sets the stage for me to proffer a theoretical framework that describes how a mature multidimensional self emerges in early adulthood, is manifest throughout most of our adult lives, and then declines as we enter into old age.

Chapter 3 - The Sociobiographical Self

Introduction

The discussion in this chapter focuses on the role that the social environment plays in the development of human selfhood from the earliest stages during which minimal human selfhood emerges, to subsequent stages during which a more developed and mature form of human selfhood emerges. In order to understand this, I want to expand on an idea that I mentioned in Chapter 1 about a particular way in which we might think of the self as a construction. You will recall that I distinguished between a literal and metaphorical notion of construction, where the former refers to the causal role that human beings play in a construction, and the latter refers to the processes of natural development. Regarding the latter, I raised the caveat that the natural development of certain uniquely human capacities might also involve the developing human being playing a constructive role in the literal sense.

The aim in the first part of this chapter is to clarify the sense in which the minimal human self can be considered as both a construction and the outcome of natural biological development. In order to do this, I first introduce an important and popular debate about the nature of ontogenetic development in developmental psychology, i.e. nativism versus empiricism. For it may be the case that one of those theories aptly describes the development of minimal human selfhood during ontogeny. However, it turns out that the nativism/empiricism distinction is eschewed by developmental cognitive neuroscientists who instead adopt a theoretical framework known as “neuroconstructivism” (or “neural-constructivism”). This is in large part due to the accumulation of evidence indicating that epigenetic factors play a determinative role in early childhood development, particularly in relation to cognitive development. In other words, development is thought to be determined by the bidirectional interactions between various intrinsic and extrinsic factors, such as genetics, neurobiology, cognition, experience, learning and the environment. The development and integration of the multiple cognitive capacities that underpin minimal human selfhood also appears to depend on bidirectional interactions between developing human beings expressing those nascent capacities and their environment. Thus, I argue that the natural development of minimal human selfhood during infancy and early childhood fits within the neuroconstructivist framework and it is in this sense that we can regard the minimal human self as constructed.

Having developed rudimentary capacities associated with language, conceptual self-awareness, diachronic agency and normative self-government, the minimal human self is poised to navigate the

world wherein it becomes increasingly socially embedded over time. The minimal human self serves as a pivotal structural and functional precursor for further development of human selfhood during adolescence and emerging adulthood. During these developmental stages, social interaction plays a crucial role in the construction of a more complex and mature human self, one that is associated with a social and autobiographical sense of self-awareness from which an enriched self-concept and a sense of personal identity emerges. I refer to this as the “sociobiographical self” (a term I borrow from the existing dementia care literature), and in the second part of this chapter I discuss how such a self is constructed from bidirectional interactions between the minimal human self (as a rudimentary diachronic agent) and the social environment within which it is embedded.

Constructing Minimal Human Selves

Construction in Natural Development

An enriched environment where an infant can interact with physical objects and other people is necessary for the development of their selfhood and agency. It informs them of their relation to the external world and to other people. From this they can develop an awareness of the variety of contingencies and normative requirements associated with existing in such a world. Social interaction and conversations facilitate the development of both social and linguistic capacities, while also enabling a child to gain more knowledge about himself/herself and others. Suffice to say, that without the appropriate social environment, a child cannot acquire the capacities necessary for minimal human selfhood.⁴⁵⁹ This suggests that the development of minimal human selfhood is not simply a matter of biological maturation based on innately specified developmental outcomes, but rather, it is a complex process involving a child’s social environment.

In Chapter 1, I discussed two competing views about how human selfhood might be considered a construction in the literal sense. One view is social constructionism, which refers to the idea that groups or collectives are primarily responsible for the construction process. A common theme in social constructionist theories of self is the idea that it is only within the context of interpersonal interaction and interlocution that a person can become what Mead refers to as “an object to himself”. This consists in adopting a reflective stance towards oneself from either one’s own perspective or from the

⁴⁵⁹ The phenomenon of “feral children” is a case in point (albeit an extreme one). Such children are reported to have been reared in the wild by animals (e.g. wolves, monkeys and even chickens). They manifest many of the behaviours of the animals they are purported to have been reared by (e.g. clucking, walking on all-fours, and gnawing on bones on the ground) while seemingly lacking the capacities necessary for minimal human selfhood. <http://www.bbc.com/culture/story/20151012-feral-the-children-raised-by-wolves> (last accessed 6/10/2018)

perspective of one's interlocutor (and also one's broader social network) thus giving rise to a reflective and linguistically enacted awareness of oneself, i.e. a self-concept.

Another view is constructivism, which distinguishes itself from social constructionism by attributing a causal role to the individual in the constructive process. On the one hand, there are constructivist theories of cognitive development that describe how internal mechanisms and cognitive structures enable a child to learn from, and adapt to, their environment (e.g. Piagetian constructivism), as well as how the social environment plays a critical role in guiding or scaffolding development (e.g. Vygotskian social constructivism). On the other hand, constructivism also describes an epistemological theory, which posits that knowledge is subjective, mind-dependent and hermeneutical, derived from individuals interpreting and constructing meaning out of their experiences, as opposed to observing, experiencing, or representing a mind-independent world (i.e. radical constructivism).

However, neither social constructionism nor constructivism are particularly relevant to understanding the development of minimal human selfhood. They are more relevant to developmental stages that presuppose and proceed the development of various basic linguistic, metarepresentational and social cognitive capacities that underpin minimal human selfhood. Consider the fact that social constructionism is predicated on interpersonal interaction and interlocution, which presupposes the existence of relevant linguistic and social capacities. Such capacities do not exist until after minimal human selfhood has developed. Additionally, according to social constructionist theories of self, the aetiology is attributed to the activity of social groups or collectives, yet it is hard to fathom how social interactions and the social environment alone (which in the case of infants are more or less limited to infant/parent dyads) can be considered sufficient for development of minimal human selfhood. There must be a range of biological and innate mechanisms that play a necessary role in the developmental process, particularly during such early stages of development. This is also why constructivist theories of self are inadequate, given that they presuppose the existence of certain internal structures or predispositions, such as sensory motor function and existing schemas (in the case of Piagetian constructivism), interpersonal and interlocutory capacities (in the case of Vygotskian social constructivism), and cognitive capacities associated with hermeneutical and pragmatic interpretations of a mind-dependent world (in the case of radical constructivism).

It is important to remember that the emergence of minimal human selfhood is not that far removed from neonatal stages of development during which biological processes are highly influential in determining developmental outcomes. Newborns appear to be innately endowed with certain

functions associated with maternal care, survival and social interaction.⁴⁶⁰ These functions manifest as behavioural and affective tendencies that orientate them towards food, comfort, safety and appropriate stimulation (I discuss this in more detail in the following sections). In fact, Rochat (2011) describes development during infancy and early childhood as requiring an “ecology of protracted ‘extero-gestation’”.⁴⁶¹ This seems to be a uniquely human phenomenon because unlike many other animal species, humans are profoundly dependent on the care of others for basic survival (e.g. feeding and avoiding a plethora of hazards, disease and danger) from birth and throughout childhood. An environment where an infant can interact with other people (particularly with their mother), and other objects, is essential for the development of human traits, particularly those associated with language and social understanding.⁴⁶²

Therefore, in order to understand how minimal human selfhood develops, we need a theoretical framework that captures the role of both innate biological mechanisms and social/environmental interactions in the development of the capacities that underpin minimal human selfhood. In the following section I discuss one such framework that comes from developmental cognitive neuroscience. It is known as “neuroconstructivism” and it aptly describes how capacities underpinning minimal human selfhood develop during ontogeny. The idea of “construction” in this context is primarily a metaphorical one, which as I alluded to Chapter 1, can be used to describe the processes of natural development.

Neuroconstructivism

It is generally accepted that while biological factors play a necessary role in specifying development, an appropriate environment is also necessary. However, the extent to which the environment plays a role in development of biological organisms and biological systems is a contentious issue, one that is reflected in the debate between nativism and empiricism in developmental psychology. Nativism posits that development of a particular function or capacity occurs via a natural process of biological maturation. This means that the capacity is not acquired or learned from experience and that the environment plays no substantive or determinative role in the development of that capacity.

⁴⁶⁰ My focus on “maternal” contributions to care throughout this discussion is not intended to imply that “paternal” contributions are irrelevant. Much of the literature on early childhood development focuses on the maternal-infant dyad, which may indeed be shaped by certain assumptions about the nature of that relationship.

⁴⁶¹ Rochat, P. (2011) What is it Like to be a Newborn. In Gallagher, S. (Ed) *The Oxford Handbook of the Self*. Oxford University Press; Pg. 60

⁴⁶² Carpendale, J. I. M. and Lewis, C. (2004) Constructing an understanding of mind: The development of children’s social understanding within social interaction, *Behavioural and Brain Sciences*, Vol. 27(1); Pp: 79-151

Empiricism denies this and instead posits that a particular function or capacity is acquired or learned from experience. This means that environmental factors play a substantive or determinative role in its development.^{463 464}

Piagetian constructivism, Vygotskian social constructivism and radical constructivism posit that cognitive development and learning is achieved by constructing knowledge through appropriate physical and social interactions with the environment. Though each theory assumes the presence of biologically pre-specified processes (e.g. sensory motor functions, pre-existing schemas, language, social cognition, and metarepresentational functions) such processes constitute the prerequisite conditions for developmental outcomes derived from domain-general learning. Thus, those theories are substantially consistent with an empiricist account of cognitive development. Social constructionism, though also an empiricist account, distinguishes itself from those theories. It is committed to the view that the social environment plays a necessary and sufficient role in cognitive development where cognitive capacities are essentially the product of passive enculturation or the outcome of internalising information from the social environment.

The problem with the nativism versus empiricism debate is that it implies development of cognitive capacities associated with minimal human selfhood can only be the result of either neurobiological maturation (nativism),⁴⁶⁵ experience-based learning (empiricism, Piagetian constructivism, Vygotskian constructivism, and radical constructivism), or passive enculturation/internalisation (social constructionism). In other words, it assumes unidirectional causation or determination in human development. However, there is evidence that cognitive development, particularly during the earliest stages of ontogeny, involves reciprocal or bidirectional interactions between internal biological structures (e.g. genes, neural networks and brains), an individual's experiences and actions (e.g. perception, learning, cognition and behaviour) and factors external to that individual (e.g. physical and social interactions).⁴⁶⁶ This indicates that developmental outcomes are the result of dynamic bidirectional interactions between biological, behavioural and environmental factors. This

⁴⁶³ Samet, Jerry and Zaitchik, Deborah, "Innateness and Contemporary Theories of Cognition", The Stanford Encyclopedia of Philosophy (Spring 2017 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/spr2017/entries/innateness-cognition/> (last accessed 19/05/2019)

⁴⁶⁴ Whether language is innate or learned is a paradigmatic example of this kind of debate. See Cowie, Fiona, "Innateness and Language", *The Stanford Encyclopedia of Philosophy* (Winter 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2016/entries/innateness-language/> (last accessed 19/05/2019)

⁴⁶⁵ The same point applies to Maturana and Varela's idea of "autopoietic constructivism", which as I discussed in Chapter 1 is the idea that developmental outcomes are the result of an organism adapting to environmental perturbations.

⁴⁶⁶ This reflects the distinction between unidirectional determinism versus interactionism in human development. See Baltes, P. B., Reuter-Lorenz, P. A. and Rosler, F. (2006) *Lifespan Development and the Brain: The Perspective of Biocultural Co-Constructivism*. Cambridge University Press: UK

idea serves as the basis for an interactionist framework in developmental cognitive neuroscience known as “neuroconstructivism” (or “neural-constructivism”).

An early and influential proponent of such a view was Annette Karmiloff-Smith. She argued that development of cognitive capacities occurs due to the presence of innate domain specific capacities that enable an infant to learn by focusing their attention on proprietary inputs from the environment, which in turn critically affect subsequent brain development.⁴⁶⁷ A more recent proponent of this view is Gert Westerman, who claims that cognitive processes shape the very neural substrate that underpins those same cognitive processes. However, the influence between cognitive processes and its neural substrate is bidirectional, and changes in the neural substrate also result in changes to those cognitive processes. This leads to new experiences and new ways of interacting with the environment, which in turn causes further changes to the neural substrate.⁴⁶⁸ Thus, according to neuroconstructivism, neural and cognitive development is highly sensitive to both innate biological factors, and experiential/behavioural and environmental factors. It posits that developmental outcomes are the result of dynamic and bidirectional interactions between neurobiological function, cognitive processing and environmental inputs. Hence it rejects the nativism and empiricism dichotomy and its underlying assumption of unidirectional determinism.⁴⁶⁹

Westerman describes neuroconstructivism as a framework that draws on and integrates a broad range of views about the brain, cognitive development and environmental interactions. One view is known as “probabilistic epigenesis”, which emphasises the interactions between experience and gene expression. Another view is “neural constructivism”, which focuses on the experience-dependent elaboration of neural networks in the brain. There is also what is known as the “interactive specialization” view of brain development, which focuses on the mutually constraining interactions of different brain regions in shaping the developing brain. Neuroconstructivism also incorporates a number of views about embodiment, empiricist learning and the role of the social/environmental in development. It captures the importance of bodily functions in cognitive development and processing, the idea that children pro-actively acquire knowledge as described by Piagetian constructivism, and

⁴⁶⁷ Karmiloff-Smith, A. (1992) *Beyond modularity: A developmental perspective on cognitive science*. MIT Press

⁴⁶⁸ Westerman, G., Mareschal, D., Johnson, M. H., Sirois, S., Spratling, M. W. and Thomas, M. S. C. (2007) Neuroconstructivism, *Developmental Science*, Vol. 10(1); Pp: 75-83

⁴⁶⁹ According to Karmiloff-Smith, neuroconstructivism can be thought of as occupying a middle ground between nativism and Piagetian constructivism. See Karmiloff-Smith, A. (1992) *Beyond modularity: A developmental perspective on cognitive science*. MIT Press

the influence of the evolving social environment as described by Vygotskyan social constructivism.⁴⁷⁰ These ideas will be further elucidated in the proceeding sections of this chapter.

An important implication of neuroconstructivism is the rejection of David Marr's view of the independence of the neural and cognitive levels of description/analysis. Marr argued that because computation can be implemented on different substrates and different architectures, a computational theory of cognition can be described and analysed independently of the properties of its implementation (i.e. its "hardware"). This meant that focussing on the role of the brain (including molecular, cellular, and neurophysiological processes) was unnecessary and insufficient for understanding cognition.⁴⁷¹ However, according to neuroconstructivism, the range of possible computational processes is constrained, not just by the "hardware" itself, but by the properties and organisation of the "hardware". This implies that an analysis of the implementation level (or "hardware" level) is necessary for understanding cognition. Thus, neuroconstructivism advocates for a neurocomputational approach towards understanding cognitive development.⁴⁷² Cognitive development is therefore typically described as the progressive increase in the complexity of representations and neural structures underpinning those representations, where the goal is to acquire appropriate representations for specific functional domains.⁴⁷³

Neuroconstructivism emphasizes the interrelation between brain development and cognitive development. We see constructivist development as a progressive increase in the complexity of representations, with the consequence that new competences can develop based on earlier, simpler ones. This increase in representational complexity is realized in the brain by a progressive elaboration of cortical structures... neuroconstructivism implies the creation of genuinely new cognitive abilities and not just the better use of pre-existing abilities (Mareschal et al, 2007; Pg. 6)

Those representations are constructed under the influence of context dependent constraints (i.e. constraints associated with a particular problem facing a developing child). Quartz and Sejnowski (1997) describe this as "constructive learning", in which representations are built by the nature of the

⁴⁷⁰ Westerman, G., Thomas, M. S. C. and Karmiloff-Smith, A. (2010) Childhood Cognitive Development. In U. Goswami (Ed) *The Wiley-Blackwell Handbook of Childhood Cognitive Development, Second edition*. Wiley-Blackwell, Oxford: UK

⁴⁷¹ Marr, D. (1982) *Vision. A computational investigation into the human representation and processing of visual information*. San Francisco, CA: W.H. Freeman & Company

⁴⁷² This approach also reflects the naturalist methodology I described in Chapter 1. For a more detailed discussion see Churchland, P. M. (1989) *A neurocomputational perspective: the nature of mind and the structure of science*. MIT Press: Cambridge, MA

⁴⁷³ Mareschal, D., Johnson, M. H., Sirois, S., Spratling, M. W., Thomas, M. S. C. and Westermann, G. (2007) *Neuroconstructivism: How the Brain Constructs Cognition*. Oxford: Oxford University Press

problem domain confronting it.⁴⁷⁴ More recently, Sirois et al (2008) have suggested that the general guiding principle of neuroconstructivism is “context dependence”. They describe cognitive development as constrained by various internal and external factors, from all levels of description (i.e. from genes, to neurons, to brains, to bodies and the environment), which form an interactive network that shapes the neural structures underpinning mental representations. This also implies that cognitive development is not innately pre-specified according to teleology.⁴⁷⁵

Representations in the brain do not emerge or function in isolation, but within the context of co-occurring molecular, neural, bodily, and social events. This constrains and guides emerging representation. (Sirois et al, 2008; Pg. 323)

According to Sirois et al (2008), the construction of mental representations depends on two processes - “proactivity” and “progressive specialisation” (which give rise to “partial representations”). Proactivity refers to internally generated activity which might mean spontaneous neural activity or the activity that directs a child to interact with its environment. Progressive specialization refers to the fact that representational states at a given time constrain the range of possible future representational states. Hence new representations are acquired in the context of existing ones. A child’s representations become progressively specialised by adapting to the immediate challenges it faces. However, they are only “partial representations”, or in other words, they are fragmentary, distributed across multiple brain regions and timescales, and “just sufficient for on-the-fly processing” (enabling a child to face immediate challenges).⁴⁷⁶ Thus, the construction of mental representations is a diachronic process that is adaptive, progressively specialised, and reflects the unique developmental history of a child.

The progressive specialisation also explains how cognitive capacities become domain specific or “modularised”, a process which Karmiloff-Smith refers to as “representational redescription”.⁴⁷⁷ This also explains why the existence of modularised cognitive capacities does not necessarily imply that such capacities are innate. Neuroconstructivism therefore challenges the idea that the brain evolved a variety of innately specified modules that perform specialised cognitive functions (i.e. an idea known

⁴⁷⁴ Quartz, S. R. and Sejnowski, T. J. (1997) The Neural Basis of Cognitive Development: A Constructivist Manifesto, *Behavioral and Brain Sciences*, Vol. 20(4); Pp: 537-96

⁴⁷⁵ Sirois, S., Spratling, M., Thomas, M. S., Westermann, G., Mareschal, D. and Johnson, M. H. (2008) Précis Of neuroconstructivism: How the brain constructs cognition, *Behavioural and Brain Sciences*, Vol. 31(3); Pp: 321-31

⁴⁷⁶ Ibid.

⁴⁷⁷ Karmiloff-Smith, A. (1992) *Beyond modularity: A developmental perspective on cognitive science*. MIT Press

as “massive modularity”).^{478 479 480} It suggests that the evolution of the mammalian brain (more specifically, the neocortex) reflects a progression toward more flexible representational structures rather than specialised structures. This is also consistent with the evidence that the developing cerebral cortex is largely free of domain-specific structure.⁴⁸¹ Furthermore, given that postnatal cortical development is protracted, it suggests that the neocortex in humans evolved so as to maximise the environment’s capacity to shape its structure and function.⁴⁸²

The sharp contrast between cortical and subcortical structures suggests that the evolution of cortex may represent the evolution of a new acquisition strategy, perhaps through the constructive strategy... Ironically, the developing cortex may owe its relative flexibility to more constrained subcortical structures that may be a source of more dynamic constraints on developing cortex. From a developmental perspective, subcortical structures, which are developmentally precocial, may both play a critical role in providing early behavioral and cognitive competences and may play a central but overlooked role in directing, or bootstrapping, the emergence of cortical representations. (Quartz, 2003; Pg. 36-37)

Therefore, neuroconstructivism seems more apt in explaining how minimal human selfhood develops, as opposed to the nativist/empiricist and social constructionist/constructivist theories discussed previously. Not only does it account for the dynamic bidirectional interactions between relevant causal factors during ontogenetic development (whether they originate from the individual or the environment), it also offers a more parsimonious theory of evolutionary psychology.

While it is beyond the scope of this thesis to offer a detailed account of how neuroconstructive processes specifically shape the development of the capacities that underpin minimal human selfhood, I do want to offer an indication of what such an account might look like. Hence in the following sections, I briefly describe how two important capacities, face recognition and language processing, are thought to emerge during pre-natal and neonatal development. Both highlight the importance of innate predispositions and social and environmental constraints during the earliest stages of human development.

⁴⁷⁸ Spelke, E. (1998) Nativism, Empiricism, and the origins of knowledge, *Infant Behavior & Development*, Vol. 21(2); Pp: 181–200

⁴⁷⁹ Cosmides, L. and Tooby, J. (1992) Cognitive adaptations for social exchange. In J. Barkow, L. Cosmides, and J. Tooby, (Eds) *The Adapted Mind*. Oxford: Oxford University Press; Pp: 163–228

⁴⁸⁰ Carruthers, P. (2006) *The Architecture of the Mind*. Oxford: Oxford University Press

⁴⁸¹ Quartz, S. R. and Sejnowski, T. J. (1997) The Neural Basis of Cognitive Development: A Constructivist Manifesto, *Behavioral and Brain Sciences*, Vol. 20(4); Pg. 537

⁴⁸² Quartz, S. R. (2003) Innateness and the Brain, *Biology and Philosophy*, Vol. 18(1); Pp: 13-40

Facial Recognition and Language Development

There is an important distinction between nativist and neuroconstructivist accounts of the role of environment in ontogeny. For nativists, there is very little scope for the environment to play a determinative role in specifying the development of a cognitive capacity in any substantive way. The contribution of the environment is merely to act as a necessary “trigger” for a developmental trajectory that is already highly constrained by innate mechanisms (just as water is necessary for the germination of a seed but does not specify that the seed develop into a sapling). Quartz (2003) describes this type of environmental input as a “permissive somatic interaction process”, which he regards as consistent with nativism. The dependence on light induced changes in gene expression, for the functional maturation of the visual cortex, is offered as an example of such a process. In contrast, with regard to neuroconstructivism, Quartz describes the role of the environment as an “instructive somatic interaction process”. The neurobiological theory of “Hebbian learning” is offered as a paradigmatic example of such a process, where persistent activity and stimulation is associated with strengthening of synaptic connections.⁴⁸³

The idea of the environment triggering or permitting development is also captured by the idea of “deterministic epigenesis”, which refers to the unidirectional causal path from genes to structure and function. It contrasts with “probabilistic epigenesis”, which refers to the bidirectional and dynamic causal pathways that exist between genes, structure and function. According to probabilistic epigenesis, both the environment and behaviour of an organism play a fundamental role in modulating the expression of genes.^{484 485} Probabilistic epigenesis is central to neuroconstructivism.⁴⁸⁶

487

The development of subcortical structure/function underpinning the proto-self (i.e. somatic and autonomic nervous system function) are likely to follow a highly constrained trajectory in which the environment merely plays the role of triggering or permitting developmental maturation. They have a genetic basis, are phylogenetically conserved in mammalian species, and generally associated with instinctual behaviour.⁴⁸⁸ Therefore, a nativist account based on deterministic epigenesis would seem

⁴⁸³ Quartz, S. R. (2003) Innateness and the Brain, *Biology and Philosophy*, Vol. 18(1); Pp: 13-40

⁴⁸⁴ Gottlieb, G. (1992) *Individual development and evolution*. Oxford University Press

⁴⁸⁵ Gottlieb, G. (2007) Probabilistic epigenesis, *Developmental Science*, Vol. 10(1); Pp: 1–11

⁴⁸⁶ Sirois, S., Spratling, M., Thomas, M. S., Westermann, G., Mareschal, D. and Johnson, M. H. (2008) Précis Of neuroconstructivism: How the brain constructs cognition, *Behavioural and Brain Sciences*, Vol. 31(3); Pg. 349

⁴⁸⁷ Westerman, G. Thomas, M. S. C. and Karmiloff-Smith, A. (2010) Childhood Cognitive Development. In U. Goswami (Ed) *The Wiley-Blackwell Handbook of Childhood Cognitive Development, Second edition*. Wiley-Blackwell, Oxford, UK

⁴⁸⁸ Frolich, R. W. (2009) *Evolutionary Intelligence: The Anatomy of Human Survival (2nd ed)*. Xlibris Corporation; Pp: 347-348

to aptly describe the development of the proto-self. However, in contrast, the development of the cortical substrates underpinning the various metarepresentational capacities necessary for minimal human selfhood, is likely to require more than just environmental triggering (or permission).

When the innate component is specified in detail, it is likely that the environment acts simply as a trigger for the organism to select one parameter or circuit over others... By contrast, when the innate predisposition is specified merely as a bias or as a skeletal outline, then it is likely that the environment acts as much more than a trigger – that it actually influences the subsequent structure of the brain via a rich epigenetic interaction between the mind and the physical/sociocultural environment. (Karmiloff-Smith, 1992; Pg. 15)

Over a century ago William James described a newborn baby's impression of the world as a "great blooming, buzzing confusion".⁴⁸⁹ However, there is now an abundance of empirical evidence that suggests otherwise. As alluded to previously, newborns/neonates appear to have a range of innate predispositional biases that manifest as behavioural and affective tendencies associated with maternal care, survival, and social engagement. Such predispositions enable neonates to orientate themselves towards food, comfort and appropriate physical/social stimulation.⁴⁹⁰ This is a developmental stage that Peter Hobson refers to as "before thought".⁴⁹¹

It is known that neonates have a preference for face-like stimuli, i.e. objects that resemble faces, rather than objects that do not.^{492 493} This indicates that such an ability is likely to be innate.⁴⁹⁴ Johnson and Morton (1991) had first proposed a two-process theory, which describes how the development

⁴⁸⁹ Goodman, Russell, "William James", *The Stanford Encyclopedia of Philosophy* (Fall 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2016/entries/james/> (last accessed 19/05/2019)

⁴⁹⁰ Rochat, P. (2011) What is it Like to be a Newborn, In Gallagher, S. (Ed) *The Oxford Handbook of the Self*. Oxford University Press

⁴⁹¹ Hobson, P. (2002) *The Cradle of Thought: Exploring the Origins of Thinking*. London: Macmillan

⁴⁹² Johnson, M. H., Dziurawiec, S., Ellis, H. and Morton, J. (1991) Newborns' preferential tracking of face-like stimuli and its subsequent decline, *Cognition*, Vol. 40(1-2); Pp: 1-19

⁴⁹³ Easterbrook, M. A., Kisilevsky, B. S., Muir, D. W. and Laplante, D. P. (1999) Newborns discriminate schematic faces from scrambled faces, *Canadian Journal of Experimental Psychology*, Vol. 53(3); Pp: 231-41

⁴⁹⁴ In recent years the evidence suggests such a preference might in fact be due to an attentional bias for a particular kind of asymmetrical configuration of elements along the vertical axis of an image (i.e. more elements in the upper part of a visual image) rather than for faces *per se*, implying that innate preferences for faces may in fact be due to general characteristics of the visual perceptual system rather than an innate domain specific face processing mechanism. See Turati, C., Simion, F. Milani, I. and Umiltà, C. (2002) Newborns' preference for faces: what is crucial? *Developmental Psychology*, Vol. 38(6); Pp: 875-82; Simion, F., Leo, I. Turati, C. Valenza, E. and Dalla Barba, B. (2007) How face specialization emerges in the first months of life, *Progress in Brain Research*, Vol. 164; Pp: 169-85; McKone, E., Crookes, K., Jeffery, L. and Dilks, D. D. (2012) A critical review of the development of face recognition: Experience is less important than previously believed, *Cognitive Neuropsychology*, Vol. 29(1-2); Pp: 174-212; and Simion, F. and Di Giorgio, E. (2015) Face perception and processing in early infancy: inborn predispositions and developmental changes, *Frontiers in Psychology*, Vol. 6(article 969); Pp: 1-11

of face recognition in human beings is achieved by two systems. One system consists of an innate preference for face-like stimuli underpinned by a subcortical mechanism (referred to as “Conspec”), and another system consists of an acquired specialisation for face recognition, underpinned by cortical pathways (referred to as “Conlern”).⁴⁹⁵ In this theory, the subcortical mechanism for Conspec serves as a developmental foundation for what later becomes the cortical “social brain network”.⁴⁹⁶ It was also known that neonates are able to detect eye gaze⁴⁹⁷ and have a preference for faces that engage them with direct eye-gazing rather than faces that averted gaze.⁴⁹⁸ Thus, more recently Johnson et al (2015) have extended their two-process theory to describe development of eye gaze detection, in which subcortical pathways not only precede functional specialisation of specific cortical pathways underpinning eye gaze detection, but also continue to have an important role facilitating face processing in adulthood.⁴⁹⁹

Being able to detect and recognize individual faces, and the broad range of information conveyed by those faces (e.g. emotional expressions, attention and engagement), are extremely important for the kind of social species that human beings are. Such predispositions are a crucial foundation for interpersonal interaction during early infancy and further social development beyond infancy. It turns out that infants from a very early age are able to monitor levels of interpersonal engagement/sensitivity and respond emotionally and behaviourally. For example, there is the commonly held view that infants have an innate ability to imitate facial and behavioural gestures.⁵⁰⁰ However, in recent times researchers have argued that imitation may be learned rather than innate.⁵⁰¹ ⁵⁰² Another important example of interpersonal engagement ability is based on what is called the “still-face” paradigm, which was named as such after the famous experiment performed by Edward Tronick in 1975 in which two month old infants were observed for how they respond to varying displays of facial engagement from their mothers. It was found that when mothers displayed no sensitivity or

⁴⁹⁵ Johnson, M. H. and Morton, J. (1991) *Biology and Cognitive Development: The Case of Face Recognition*. Blackwell, Oxford

⁴⁹⁶ Johnson, M. H. (2005) Subcortical face processing, *Nature Reviews Neuroscience*, Vol. 6(10); Pp: 766-74

⁴⁹⁷ Driver, J., Davis, G., Ricciardelli, P., Kidd, P., Maxwell, E. and Baron-Cohen, S. (1999) Gaze perception triggers reflexive visuospatial orienting, *Visual Cognition*, Vol. 6(5); Pp: 509–540

⁴⁹⁸ Farroni, T., Csibra, G., Simion, F. and Johnson, M. H. (2002) Eye contact detection in humans from birth, *Proceedings of the National Academy of Sciences*, Vol. 99(14); Pp: 9602-5

⁴⁹⁹ Johnson, M. H., Senju, A. and Tomalski, P. (2015) The two-process theory of face processing: Modifications based on two decades of data from infants and adults, *Neuroscience and Biobehavioral Reviews*, Vol. 50; Pp: 169-79

⁵⁰⁰ Meltzoff, A. N. and Moore, M. K. (1977) Imitation of Facial and Manual Gestures by Human Neonates, *Science*, Vol. 198(4312); Pp: 75–78

⁵⁰¹ Jones, S. S. (2009) The development of imitation in infancy, *Philosophical Transactions of the Royal Society B*, Vol. 364(1528); Pp: 2325-35

⁵⁰² Oostenbroek, J., Suddendorf, T., Nielsen, M., Redshaw, J., Kennedy-Costantini, S., Davis, J. Clark, S. and Slaughter, V. (2016) Comprehensive Longitudinal Study Challenges the Existence of Neonatal Imitation in Humans, *Current Biology*, Vol. 26(10); Pp: 1334-38

facial expression (a “poker face”), the infant appears sober and uneasy. The infant will then make several attempts to engage their mother by smiling at her and alternating between brief glances towards and away from her in an attempt to monitor her for any responses. If there is no response the infant will eventually withdraw, become sullen, orientate their body away from their mother, and be less likely to engage with their mothers in future.⁵⁰³ Recent evidence indicates that such a response can be observed in neonates from zero to four days old.⁵⁰⁴ The crucial point here is that infants not only appear to have an innate or pre-existing capacity to perceive facial and emotional expressions in another person, but they also translate this into their own emotional and behavioural responding, which in turn may elicit a particular kind of response from the mother. This is what enables genuinely reciprocal or bi-directional interaction between mother and infant whereby both react in accordance with the responses they elicit from one another.⁵⁰⁵

Another ability that is extremely important, particularly for social development, is language. Having developed the capacity to detect auditory stimuli in utero,^{506 507} neonates are able to detect and respond to a range of auditory stimuli.⁵⁰⁸ However, what is more relevant is that neonates have been shown to have a preference for speech related vocalisations (including rhesus monkey vocalisations) over synthetic sounds,⁵⁰⁹ and are able to distinguish between languages of distinct rhythmic

⁵⁰³ Tronick, E., Als, H., Adamson, L., Wise, S. and Brazelton, T. B. (1978) Infants response to entrapment between contradictory messages in face-to-face interaction, *Journal of the American Academy of Child and Adolescent Psychiatry*, Vol. 17(1); Pp: 1-13

⁵⁰⁴ Nagy, E., Pilling, K., Watt, R., Pal, A. and Orvos, H. (2017) Neonates’ responses to repeated exposure to a still face, *PLoS One*, Vol. 12(8); e0181688

⁵⁰⁵ According to Peter Hobson, an infant’s facial processing abilities indicate that perception is linked to emotional responding, which he describes as “the bridge between the mind of one person and that of another”. See Hobson, P. (2002) *The Cradle of Thought: Exploring the Origins of Thinking*. London: Macmillan; Pg. 40

⁵⁰⁶ Lasky, R. E. and Williams, A. L. (2005) The development of the auditory system from conception to term, *NeoReviews*, Vol. 6(3); Pp: e141–e152

⁵⁰⁷ Apparently, foetuses are able to hear as early as 19 weeks gestation and by 26 weeks gestation they are able to hear sound at frequencies below 1000Hz. See Hadley, H., Rost, G. C., Fava, E. and Scott, L. S. (2014) A Mechanist Approach to Cross-Domain Perceptual Narrowing in the First year of Life, *Brain Sciences*, Vol. 4(4); Pp: 613-634

⁵⁰⁸ Such as detecting beats in music. See Winkler, I., Haden, G. P., Ladinig, O., Sziller, I. and Honing, H. (2008) Newborn infants detect the beat in music, *Proceedings of the National Academy of Sciences*, Vol. 106(7); Pp: 2468–71

⁵⁰⁹ After three months they develop a species-specific preference for speech vocalisations over rhesus monkey vocalisations. See Vouloumanos, A. and Werker, J. F. (2007) Listening to language at birth: evidence for a bias for speech in neonates, *Developmental Science*, Vol. 10(2); Pp: 159–164; and Vouloumanos, A., Hauser, M. D., Werker, J. F. and Martin, A. (2010) The tuning of human neonates’ preference for speech, *Child Development*, Vol 81(2); Pp: 517-27

categories,^{510 511} and prefer to listen to their native language over a non-native language.⁵¹² Furthermore, neonates are able to distinguish their mother's voice and display a preference for their mother's voice over the voice of other females.^{513 514} Such studies indicate that neonates may have an innate or pre-existing bias for listening to speech, though it should be mentioned that recent evidence suggests that language sounds heard *in utero* also contribute to certain kinds of biases and speech preferences.^{515 516} There is also evidence to suggest that neonatal preference for, and ability to recognise their mother's face, also require prenatal learning of their mother's voice.⁵¹⁷

With regard to development of language, the way in which mothers (also fathers and caregivers) speak with their children after birth, and during infancy, is particularly significant. Infants from as young as a few days old (and up to one year old) show a preference for what is referred to as "infant directed speech" (IDS), also known as "motherese". IDS describes the prosodic exaggerated speech and tones that mothers and fathers typically/spontaneously use when speaking to infants and young children.⁵¹⁸ Interestingly, neonates still prefer their mother's normal speech as opposed to IDS,⁵¹⁹ whereas four month old infants prefer their mother's IDS,⁵²¹ indicating that preference for IDS might follow a specific developmental course during the earliest stages of development.⁵²²

⁵¹⁰ Mehler, J., Jusczyk, P., Lambertz, G., Halsted, N., Bertoncini, J. and Amiel-Tison, C. (1988) A precursor of language acquisition in young infants, *Cognition*, Vol. 29(2); Pp: 143–78

⁵¹¹ Ramus, F., Hauser, M. D., Miller, C., Morris, D. and Mehler, J. (2000) Language discrimination by human newborns and by cotton-top tamarin monkeys, *Science*, Vol. 288(5464); Pp: 349–51

⁵¹² Moon, C., Cooper, R. P. and Fifer, W. P. (1993) Two-day-olds prefer their native language, *Infant Behavior and Development*, Vol. 16(4); Pp: 495–500

⁵¹³ DeCasper, A. J. and Fifer, W. P. (1980) Of Human Bonding: Newborns Prefer their Mothers' Voices, *Science*, Vol. 208(4448); Pp: 1174-6

⁵¹⁴ Mills, M. and Melhuish, E. (1974) Recognition of mother's voice in early infancy, *Nature*, Vol. 252(5479); Pp: 123-4

⁵¹⁵ Byers-Heinlein, K., Burns, T. C. and Werker, J. F. (2010) The roots of bilingualism in newborns, *Psychological Science*, Vol. 21(3); Pp: 343–48

⁵¹⁶ May, L., Byers-Heinlein, K., Gervain, J. and Werker, J. F. (2011) Language and the newborn brain: does prenatal language experience shape the neonate neural response to speech? *Frontiers in Psychology*, Vol. 2(Article 222); Pp: 1-9

⁵¹⁷ Sai, F. Z. (2004) The role of the mother's voice in developing mother's face preference: Evidence for intermodal perception at birth, *Infant and Child Development*, Vol. 14(1); Pp: 29-50

⁵¹⁸ Cooper, R. P. and Aslin, R. N. (1990) Preference for infant-directed speech in the first month after birth, *Child Development*, Vol. 61(5); Pp: 1584-95

⁵¹⁹ Cooper, R. P., Abraham, J., Berman, S. and Staska, M. (1997) The Development of Infants' Preference for Motherese, *Infant Behaviour and Development*, Vol. 20(4); Pp: 447-88

⁵²⁰ Hepper, P. G., Scott, D. and Shahidullah, S. (1993) Newborn and fetal response to maternal voice, *Journal of Reproductive and Infant Psychology*, Vol. 11(3); Pp: 147-53

⁵²¹ Cooper, R. P., Abraham, J., Berman, S. and Staska, M. (1997) The Development of Infants' Preference for Motherese, *Infant Behaviour and Development*, Vol. 20(4); Pp: 447-88

⁵²² Saint-Georges, C., Chetouani, M., Cassel, R., Apicella, F., Mahdhaoui, A., Muratori, F., Laznik, M. and Cohen, D. (2013) Motherese in Interaction: At the Cross-Road of Emotion and Cognition? (A Systematic Review), *PLoS One*, Vol. 8(10) e78103; Pp: 1-17

The function of IDS is thought to communicate affect, regulate infant arousal and attention, and facilitate speech perception and language comprehension.⁵²³ One study showed that eye gaze detection in six month old infants could be achieved if preceded by an ostensive cue in the form of IDS.⁵²⁴ Thus, IDS may also play a crucial role in helping infants to learn about objects from others as well as their states of mind, paving the way for development of social cognitive capacities such as theory of mind (ToM). With regard to language acquisition, IDS is thought to facilitate syllabic discrimination, vowel categorisation, and word and clause segmentation. A recent systematic review by Saint-Georges et al (2013) concluded that the evidence supports the idea that prosody in IDS contributes to language acquisition in the very early stages of development and the linguistic aspects of IDS contribute to language acquisition in the latter stages when infants gain verbal abilities.⁵²⁵

It should be mentioned that such an idea challenges the view that Noam Chomsky famously argued for, which is that the speech heard by infants and young children (which includes IDS) was “deformed” and “degenerate” (i.e. insufficient to enable language acquisition). Instead, Chomsky proposed that children possessed innate grammatical knowledge.⁵²⁶ This debate between linguistic nativists and empiricists is an ongoing one and is beyond the scope of this thesis.⁵²⁷ However, what is relatively uncontentious is the view that development of phonology and vocabulary (associated with natural language) is the result of learning for which there are some general developmental trends. Neonates may be able to recognise and discriminate between languages of different rhythmic categories, but it is not until five months of age that they can recognise and discriminate between phonemes within a single rhythmic category (both native and non-native languages).⁵²⁸ Vocalizations in the form of “babbling” emerge after ten months and production of phonemes and recognisable words emerge after twelve months. Vocabulary (including recognition of phonemes and meaning of words) is present

⁵²³ Ibid.

⁵²⁴ Senju, A. and Csibra, G. (2008) Gaze following in human infants depends on communicative signals, *Current Biology*, Vol. 18(9); Pp: 668-671

⁵²⁵ Saint-Georges, C., Chetouani, M., Cassel, R., Apicella, F., Mahdhaoui, A., Muratori, F., Laznik, M. and Cohen, D. (2013) Motherese in Interaction: At the Cross-Road of Emotion and Cognition? (A Systematic Review), *PLoS One*, Vol. 8(10) e78103; Pp: 1-17

⁵²⁶ Chomsky, N. (1965) *Aspects of the Theory of Syntax*. Cambridge, MA: MIT Press

⁵²⁷ For a review of this debate see Cowie, Fiona, "Innateness and Language", *The Stanford Encyclopedia of Philosophy* (Winter 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2016/entries/innateness-language/> (last accessed 19/05/2019)

⁵²⁸ Yeung, H. H., Chen, K. H. and Werker, J. F. (2013) When does native language input affect phonetic perception? The precocious case of lexical tone, *Journal of Memory and Language*, Vol. 68(2); Pp :123–139

as early as six months and rapidly increases after twelve months.⁵²⁹ A child's phonological repertoire is usually complete by the age of six to eight years.⁵³⁰

While the development of language appears to require certain kinds of innate or pre-existing auditory and speech recognition processes (some of which may develop during gestation), such processes are typically expressed in the context of reciprocal interactions between infant and parent. IDS appears to play an important role in those reciprocal interactions during which parent and infant react in accordance with the responses they elicit from one another (as was the case in the example of facial responding discussed previously). Parents continue to adjust their IDS according to an infant's responses, age, abilities and linguistic level. Such adjustments ultimately facilitate positive outcomes for emotional expression, learning and language acquisition, all of which are crucial for further development of complex social cognitive capacities.⁵³¹

Perceptual Narrowing

The phenomenon of "perceptual narrowing" (or "perceptual tuning") in both facial processing and language acquisition in neonates also highlights how the salient features of the environment contribute to increasingly adapted, specialized and efficient processing. In the very early stages of neonatal development, the broad abilities associated with facial recognition and language acquisition (as discussed above) reflect domain general functions that exist across both visual and auditory perceptual "modalities" (domains). Those abilities soon become more finely tuned and adapted to specific environmental constraints and neonates are soon able to make environmentally relevant perceptual distinctions while being less prone to make environmentally irrelevant distinctions.⁵³² For example, neonates show no preferences for faces of any particular race. However, three month old infants who have been exposed primarily to faces of their own race show a preference for looking at faces of their own race. In contrast, those who have been exposed to faces of their own and other

⁵²⁹ Bergelson, E. and Swingle, D. (2012) At 6–9 months, human infants know the meanings of many common nouns, *Proceedings of the National Academy of Sciences*, Vol. 109(9); Pp: 3253–3258

⁵³⁰ Rosselli, M., Ardila, A., Matute, E. and Velez-Urbe, I. (2014) Language Development across the Life Span: A Neuropsychological/Neuroimaging Perspective, *Neuroscience Journal*, Vol. 2014; Pp: 1-21

⁵³¹ Saint-Georges, C., Chetouani, M., Cassel, R., Apicella, F., Mahdhaoui, A., Muratori, F., Laznik, M. and Cohen, D. (2013) Motherese in Interaction: At the Cross-Road of Emotion and Cognition? (A Systematic Review), *PLoS One*, Vol. 8(10) e78103; Pp: 1-17

⁵³² Maurer, D. and Werker, J. F. (2014) Perceptual narrowing during infancy: A comparison of languages and faces, *Developmental Psychobiology*, Vol. 56(2); Pp: 154–178

aces show no such preference.⁵³³ ⁵³⁴ This is thought to shape their subsequent ability to better recognise/differentiate faces of familiar versus unfamiliar ethnic/race classes (i.e. they are able to better distinguish between faces of familiar race/ethnic classes than unfamiliar ones). This phenomenon is referred to as the “other race effect” (ORE).⁵³⁵ The ORE is most robust (i.e. not easily eliminated by transient exposure to faces of unfamiliar race/ethnicity) at nine months when infants are able to better discriminate faces from only within their own ethnic group (an effect that persists through to adulthood).⁵³⁶ ⁵³⁷ ORE is an example of perceptual narrowing in face processing.

There is also evidence for the perceptual narrowing effect in the auditory function. A decline in recognition/differentiation of musical rhythm and metrical structure at twelve months of age has been observed.⁵³⁸ Interestingly, there are a couple of studies of perceptual narrowing that suggest a link between the visual and auditory systems (also recall that neonatal recognition of their mother’s face also requires prenatal recognition of their mother’s voice). Firstly, recognition and differentiation of speech sounds (e.g. phonetic discernment) not present in one’s native language declines from six to twelve months of age. A study by Patricia Kuhl demonstrated that the perceptual narrowing effect of phonetic discernment could be reversed in American nine month old infants if those infants were exposed to live persons speaking a non-native language (in this case Mandarin). However, this reversal was not observed when infants were exposed to the Mandarin speakers via audio-only and audio-visual recordings.⁵³⁹ This also led Kuhl to propose that early language acquisition requires social interaction.⁵⁴⁰ Secondly, a study by Lewkowicz and Ghazanfar (2006) revealed a decline in infants’ ability to match monkey faces to corresponding monkey vocalisations by eight to ten months of age.

⁵³³ Kelly, D. J., Quinn, P. C., Slater, A. M., Lee, K., Gibson, A., Smith, M. and Pascalis, O. (2005) Three-month-olds, but not newborns, prefer own-race faces, *Developmental Science*, Vol. 8(6); F31–F36

⁵³⁴ Bar-Haim, Y., Ziv, T., Lamy, D. and Hodes, R. M. (2006) Nature and nurture in own-race face processing, *Psychological Science*, Vol. 17(2); Pp: 159–63

⁵³⁵ Hayden, A., Bhatt, R. S., Joseph, J. E. and Tanaka, J. W. (2007) The other-race effect in infancy: Evidence using a morphing technique, *Infancy*, Vol. 12(1); Pp: 95–104

⁵³⁶ Kelly, D. J., Liu, S., Lee, K., Quinn, P. C., Pascalis, O., Slater, A. M., and Ge, L. (2009) Development of the other-race effect during infancy: Evidence toward universality? *Journal of Experimental Child Psychology*, Vol. 104(1); Pp: 105–114

⁵³⁷ Anzures, G., Quinn, P. C., Pascalis, O., Slater, A. M., Tanaka, J. W. and Lee, K. (2013) Developmental origins of the other-race effect, *Current Directions in Psychological Science*, Vol. 22(3); Pp: 173–78

⁵³⁸ Hannon, E. E. and Trehub, S. E. (2005) Metrical categories in infancy and adulthood, *Psychological Science*, Vol. 16(1); Pp: 48–55

⁵³⁹ Kuhl, P. K., Tsao, F-M. and Liu, H-M. (2003) Foreign-language experience in infancy: Effects of short-term exposure and social interaction on phonetic learning, *Proceedings of the National Academy of Sciences*, Vol. 100(15); Pp: 9096-9101

⁵⁴⁰ Kuhl, P. K. (2007) Is speech learning ‘gated’ by the social brain? *Developmental Science*, Vol. 10(1); Pp: 110-20

However, younger infants were able to correctly match the vocalizations to the corresponding monkey face.⁵⁴¹

The multimodal nature of perception and the parallel trajectory of perceptual narrowing in both face and speech processing, suggest that a common neural architecture, and a domain general mechanism, underpin development across the visual and auditory domains/modalities. Scott et al (2007) propose that such perceptual narrowing is underpinned by the refining of synaptic connections associated with Hebbian Learning (i.e. the strengthening of synaptic connections and networks as a result of repeated stimuli).⁵⁴² Hadley et al (2014) have also proposed that perceptual narrowing reflects a shift from primarily “bottom-up” processes (i.e. perceptual responses dynamically coupled with context dependent stimuli) to a combination of both “bottom-up” and “top-down” processes. “Top-down” in this context refers to a broad range of processes that might contribute to perceptual narrowing in face and speech perception. According to Hadley et al (2014) those “top-down” processes refer to the influence of early social interaction, early experiences and socio-cultural norms, and developmental goals at the level of the individual infant (e.g. the shift in attention towards an adult’s mouth from four months of age which parallels the developmental trajectory of speech perception). Furthermore, Hadley et al (2014) also claim that early concept formation linked to lexical and semantic comprehension also contributes to perceptual narrowing.

...we propose word learning as a top-down mechanism to facilitate perception of face and speech categories by directing attention to meaningful versus non-meaningful distinctions between phonemes or between visual stimuli (e.g., objects or faces). In the first year of life, caregiver labeling may be simultaneously influencing language development and face processing and result in the refining of visual and auditory systems such that narrowing and tuning effects are observed across domains. (Hadley et al, 2014; Pg. 627)

Johnson (2011) has proposed a framework for human post-natal brain development that integrates evidence from developmental functional neuroimaging relating to face and language processing, social cognition, executive control and brain resting states. He refers to it as “interactive specialization” (IS), which is based on the idea of probabilistic epigenesis, the interactivity and inter-regional connectivity of brain networks (which determine cortical development), self-organising and activity-dependent processes (e.g. selective attention directed at novel stimuli) and dynamic mapping between cognitive function and neural substrate (i.e. different regions and structures of the brain can

⁵⁴¹ Lewkowicz, D. J. and Ghazanfar, A. A. (2006) The decline of cross-species intersensory perception in human infants, *Proceedings of the National Academy of Sciences*, Vol. 103(17); Pp: 6771–6774

⁵⁴² Scott, L. S., Pascalis, O. and Nelson, C. A. (2007) A Domain-General Theory of the Development of Perceptual Discrimination, *Current Directions in Psychological Science*, Vol. 16(4); Pp: 197-201

be reorganised and deployed for acquisition of new skills or cognitive functions). IS is distinguished from the idea that development of cognitive function is underpinned by either maturation of particular regions of the cerebral cortex (i.e. nativist neurological development) or changing pre-specified neural circuitry associated with adult-equivalent skill acquisition (i.e. empiricist learning).⁵⁴³

The research into the development of facial processing and language acquisition discussed thus far highlights a number of important aspects of the development of minimal human selfhood. Firstly, that humans are born with certain capacities (e.g. predispositions, preferences or biases for various kinds of visual/auditory cues such as face-like and linguistic stimuli) and that those capacities serve as substrates or precursors for more complex capacities to subsequently develop (e.g. capacities associated with social cognition, such as language and theory of mind). Secondly, it also highlights the importance of the role of interpersonal interaction in neonatal development and the dynamic/bidirectional nature of infant cognitive, emotional and social development. Thirdly, it demonstrates that the emergence of such capacities is not simply due to either the maturation of a domain specific function or the outcome of experience dependent learning (i.e. nativism versus empiricism). Rather, they are the result of dynamic bidirectional causal processes underpinning a development trajectory that begins with innate domain general functions (that manifest as a predisposition or bias) and progresses towards greater domain specificity and specialisation of function in accordance with salient/relevant features of the environment (as exemplified in the cross-domain perceptual narrowing of language and face processing). These are central features of the neuroconstructivist framework and the examples of neonatal development of facial and language processing indicate that neuroconstructive processes are occurring from the earliest stages of human life and throughout early childhood.

The Role of the Social Environment

As an infant enters into early childhood, social interactions become increasingly important for their development, particularly the development of social cognition. A well-known example that highlights the importance of the social environment is what is referred to as the “sibling effect” on theory of mind (ToM) development. Research indicates that children with siblings perform better on tests of

⁵⁴³ Johnson, M. H. (2011) Interactive Specialization: A domain-general framework for human functional brain development? *Developmental Cognitive Neuroscience*, Vol. 1(1); Pp: 7-21

ToM (i.e. the well-known “false-belief test”).^{544 545} There is also evidence that parenting styles⁵⁴⁶ and socioeconomic status can also affect development of ToM.⁵⁴⁷ This has led some to propose that development of ToM is a result of learning and activity in the context of interpersonal/environmental interaction, combined with social/cultural, biological and psychological factors, a view that is consistent with the neuroconstructivist framework discussed above.⁵⁴⁸

As discussed in Chapter 2, language and conversation are particularly important with regard to reflective self-awareness because they enable a child to understand the subjective nature of their own thoughts and feelings. Language and conversation enable a child to express their reflective/introspective thoughts and ideas, which promotes the integration of their past, present and future, thus facilitating the development of narrative capacity as well as a temporally extended or diachronic self. Furthermore, communication and interaction with others facilitates the development of a self-concept or a sense of personal identity (i.e. how the child perceives themselves in terms of autobiographical knowledge, personal values, and evaluations from others) that is unified, extends over time and beholden to the child’s values, ideals, and future aspirations.

An infant takes his or her first social steps in the context of familial relationships, particularly alongside their parents (or caregivers). There is an abundance of research that demonstrates how social interaction between children and parents/caregivers can influence maternal reminiscing styles, which in turn affect a child’s subsequent development and the quality of their autobiographical memories.⁵⁴⁹
^{550 551} This establishes one of the very first and significant sets of bidirectional influences between the child and their social world. Furthermore, positive familial relationships increase the likelihood of children having positive harmonious relationships with others in future. Hence the quality of social

⁵⁴⁴ Perner, J., Ruffman, T. and Leekam, S. R. (1994) Theory of mind is contagious: You catch it from your sibs, *Child Development*, Vol. 65(4); Pp: 1228–38

⁵⁴⁵ Hughes, C. and Ensor, R. (2005) Executive function and theory of mind in 2 year olds: A family affair? *Developmental Neuropsychology*, Vol. 28(2); Pp: 645–668

⁵⁴⁶ Ruffman, T., Perner, J. and Parkin, L. (1999) How parenting style affects false belief understanding, *Social Development*, Vol. 8(3); Pp: 395–411

⁵⁴⁷ Holmes, H. A., Black, C. and Miller, S. A. (1996) A cross-task comparison of false-belief understanding in a Head Start population, *Journal of Experimental, Child Psychology*, Vol. 63(2); Pp: 263–85

⁵⁴⁸ Carpendale, J. I. M. and Lewis, C. (2004) Constructing an understanding of the mind: The development of children’s social understanding within social interaction, *Behavioral and Brain Sciences*, Vol. 27(1); Pp: 79-151

⁵⁴⁹ Reese, E., Haden, C. A. and Fivush, R. (1993) Mother–child conversations about the past: Relationships of style and memory over time, *Cognitive Development*, Vol. 8(4); Pp: 403–30

⁵⁵⁰ Reese, E. and Farrant, K. (2003) Social Origins of Reminiscing, In Fivush, R. and Haden, C. A. (Eds) *Autobiographical Memory and the Construction of a Narrative Self: Developmental and Cultural Perspectives*. Lawrence Erlbaum Associates, Inc.: Mahwah, NJ; Pp: 29-48

⁵⁵¹ Haden, C. A. (2003) Joint Encoding and Joint Reminiscing: Implications for Young Children’s Understanding and Remembering of Personal Experiences, In Fivush, R. and Haden, C. A. (Eds) *Autobiographical Memory and the Construction of a Narrative Self: Developmental and Cultural Perspectives*. Lawrence Erlbaum Associates, Inc.: Mahwah, NJ; Pp: 49-70

interaction at this early stage is crucial in developing a child's capacity for socialisation, which further establishes the possibility of the kind of bidirectional influences between the child and their social environment that is necessary for further cognitive development.

The parent/caregiver-child relationship provides solicitude, warmth and security to the child conferring on them a basic sense of being loved, respected and safe. The positive affect derived from such relationships enables a child to become more receptive to their parents/caregivers, thus motivating them to share their experiences with their parent/caregivers (particularly through verbal conversation) as well as to behave in ways that please them. It is in the context of such relationships that children further develop their nascent capacity for self-regulation and reflective self-awareness. For example, they learn to adapt their behaviour in ways that elicit positive responses from their parent/caregiver. In doing so, they become aware of their causal agency and aware of the standards on which their behaviour is evaluated. Their sense of self during this early stage of development is thus linked closely to parent/caregiver love and approval and will often manifest in verbal assertions of self-esteem, competence, ownership, responsibility and compliance with evaluative standards.⁵⁵²

These remarkable advances in self-related processes in early childhood underscore how much the efficacy of socialization depends on children's developing self-image and capacities for self-control, and suggest that variations in young children's self-concept, self-regulation, and proneness toward experiencing self-conscious emotions may significantly moderate the influence of parental socialization initiatives. (Laible et al, 2015; Pg. 49)

Negative relationships with parent/caregivers can lead to negative outcomes associated with negative self-concept and poor self-regulation. In addition there is also growing evidence of this having biological consequences, such as stress responses associated with hypothalamic-pituitary-adrenocortical function, and epigenetic effects that are linked to behavioural phenotypes (which may therefore be potentially heritable).⁵⁵³ We must also bear in mind that the child as an individual and as an agent (as opposed to merely a social interlocutor) also contributes to the way in which the parent/caregiver-child relationships shapes socialisation capacity. There are innate temperaments and genetic factors that play a role, and there is also the child's nascent capacity for diachronic agency that enables them to judge and act in accordance with certain independent normative standards (e.g.

⁵⁵² Laible, D., Thompson, R. A. and Froimson, J. (2015) Early Socialization; The Influence of Close Relationships. In Grusec, J. E and Hastings, P. D (Eds) *Handbook of Socialization: Theory and Research (2nd Edition)*. The Guilford Press: New York; Pg. 35-59

⁵⁵³ Laible, D., Thompson, R. A. and Froimson, J. (2015) Early Socialization; The Influence of Close Relationships. In Grusec, J. E and Hastings, P. D (Eds) *Handbook of Socialization: Theory and Research (2nd Edition)*. The Guilford Press: New York; Pg. 35-59

standards or morality and etiquette, which I discussed in Chapter 2). This indicates that the nature of the development of socialisation capacities is dynamic and bidirectional and therefore the relationship between parent/caregiver and child is considered dyadic.

For example, Laible et al (2015) cite research which indicates that children who are high on negative emotionality require sensitive and mutually responsive relationships and are more susceptible to negative outcomes (such as poor self-regulation) if parents are insensitive or unresponsive to their needs.^{554 555} There has been much research focus on two genes which are thought to influence social behaviour. One is the monoamine oxidase A gene (MAOA), which encodes an enzyme that metabolises neurotransmitters such as serotonin, dopamine and norepinephrine. A low-expression variant (allele) of the MAOA gene (i.e. it produces less enzyme) known as MAOA-L, has been linked to increased risk of violent and aggressive behaviour.⁵⁵⁶ Laible et al (2015) also cite a study by Caspi et al (2002) which showed that young adults with the MAOA-L allele were more prone to be violent if they had experienced maltreatment during childhood compared with those with the MAOA allele who also had a history of maltreatment.⁵⁵⁷ The other gene is the Cadherin-13 gene (CDH13), which encodes a neuronal membrane adhesion protein that also plays a role in signal transmission between cells. CDH13 has been associated with risk for attention deficit/hyperactivity disorder (ADHD) and related neuropsychiatric conditions such as depression, autism spectrum disorders, schizophrenia, bipolar disorder, extraversion, violent behaviour, as well as comorbid conditions such as drug and alcohol abuse.⁵⁵⁸ ADHD is historically defined as a disorder of childhood in which the age of onset is prior to 7 years, though it is increasingly recognized as a valid diagnosis in adults.⁵⁵⁹ ADHD is characterised by inattention, hyperactivity, impulsivity and motivational/emotional dysregulation and results in learning impairments.⁵⁶⁰

⁵⁵⁴ Negative emotionality is the tendency to experience unpleasant emotional states such as fear, anger, and nervous tension.

⁵⁵⁵ Laible, D., Thompson, R. A. and Froimson, J. (2015) Early Socialization; The Influence of Close Relationships. In Grusec, J. E and Hastings, P. D (Eds) *Handbook of Socialization: Theory and Research (2nd Edition)*. The Guilford Press: New York; Pg. 49

⁵⁵⁶ Hunter, P. (2010) The psycho gene, *EMBO reports*, Vol. 11(9); Pp: 667-669

⁵⁵⁷ Caspi, A., McClay, J., Moffitt, T., Mill, J., Martin, J., Craig, I., Taylor, A. and Poulton, R. (2002) Role of genotype in the cycle of violence in maltreated children, *Science*, Vol. 297(5582); Pp: 851–54

⁵⁵⁸ Rivero, O., Selten, F. M., Sich, S., Popp, S., Bacmeister, L., Amendola, E., Negwer, M. J., Schubert, D., Proft, F., Kiser, D., Schmitt, A. G., Gross, C., Kolk, S.M., Strelakova, T., Hove, D. van den, Resink, T. J., Nadif Kasri, N. and Lesch, K. P. (2015) Cadherin-13, a risk gene for ADHD and comorbid disorders, impacts GABAergic function in hippocampus and cognition, *Translational Psychiatry*, Vol. 5(10); Pp: e655 doi:10.1038/tp.2015.15

⁵⁵⁹ Kieling, C., Kieling, R. R., Rohde, L. A., Frick, P. J., Moffitt, T., Nigg, J. T., Tannock, R. and Castellanos, F. X. (2010) The age at onset of attention deficit hyperactivity disorder, *The American Journal of Psychiatry*, Vol. 167(1); Pp: 14-6

⁵⁶⁰ Rivero, O., Sich, S., Popp, S., Schmitt, A., Franke, B. and Lesch, K. P. (2013) Impact of the ADHD-susceptibility gene CDH13 on development and function of brain networks, *European Neuropsychopharmacology*, Vol. 23(6); Pp: 492-507

Children also have the social and moral cognitive capacity to interpret and evaluate their parent/caregiver's behaviour and motivations according to certain ethical standards (e.g. whether a parent/caregiver's decision is unfair, selfish, unreasonable, or threatens their autonomy). They have an awareness of the psychological motivations of their parent/caregiver and understand they can be mistaken, selfish, or otherwise fallible. As a result, their response to socialisation initiatives will also depend on how they perceive and evaluate those initiatives, and such responses can also influence the way in which parents/caregivers adopt specific socialisation strategies.⁵⁶¹ Hence socialisation during this early stage is jointly constructed by both parents/caregivers and children, whose relationship is a dyadic one.⁵⁶² Kochanska and colleagues have described the parent/caregiver-child relationship as consisting of a "mutually responsive orientation" (MRO), which describes the sensitivity of both parent/caregiver and child to each other's responses (e.g. happiness and distress) and needs (e.g. need for attention or exerting influence), as well as positive affect experienced by both as a result of pleasurable harmonious interaction.^{563 564} Having an MRO has also been demonstrated to aid in the development of a child's conscience and moral conduct in which they are more likely to comply with parent's/caregiver's values and moral obligations without the need for disciplinary action in the form of power assertion.^{565 566} Therefore, as was the case regarding development of facial and language processing, it seems that socialisation during early childhood is a result of internal/individual factors (such as genetics, temperament and behaviour) and external/social factors (such as interactions between parents/caregivers and broader sociocultural norms in which such interactions are situated), both of which exert an influence on the other in dynamic and bidirectional ways. This is consistent with the neuroconstructivist framework I discussed above and the overall developmental outcome is a nascent diachronic agent, with a rudimentary self-concept, and a capacity for social

⁵⁶¹ Laible, D., Thompson, R. A. and Froimson, J. (2015) Early Socialization; The Influence of Close Relationships. In Grusec, J. E and Hastings, P. D (Eds) *Handbook of Socialization: Theory and Research (2nd Edition)*. The Guilford Press: New York; Pg. 35-59

⁵⁶² Obviously, there are also broader sociocultural and historical norms that influence the way that parents/caregivers raise children, and it is in this regard that broader societal/cultural norms can influence socialization during early childhood.

⁵⁶³ Kochanska, G. (2002) Mutually Responsive Orientation Between Mothers and Their Young Children: A Context for the Early Development of Conscience, *Current Directions in Psychological Science*, Vol. 11(6); Pp: 191-95

⁵⁶⁴ Kochanska, G., Aksan, N., Prisco, T. R. and Adams, E. E. (2008) Mother-child and father-child mutually responsive orientation in the first 2 years and children's outcomes at preschool age: Mechanisms of influence, *Child Development*, Vol. 79(1); Pp: 30-44

⁵⁶⁵ Kochanska, G., Forman, D. R. Aksan, N. and Dunbar, S. B. (2005) Pathways to conscience: early mother-child mutually responsive orientation and children's moral emotion, conduct, and cognition, *Journal of Child Psychology and Psychiatry*, Vol. 46(1); Pp: 19-34

⁵⁶⁶ Kochanska, G. and Kim, S. (2012) Toward a new understanding of legacy of early attachments for future antisocial trajectories: Evidence from two longitudinal studies, *Development and Psychopathology*, Vol. 24(3); Pp: 783-806

cognition, i.e. a minimal human self that is poised to act in, and navigate further through, the social world.

It is important to bear in mind that development of minimal human selfhood occurs within a relatively narrow social context (i.e. parents and immediate family). Nevertheless, minimal human selfhood equips a child with the capacity to become further socialised and to acquire the necessary skills to successfully function in broader social contexts, i.e. as members of society rather than simply members of one's immediate family. The minimal human self is poised to become further embedded within social contexts that extend beyond the immediate family (e.g. school and community settings where friendships and peer networks are established). It is within these social contexts that the minimal human self continues to develop towards the kind of self we find in mature adults, one that is associated with a more enriched and complex self-concept and hermeneutical sense of personal identity.

In the remainder of this chapter, I describe how the minimal human-self continues to develop throughout adolescence and emerging adulthood.^{567 568} The social environment plays a particularly important role during those stages and so too do certain cognitive capacities that are not yet fully developed. Hence both internal/individual and external/social factors continue to play a role in developmental outcomes much in the same way they did during early childhood (consistent with neuroconstructivism). However, such is the nature and influence of those factors during those stages of development that selfhood begins to take on an increasingly psychological and social quality. This forms the basis of "psychosocial" and "biopsychosocial" models of the self, which focus on various biological, psychological and social dimensions of selfhood. Those models are prominent in social psychology and psychiatry and much of our current understanding of the self in mature adult human beings is grounded in those models. However, a significant limitation of those models is that they fail to adequately capture the narrative dimension of mature human selfhood. Autobiographical narratives, and the capacity for human beings to construct such autobiographical narratives, are essential to mature human selfhood, and thus I borrow the phrase "sociobiographical self" to refer to the mature human self.

⁵⁶⁷ Arnett, J. J. (2000) Emerging adulthood: A theory of development from the late teens through the twenties, *American Psychologist*, Vol. 55(5); Pp: 469-480

⁵⁶⁸ Arnett, J. J., Zukauskienė, R. and Sugimura, K. (2014) The new life stage of emerging adulthood at ages 18-29 years: implications for mental health, *Lancet Psychiatry*, Vol. 1(7); Pp: 569-576

Constructing Sociobiographical Selves

Socially Situated Construction

In the previous section, I argued that neuroconstructivism offers a better explanation of ontogenetic development of the minimal human self than either constructivism or social constructionism. However, I believe there is much to be gained from those perspectives when it comes to understanding how the minimal human self continues to develop throughout adolescence through to emerging adulthood. This is particularly the case when it comes to understanding how the nature of the bidirectional interactions between individuals and their social environment influence certain kinds of outcomes associated with selfhood. We can think of those interactions as predicated on a certain kind of tension associated with conflicts between individual goals and societal norms, which inevitably arise in virtue of one's embeddedness within increasingly complex social contexts combined with one's developing capacity for diachronic agency.

This kind of tension and the natural tendency to resolve it is a central feature of the way in which mature adult selfhood develops. This is exemplified in moral development and socialisation, particularly during childhood and adolescence, where one tries to comport oneself in accordance with relevant moral and societal norms. Tensions often arise due to certain beliefs, desires and behavioural tendencies coming into conflict with moral and societal norms. Those tensions can be resolved by applying one's capacity for reflective self-evaluation and diachronic agency towards their resolution (i.e. performing various modes of offline cognition for the purposes of prudential decision making and evaluating certain possible or actual outcomes). Those conflicting beliefs, desires and actions are resolved through action, and/or coming to terms psychologically with the circumstances, so as to achieve a state of subjective reconciliation. Over time, one's moral or social character and identity can thus be shaped by the way in which one resolves and reconciles those tensions.

The resolution of such tensions and conflicts captures the kind of dynamic and bidirectional interactions between agent and environment that are most influential in shaping developmental outcomes associated with human selfhood during adolescence and emerging adulthood. The outcome of such processes is the emergence of a kind of selfhood that is more stable and enduring, and one that is associated with a more enriched and complex self-concept and hermeneutical sense of personal identity. A four year old child with minimal human selfhood may have a nascent capacity for reflective self-awareness, language and diachronic agency, but they have yet to develop the linguistic and cognitive capacities, and diachronic self-awareness, necessary for this kind of self-evaluation and

subjective reconciliation. Hence their self-concepts and sense of personal identity are undeveloped and relatively unsophisticated.

Essentially, what the minimal human self lacks is an autobiographical or narrative form of self-awareness, one that is constructed out of the kind of conscious reflection, self-evaluation and subjective reconciliation that takes place as one navigates through and reconciles the complexities of the social world. In this regard, the mature human self is embedded and enacted in the social world, and there is a real sense in which both conscious constructive processes and broader sociocultural forces contribute to its development. Mature human selfhood is therefore “sociobiographical” in nature and it is during adolescence and emerging adulthood that such a sociobiographical self begins to emerge. I discuss these ideas in more detail in the following sections.

The Biographical Dimension

One of the most well-known theories of development of the self is Erik Erikson’s theory of psychosocial development across lifespan (proposed in the 1950s in collaboration with his wife Joan Erikson).^{569 570} Erikson’s theory describes how an individual passes through eight developmental stages in their life. At each developmental stage they are faced with unique conflicts and challenges that they must try to resolve in order to develop successfully. Those conflicts arise due to complex interactions between an individual’s biological/psychological needs and the nature of their social relationships with significant others. Thus, he coined the term “psychosocial” to describe the nature of those conflicts and challenges. He also describes the individual as having a particular kind of “psychosocial crisis” at each of the stages. An individual must then deal with the particular crisis and try to resolve the conflicts at each stage in order to successfully grow and develop (in the sense of socialisation, i.e. being able to adjust to the social environment).

Successful resolution of conflict at a particular stage confers on the individual a sense of mastery or competence and thus a sense of adequacy. On the other hand, if the conflict is not successfully resolved it can leave the individual with a sense of incompetence and inadequacy. Thus, at each stage there is potential for progressive development of competencies and virtues as well as potential for progressive development of descriptive and evaluative self-awareness (i.e. a self-concept or what Erikson refers to as “ego identity”). The outcomes at each stage can either result in socially adaptive or socially maladaptive self-concepts. For example, the first stage occurs during infancy in which an

⁵⁶⁹ Erikson, E. H. (1959) Identity and the life cycle: Selected papers, *Psychological Issues*, Vol. 1(1); Pp: 1-171

⁵⁷⁰ Erikson, E. H. and Erikson, J. M. (1998) *The Life Cycle Completed: Extended Version*. W. W. Norton

infant is confronted with a conflict/crisis of “trust versus mistrust”. An infant has a basic biological and psychological need for comfort and sustenance that must be met by their parents/caregivers. If the need is met then this will provide an infant with a fundamental sense of trust of the world. If the need is not met then an infant is left with a fundamental sense of mistrust of the world, which can lead to frustration, fear, suspicion, lack of confidence and insecurity. Erikson’s theory of psychosocial development was one of the first to consider the complex interactions between biological, psychological and social determinants of development, and remains highly influential.

Another influential theory that applies the same considerations of the interactions between biological, psychological and social factors is George Engel’s “biopsychosocial” model of disease. It offers a way of understanding how biological, psychological and social factors contribute to disease and illness and also offers a practical guide for clinical care by focusing on a patient’s subjective experience of their illness.⁵⁷¹ The model first came to prominence in the late 70s, when Engel argued that the “biomedical model of disease” as defined solely in terms of biological parameters, was inadequate. Engel argued that social, psychological and behavioural factors must also be part of the concept of “disease” and must also be taken into consideration in the context of medical treatment.⁵⁷² Using the example of diabetes, he states that the symptoms of the disease “may also be expressions of or reactions to psychological distress”, and more generally that the “conditions of life and living” were variables that influenced the onset and manifestation of such diseases. Such conditions of life and living extend broadly to also include socioeconomic status, culture and religion.

Furthermore, Engel also argued that clinical care must focus simultaneously on the biological, psychological and social dimensions and regarded the nature of the relationship between the patient and physician as having a powerful influence on therapeutic outcomes. Engel’s biopsychosocial model is also a critique of the way in which the medical model of disease had fostered a view of patients as objects with little regard for their subjective experiences in both clinical care and medical research.

To provide a basis for understanding the determinants of disease and arriving at rational treatments and patterns of health care, a medical model must also take into account the patient, the social context in which he lives, and the complementary system devised by society to deal with the disruptive effects of illness, that is, the physician role and the health care system. This requires a biopsychosocial model. (Engel, 1977; Pg. 196)

⁵⁷¹ Borrell-Carrio, F., Suchman, A. L. and Epstein, R. M. (2004) The Biopsychosocial Model 25 Years Later: Principles, Practice, and Scientific Inquiry, *The Annals of Family Medicine*, Vol. 2(6); Pp: 576-82

⁵⁷² Engel, G. L. (1977) The Need for a New Medical Model: A Challenge for Biomedicine, *Science*, Vol. 196(4286); Pp: 129-136

Contemporary “person-centred” or “patient-centred” approaches to clinical care and care policy either explicitly or implicitly adopt the biopsychosocial model.⁵⁷³ It is particularly prominent in various person-centred care (PCC) frameworks discussed in the introductory chapter. For example, the biopsychosocial model is central to Kitwood’s PCC framework for dementia care. However, what is distinctive about Kitwood’s definition is his recognition of the importance of biographical history. He argued that a dementia sufferer is “a person in the fullest possible sense: he or she is still an agent, one who can make things happen in the world, a sentient, relational and historical being”.⁵⁷⁴ Thus, PCC as envisaged by Kitwood, is aimed at promoting not just the psychological, social, and agential dimensions of personhood but also the biographical dimension.

The emphasis on biography lends itself to the idea that PCC is concerned with promoting or maintaining continuity of selfhood. The biographical dimension underpins an important aspect of selfhood, which is the narrative aspect. A person’s biographical history informs their sense of who they are (their sense of personal identity) and this is thought to take the form of autobiographical narratives. Kitwood’s framework for PCC also recognises that people throughout their lives consciously strive to uphold particular values and ideals so as to achieve goals in life and perhaps fulfil a particular vision they may have for themselves. This converges with the idea that human beings are agents that contribute to the construction of their personal identities and that those personal identities also capture their sense of value, meaning and purpose in life. Hence the autobiographical narratives that constitute our personal identities consist of both descriptive and evaluative components, which are also imbued with emotional tonality.

Insofar as the goal of PCC in dementia is framed as promoting or maintaining continuity of self, this narrative dimension appears to be a crucial one. Though I will discuss narrative theories of selfhood in more detail in the following chapter, it is worth pointing out that while there is relatively little discussion of this idea in the dementia-care literature, the idea is implicit in various approaches towards PCC. However, there is one particular account, which I want to briefly discuss here, and that is Alice Surr’s theory of the “socio-biographical self”. It explicitly describes the relevance and importance of this narrative dimension to both understanding the self and understanding dementia-care. Hence, I borrow this phrase to describe the mature human self more specifically as a sociobiographical self.

⁵⁷³ van Dulmen, S. A., Lukersmith, S. Muxlow, J., Mina, E. S., Nijhuis-van der Sanden, M. W. G. and van der Wees, P. J. (2015) Supporting a person-centred approach in clinical guidelines. A position paper of the Allied Health Community – Guidelines International Network (G-I-N), *Health Expectations*, Vol. 18(5); Pp; 1543-58

⁵⁷⁴ Kitwood, T. (1993) Person and process in dementia, *International Journal of Geriatric Psychiatry*, Vol. 8(7); Pg. 541

Much like the narrative theories of self that I will discuss in the following chapter, Surr describes how a person can make sense of their self, identity and life events through the autobiographical narratives they create. Those narratives link together the multitude of facts and events that occur during life to create a coherent life story which forms the basis of a biographical understanding of oneself. This is why narrative story-telling, which can be understood as a way of helping to promote or maintain continuity of self, is thought to be an effective form of PCC.^{575 576 577 578 579}

...a socio-biographical theory of self in dementia contends that relationships with others, the broader social context in which individuals are situated and narrative and storytelling have a crucial role in the undermining or maintenance of self. (Surr, 2006; Pg. 1720)

Surr's sociobiographical theory of self thus captures three important dimensions of self, i.e. interpersonal relationships, broader social networks and narrative. Thus, we can think of human selfhood as situated within interpersonal contexts, situated within broader social contexts, and constituted by narratives. However, as discussed in the Chapter 2, there is also an embodied dimension associated with the self (which constitutes the essential elements of the "proto-self"). At the most basic level this dimension is necessary for basic biological functions (e.g. survival and reproduction) and is associated with what I referred to as our basic core values. Other aspects of embodiment include our physical appearance and our health. We also experience ourselves as embodied and such experiences can be pre-reflective or reflective. The latter is part of another important dimension of self, one that is essential for human selfhood, i.e. reflective self-awareness. Likewise, language is also essential to human selfhood, for it not only enables us to represent ourselves symbolically (e.g. through the use of first-person pronouns), it confers on us a conceptual understanding of ourselves as beings that are embodied, temporally extended and with a biographical history. The integration of diachronic self-awareness with executive control yields a diachronic agent who is able to reflect on their past and present, imagine future contingencies, and act accordingly. Thus, we can list all of the relevant dimensions of mature human selfhood as follows.

⁵⁷⁵ Surr, C. A. (2006) Preservation of self in people with dementia living in residential care: A socio-biographical approach, *Social Science and Medicine*, Vol. 62(7); Pp: 1720-30

⁵⁷⁶ Holm, A. K., Lepp, M. and Ringsberg, K. C. (2005) Dementia: involving patients in storytelling--a caring intervention. A pilot study, *Journal of Clinical Nursing*, Vol. 14(2); Pp: 256-63

⁵⁷⁷ McKeown, J. Clarke, A. Ingleton, C. Ryan, T. and Repper, J. (2010) The use of life story work with people with dementia to enhance person-centred care, *International Journal of Older People Nursing*, Vol. 5(2); Pp: 148-58

⁵⁷⁸ Grondahl, V. A., Persenius, M., Baath, C. and Helgesen, A. K. (2017) The use of life stories and its influence on persons with dementia, their relatives and staff – a systematic mixed studies review, *BMC Nursing*, Vol. 16(28); Pp: 1-11

⁵⁷⁹ Cooney, A. and O'Shea, E. (2018) The impact of life story work on person-centred care for people with dementia living in long-stay care settings in Ireland. *Dementia*, Article first published online: February 7, 2018 <https://doi.org/10.1177/1471301218756123> (last accessed 19/05/2019)

1. The interpersonal dimension
2. The broader social dimension
3. The narrative dimension
4. The embodied dimension
5. The agential dimension

It is important to understand that these dimensions do not exist in isolation from one another and the extent to which one dimension can manifest independently from another may be limited. The sociobiographical self is a multidimensional construct that emerges from the integration of those dimensions, which are likely to interact with each other in dynamic and bidirectional ways. For example, our interpersonal relationships and broader social embeddedness influence the narratives that we construct. Conversely, our narratives influence the way in which we interact with others, how we navigate the social world, and how we make sense of those experiences, thus also shaping our social context and its meaning. Our core values motivate many of our decisions and actions at a primal level and therefore also influence our narratives and the way in which we interact with others and how we interpret and evaluate those interactions. As we develop and continue to navigate the world, some of our values and goals may change and therefore, the basic parameters within which we construct our narratives and our lives, remain fluid and dynamic. However, what seems to be necessary for a functional and meaningful life is a relatively stable and enduring self, and in this regard, it would appear that the narrative dimension is essential. I will have more to say about this in the following chapter, but I for now want to highlight the importance of the interpersonal and social dimensions by discussing the significance of socialisation during adolescence and emerging adulthood.

Tensions During Infancy and Early Childhood

As discussed in Chapter 2, by around the ages of three to four a young child will have developed certain rudimentary cognitive capacities that underpin minimal human selfhood. It is at this stage of development that they are poised to navigate further into the social world in which they will become increasingly embedded. Much of their social lives will still revolve around their immediate family, but they will also find their place within increasingly broader and complex social contexts (e.g. extended family, peer, professional and community networks). The social context will have a significant influence on their selfhood as they continue to develop throughout adolescence and into emerging adulthood.

The combination of nascent diachronic agency and social embeddedness means that certain kinds of tensions inevitably arise due to conflicts between personal beliefs, desires, goals and environmental/social contingencies, which a developing child has yet to confront. Of course, tensions already existed during early infancy but those tensions are of a different kind. As discussed above, an infant's goals are primarily associated with maternal care, survival and social interaction. Such goals are implicit and manifest as behavioural and affective tendencies that orientate them towards food, comfort, safety and appropriate stimulation (e.g. preference for face-like objects, IDS/"motherese", and interpersonal/emotional engagement). This is why infants are naturally inclined to interact with their mother/caregiver in ways that nurture certain developmental outcomes, particularly social cognitive outcomes, which are influenced by the quality and quantity of interactions between an infant and their caregiver/mother. In this context, an infant's goal is to engage with their mother/caregivers, gain their attention, and elicit appropriate emotional and linguistic responses. Tensions can arise from such situations and how such tensions are resolved will depend on how infant and mother/caregivers respond to each other, which will in turn shape developmental outcomes. Recall the example of the "still-face paradigm", when a mother/caregiver shows a lack of facial engagement, an infant will become sullen, withdrawn, orientate their body away and become less likely to engage in future.⁵⁸⁰ Thus, when tensions are not resolved appropriately (e.g. a lack of appropriate engagement), a conflict between an infant's goal and their immediate social environment arises and this can yield certain problematic social, behavioural and emotional outcomes.^{581 582}

Tensions also arise during later stages of infancy or early childhood, whereby a young child's goal of achieving solicitude, warmth, security as well as autonomy and self-esteem, may come into conflict with their immediate social environment (e.g. the way in which their parent/caregiver responds). As discussed above, this can have a significant effect on their sense of security, sense of autonomy, capacity for self-regulation, and more generally, capacity for socialisation.⁵⁸³ Some of these tensions have a moral/normative dimension given that a young child will begin to develop a conscious sense of certain ideals or norms that they wish to uphold (e.g. autonomy, independence, pride, and good

⁵⁸⁰ Tronick, E., Als, H., Adamson, L., Wise, S. and Brazelton, T. B. (1978) The Infant's response to entrapment between contradictory messages in face-to-face interaction, *Journal of the American Academy of Child and Adolescent Psychiatry*, Vol. 17(1); Pp: 1-13

⁵⁸¹ Moore, G. A., Cohn, J. F. and Campbell, S. B. (2001) Infant affective responses to mother's still face at 6 months differentially predict externalizing and internalizing behaviors at 18 months, *Developmental Psychology*, Vol. 37(5); Pp: 706-14

⁵⁸² Yato, Y., Kawai, M., Negayama, K., Sogon, S., Tomiwa, K. and Yamamoto, H. (2008) Infant responses to maternal still-face at 4 and 9 months, *Infant Behavior and Development*, Vol. 31(4); Pp: 570-7

⁵⁸³ Laible, D., Thompson, R. A. and Froimson, J. (2015) Early Socialization; The Influence of Close Relationships. In Grusec, J. E and Hastings, P. D (Eds) *Handbook of Socialization: Theory and Research (2nd Edition)*. The Guilford Press: New York; Pg. 35-59

behaviour). Those norms also extend beyond the immediate social/familial context where they are part of broader social norms (e.g. norms of sociability, social etiquette and morality). It is thus perhaps during the latter stages of infancy or early childhood that we see the first expressions of reflective self-awareness and self-regulation (i.e. diachronic agency) and their application in familial/social contexts towards resolving tensions and conflict.

This marks a crucial distinction between the way in which neonates (and young infants), compared with young children, represent their goals and respond to environmental/social contingencies. For example, a neonate's predisposition to orientate towards face-like objects is an unconscious/pre-reflective and automatic response. Similarly, a young infant's response to parent/caregiver "still-face" expressions is also thought to be unconscious/pre-reflective and automatic. Thus, neonates and young infants represent their goals implicitly as behavioural dispositions. In contrast, during the latter stages of infancy (or early childhood), a young child develops a rudimentary capacity for reflective self-awareness, language and metarepresentation. Not only does this enable them to represent themselves, their goals and their environment, in a conscious and explicit manner, it also enables them to form conceptualisations of themselves, their goals and their environment. Combined with a nascent capacity for diachronic agency, a young child will begin to respond to their environment in a conscious, reflective and meaningful way. As I discussed in Chapter 2, an important example is moral development. By the ages of three to four children have a basic conceptual awareness of certain norms of morality and social etiquette and are able to form conceptual moral judgments. They also demonstrate a basic ability to conform their behaviour to those norms of morality and social etiquette (hence I described them as nascent diachronic agents capable of basic normative self-government). By the age of four they are able to articulate narratives that describe their evaluations and responses to morally relevant situations.⁵⁸⁴ The ability to reflect on their experiences in this conceptual and narrative manner is what enables them to construct a self-concept and an autobiographical sense of self. Thus, we can also think of the minimal human self in early childhood development as a nascent sociobiographical self.

Furthermore, a child at this stage of development, in virtue of their nascent capacity for diachronic agency, can begin to consciously and conceptually navigate the social terrain that lies ahead and thereby actively influence the construction and conceptualisation of their sociobiographical selfhood. Such a process involves dynamic bidirectional interactions between the child acting as a nascent diachronic agent, the influence of their social environment, and natural biological processes of

⁵⁸⁴ Turiel, E. (2015) Moral Development, In Lerner, R.M. (Ed) *Handbook of Child Psychology and Developmental Science (7th edition), Volume 1: Theory and Method*. John Wiley & Sons: New Jersey; Pg. 510

development (particularly the maturation of neural and cognitive function). It is at this stage of development that both constructivist and social constructionist mechanisms begin to contribute in a more substantive and instructive way towards the construction of sociobiographical selfhood. While such a process remains broadly consistent with the neuroconstructivist framework I discussed in the previous section, an interactionist framework that focuses on the relationship between culture and behaviour is more appropriate for describing how a mature sociobiographical self is constructed and maintained over the course of adulthood (I develop and propose such a framework in the following chapter).

So far, I have only mentioned the tensions that arise due to conflicts between personal goals and social/environmental contingencies. The emergence of a temporally extended self and a conceptual sense of self-awareness also creates the possibility of tensions arising from internally conflicting goals, values and ideals within an individual. For example, there may be short term goals that are inconsistent with longer term goals or an individual may make decisions that are inconsistent with the values and ideals they identify with. Some of these matters may be relatively trivial and transient (e.g. the banalities of practical daily life) whereas some may be more significant and have a profound and lasting impact (e.g. important decisions about family, relationships, career and one's character). At a more fundamental level, these tensions and conflicts may also be connected to an existential or spiritual dimension. Individuals, to varying extents, have a fundamental desire to make sense of their experiences, to cope with uncertainty about the future, to find meaning or purpose in their life, and to develop the kind of virtue or character they may envisage for themselves. Such tensions and conflicts, and the need for their resolution, become an inevitable part of an individual's life. It is in virtue of the capacities associated with minimal human selfhood (or nascent sociobiographical selfhood) that those tensions can be identified (during moments of conscious self-reflection) and potentially resolved (to the extent they can be resolved) through an individual's emerging capacity for reflective self-awareness, diachronic agency and normative self-government.

Socialisation in Childhood and Adolescence

Young children (two to six years of age) are at a developmental stage in which they can begin to confront such challenges. As they become further embedded in a social world that imposes a variety of normative constraints on them, those challenges become more pervasive and have more of a significant impact on their lives. Generally speaking, such constraints mean that they will need to become socialised, i.e. acquire the necessary skills to successfully navigate the social terrain as an

adult and thus become a functional member of their society.⁵⁸⁵ In the West, a young child will take his/her initial social steps typically in the context of early-childhood education/care institutions. That is where they will first adopt particular social roles and enter into non-familial social relationships. It is during this stage of development that children begin to express their agential capacities more extensively to navigate the social terrain they are confronted with. Of course, they are also helped by those around them, i.e. teachers/carers who play a formal role in the context of care and educational institutions, and parents/caregivers who continue to play their role in private familial contexts. Thus, while biological processes continue to play an influential role in childhood development (e.g. cortical development, musculoskeletal development and puberty), it is during this stage of development that psychosocial factors (i.e. agency and social environment) become influential in subsequent development. Such a view is reflected in much of the theorising and psychological research on socialisation.⁵⁸⁶

...this is when children are seen as most malleable in response to environmental influences, when innate predispositions are manifested, or when, through biopsychosocial processes, trajectories toward different developmental endpoints are firmly established. (Smetana et al, 2015; Pg. 60)

As children continue to develop during adolescence (from the age of twelve to eighteen) they are bombarded with a greater degree and variety of social influences and also more inclined to spend time with peers (which is also partly due to puberty related sexual interest in others).⁵⁸⁷ Thus, adolescence is characterised by more interpersonal and peer-group relationships being formed, while at the same time parenting increasingly occurs at a distance. Smetana et al (2015) cite a number of studies which demonstrate a decrease in the amount of time adolescents spend with their family members compared with their peers, a decline in the quality of relationships between adolescents and their parents/caregivers and increases in conflict between adolescents and their parents/caregivers. Sibling conflict is also prevalent during early adolescence and primarily based on issues surrounding fairness, equality, personal space as well as sibling de-identification (i.e. wanting

⁵⁸⁵ Though I have referred to socialisation in the context of development of minimal human selfhood, it is in the context of adolescent development that the notion of socialisation is properly understood.

⁵⁸⁶ Smetana, J. G., Robinson, J. and Rote, W. M. (2015) Socialization in Adolescence. In Grusec, J. E and Hastings, P. D (Eds) *Handbook of Socialization: Theory and Research (2nd Edition)*. The Guilford Press: New York; Pp: 60-84

⁵⁸⁷ Doremus-Fitzwater, T. L., Varlinskaya, E. I. and Spear, L. P. (2010) Motivational systems in adolescence: Possible implications for age differences in substance abuse and other risk-taking behaviors, *Brain and Cognition*, Vol. 72(1); Pp: 114–12

to distinguish themselves from siblings).⁵⁸⁸ Such normative changes in the quality of family relationships during this period are thought to reflect an adolescent's desire to express greater individuality and autonomy. However, in later adolescence and emerging adulthood, this decline stabilises (particularly between adolescents and their mothers) and reflects an orientation towards strengthening family ties.^{589 590}

Social activities during childhood typically involve close supervision of parents/caregivers in close proximity to home. However, adolescents are more independent and such activities more often occur at greater distance from their homes outside the watchful eye of parents/caregivers. This also creates conflict due to parents/caregivers wanting to exert control over their adolescent children who are increasingly disposed to evaluate the legitimacy of parental control, particularly with regard to matters that the adolescent considers as private or personal. Again, this is thought to satisfy an adolescent's desire to express their individuality and autonomy.^{591 592} Adolescents will therefore develop friendships and other social relationships outside of the familial context which will become increasingly influential. They will form and be part of cliques based on same age, same sex, socioeconomic status and various shared activities. There are also hierarchies that exist within and between cliques and they will be able to experiment with different roles or identities and thereby gain a sense of their place in those hierarchies. Such roles and social relationships help to shape an adolescent's self-concept and sense of identity.

Having a positive sense of racial/ethnic identity and adhering to the values and practices of one's culture is a positive indicator of socialisation.⁵⁹³ This is particularly important for those belonging to an ethnic minority and it is typically during adolescence that parents who belong to an ethnic minority play an important role in transmission of cultural practices and values to their children, as well as preparing them for the social challenges that lie ahead (e.g. coping with discrimination).⁵⁹⁴ Another

⁵⁸⁸ McHale, S. M., Updegraff, K. A. and Whiteman, S. D. (2012) Sibling relationships and influences in childhood and adolescence, *Journal of Marriage and Family*, Vol. 74(5); Pp: 913–930

⁵⁸⁹ Smetana, J. G. (2011) *Adolescents, families, and social development: How teens construct their worlds*. West Sussex, UK: Wiley-Blackwell.

⁵⁹⁰ Smetana, J. G., Robinson, J. and Rote, W. M. (2015) Socialization in Adolescence. In Grusec, J. E and Hastings, P. D. (Eds) *Handbook of Socialization: Theory and Research (2nd Edition)*. The Guilford Press: New York; Pg. 63

⁵⁹¹ Smetana, J. G. and Daddis, C. (2002) Domain-specific antecedents of psychological control and parental monitoring: The role of parenting beliefs and practices, *Child Development*, Vol. 73(2); Pp: 563-80

⁵⁹² Smetana, J. G., Robinson, J. and Rote, W. M. (2015) Socialization in Adolescence. In Grusec, J. E and Hastings, P. D (Eds) *Handbook of Socialization: Theory and Research (2nd Edition)*. The Guilford Press: New York; Pg.71

⁵⁹³ Hughes, D., Rodriguez, J., Smith, E. P., Johnson, D. J., Stevenson, H. C. and Spicer, P. (2006) Parents' ethnic-racial socialization practices: A review of research and directions for future study, *Developmental Psychology*, Vol. 42(5); Pp: 747–70

⁵⁹⁴ Smetana, J. G., Robinson, J. and Rote, W. M. (2015) Socialization in Adolescence. In Grusec, J. E and Hastings, P. D (Eds) *Handbook of Socialization: Theory and Research (2nd Edition)*. The Guilford Press: New York; Pg. 72

positive indicator is community engagement and the extent to which adolescents take an interest in social and political issues and current events.^{595 596} Peer influence can also have positive outcomes, such as encouraging positive behaviour, empathy and helping adolescents to deal with parental authority while also developing acceptable levels of autonomy.⁵⁹⁷

Adolescence is also associated with an increase in risky and experimental behaviours (particularly within peer contexts), such as experimentation with alcohol, drugs, cigarettes, sexual activity and delinquency.^{598 599} Such behaviours typically occur within peer contexts and are thought to be influenced by two complementary processes, i.e. peer selection and peer socialisation. Peer selection refers to the fact that adolescents tend to befriend those who are similar to themselves, whereas peer socialisation refers to the increase in similarity of individuals in peer groups over time. Thus, adolescents with an inclination for risk taking behaviour will tend to seek each other out and subsequent peer socialisation helps to facilitate such behaviour.⁶⁰⁰

From a neurodevelopmental perspective, adolescent risky behaviour in peer context is associated with maturational changes in brain structure and function during puberty, i.e. dopaminergic function associated with reward/incentive processing, increases in oxytocin receptor density in subcortical and limbic structures, and differential development between limbic system and prefrontal cortex.^{601 602 603} Adolescence is a period in which there is a heightened sensitivity to reward, novel stimuli, excitement and risk, all of which are linked to a phylogenetically ancient neural circuitry that underpins survival and adaptive functions (such as food seeking behaviour, sexual behaviour and social

⁵⁹⁵ Sherrod, L. R., Torney-Purta, J. and Flanagan, C. A. (2010) *Handbook of research on civic engagement in youth*. New York: Wiley

⁵⁹⁶ Smetana, J. G., Robinson, J. and Rote, W. M. (2015) Socialization in Adolescence. In Grusec, J. E and Hastings, P. D (Eds) *Handbook of Socialization: Theory and Research (2nd Edition)*. The Guilford Press: New York; Pg. 65

⁵⁹⁷ Daddis, C. (2008) Influence of close friends on the boundaries of adolescent personal authority, *Journal of Research on Adolescence*, Vol. 18(1); Pp: 75–98

⁵⁹⁸ Steinberg, L. (2008) *A social neuroscience perspective on adolescent risk-taking*, *Developmental Review*, Vol. 28(1); Pp: 78–106

⁵⁹⁹ Albert, D., Chein, J. and Steinberg, L. (2013) The teenage brain: Peer influences on adolescent decision-making, *Current Directions in Psychological Science*, Vol. 22(2); Pp: 114–120

⁶⁰⁰ Dishion, T. J. and Owen, L. D. (2002) A longitudinal analysis of friendships and substance use: Bidirectional influence from adolescence to adulthood, *Developmental Psychology*, Vol. 38(4); Pp: 480–491

⁶⁰¹ Spear, L. P. (2009) *The behavioral neuroscience of adolescence*. New York, NY: W. W. Norton

⁶⁰² Steinberg, L. (2008) *A Social Neuroscience Perspective on Adolescent Risk-Taking*, *Developmental Review*, Vol. 28(1); Pp: 78-106

⁶⁰³ Casey, B. J, Getz, S. and Galvan, A. (2008) The adolescent brain, *Developmental Neuropsychology*, Vol. 28(11); Pp: 62–77

⁶⁰⁴ Galvan, A., Hare, T. A., Parra, C. E., Penn, J., Voss, H., Glover, G. and Casey, B. J. (2006) Earlier development of the accumbens relative to orbitofrontal cortex might underlie risk-taking behavior in adolescents, *The Journal of Neuroscience*, Vol. 26(25); Pp: 6885–92

stimuli).⁶⁰⁵ ⁶⁰⁶ Albert et al (2013) have proposed a framework in which they claim adolescent hypersensitivity towards social stimuli produces a heightened motivational response when exposed to positively valenced peer stimuli in decision-making scenarios. They propose that peer contexts “prime” an adolescent’s reward system in a manner that increases the subjective value of immediately available rewards, and given that adolescents are less able to exert inhibitory control in decision making (due to lack of development of the prefrontal cortex), it disposes them towards short-term risky behaviour over long-term safer alternatives.⁶⁰⁷

Despite the distance between adolescents and parents during this stage of development, parents/caregivers continue to play an important role. For example, parental control and monitoring styles can also influence adolescent behaviour and peer selection. There is evidence indicating that “authoritative” parenting, which consists of monitoring, consultation, trust, support and low levels of control, increases an adolescent’s willingness to keep parents informed about their activities. In contrast, “authoritarian” parenting, which consists of higher levels of control, coercion, domineering attitudes and punitive punishment, increases adolescent secrecy and decreases adolescent disclosure over time.⁶⁰⁸ ⁶⁰⁹ Authoritative parenting also helps to promote positive peer relationships and reduces likelihood of adolescents selecting delinquent peers as friends, whereas authoritarian parenting can make them more likely to select delinquent peers as friends and partake in risky activities.⁶¹⁰

What I have discussed thus far in this section is only a very brief survey of the vast literature on socialisation. However, what I hoped to have demonstrated is that a wide variety of influences contribute to socialisation during early childhood and adolescence, which are closely linked to development of capacities associated with the self (e.g. autonomy, agency, self-concept and sense of personal identity). Those influences come from sources that are internal to the individual adolescent as well as from their external social environment. There are biological factors (such as puberty related

⁶⁰⁵ Doremus-Fitzwater, T. L., Varlinskaya, E. I. and Spear, L. P. (2010) Motivational systems in adolescence: possible implications for age differences in substance abuse and other risk-taking behaviors, *Brain and Cognition*, Vol. 72(1); Pp: 114–123

⁶⁰⁶ Spear, L. P (2013) Adolescent Neurodevelopment, *Journal of Adolescent Health*, Vol. 52(2); Supplement 2; Pp: S7-13

⁶⁰⁷ Albert, D., Chein, J. and Steinberg, L. (2013) The teenage brain: Peer influences on adolescent decision-making, *Current Directions in Psychological Science*, Vol. 22(2); Pp: 114–120

⁶⁰⁸ Darling, N., Cumsille, P., Caldwell, L. L. and Dowdy, B. (2006) Predictors of adolescents’ disclosure to parents and perceived parental knowledge: Between- and within-person differences, *Journal of Youth and Adolescence*, Vol. 35(4); Pp: 667–78

⁶⁰⁹ Smetana, J. G., Villalobos, M., Tasopoulos-Chan, M., Gettman, D. C. and Campione-Barr, N. (2009) Early and middle adolescents’ disclosure to parents about activities in different domains, *Journal of Adolescence*, Vol. 32(3); Pp: 693–713

⁶¹⁰ Keijsers, L., Branje, S., Hawk, S. T., Schwartz, S. J., Frijns, T., Koot, H. M. and Meeus, W. (2012) Forbidden friends as forbidden fruit: Parental supervision of friendships, contact with deviant peers, and adolescent delinquency, *Child Development*, Vol. 83(2); Pp: 651–666

neurological and morphological changes), psychological factors (such as a desire for greater independence/autonomy and peer group relationships), and social factors (such as parental and peer influences both of which are also situated within broader sociocultural/institutional contexts), all of which interact in dynamic bidirectional ways to yield either positive or negative outcomes associated with socialisation. Positive indicators of socialisation are generally associated with adolescents having knowledge and a sense of direction, and positive relationships with peers and parents/caregivers. This empowers them to become more autonomous and independent as they confront the social challenges that lie ahead. Negative indicators of socialisation are generally associated with unresolved conflict between adolescents and parents/caregivers (e.g. negative perceptions of parental authority) and negative peer influence, both of which are linked to risky behaviours for which there is also a biological predisposition. These indicators emerge from the way in which adolescents deal with the challenges they face as they continue to develop within an increasingly broad and complex social environment. Achieving autonomy, esteem, a sense of purpose and a sense of identity are the outcomes of socialisation, which are closely related to the development of a sociobiographical self.

It is during adolescence (particularly in the context of socialisation) that children gain a better awareness of the nature of their social environment and the challenges that it presents. They also begin to exert their agency and autonomy to a greater degree in how they respond to those challenges. Having to confront those challenges not only helps them to continue to develop their capacity for diachronic agency and normative self-government, it also shapes the way in which they come to understand themselves and their relation to the social environment (both other individuals and collectives). Hence it is in virtue of adolescent socialisation that a more complex and enriched conceptual sense of self emerges, one that gives rise to self-concept and a sense of personal identity. In this regard there is a real sense in which both conscious constructive processes (e.g. functions of diachronic agency) and social constructionist processes (e.g. influence of parents, peers, and the broader institutional/sociocultural norms) contribute to the development and expression of such a self, one that is enacted and embedded in the social world and centred on one's self-concept and sense of personal identity. This is what it means to be a sociobiographical self.

How is Self-Concept Constructed?

In the first part of this chapter, I argued that the dichotomy between social constructionism and constructivism cannot account for how capacities associated with the minimal human self develop during early childhood development, and that neuroconstructivism provides a better framework. In the second part of this chapter I focused on the subsequent developmental stage (i.e. adolescent

development) during which minimal human selves develop into sociobiographical selves, in which processes associated with both constructivist and social constructionist frameworks begin to play a more substantive and determinative role. This might suggest that those frameworks are the most appropriate for explaining the emergence of sociobiographical selfhood during adolescence, particularly one's self-concept, which is what those frameworks are primarily concerned with (as discussed in Chapter 1). However, in this section I will argue that the relevant developmental processes are not determinative in a unidirectional sense. Their causal contribution is best understood within an interactionist framework, somewhat like that of neuroconstructivism, but with an emphasis on the role of socially situated diachronic agency playing a causal role in constructive processes. This implies that neither constructivism nor social constructionism, which both typically posit unidirectional causal determinants, can sufficiently account for the way in which sociobiographical selfhood is constructed. However, social constructivism might provide the basis for an appropriate framework, given that it affords some scope for the role of socially situated diachronic agency (though I will reserve this discussion for the following chapter).

As I have already mentioned previously, one might associate minimal human selfhood with having a rudimentary self-concept underpinned by a basic capacity for language and conceptual sense of self-awareness. However, the kind of self-concept that is associated with the sociobiographical self is one that, as discussed above, is significantly influenced by interpersonal interaction and socialisation during adolescence and emerging adulthood (which is the developmental stage that immediately follows adolescence).⁶¹¹ ⁶¹² This might suggest that social constructionist theories such those I discussed in Chapter 1, are the most appropriate for explaining how a more complex and enriched self-concept emerges during this developmental stage. For example, recall from Chapter 1, Gergen's theory, which claims that self-concept emerges from "relational processes" associated with discursive practices between individuals. Similarly, according to Mead's theory, self-concept is constituted by the way in which an individual gains a "reflexive sense" of self by becoming "an object to himself" through social interaction and linguistic behaviour.

However, what is problematic for the social constructionist, in this developmental context, is the descriptive and evaluative aspect of self-concept, which requires an individual to consciously reflect on their lives, make subjective evaluations and interpretations, and also make re-evaluations and reinterpretations of themselves where necessary. It is unclear how social interaction and the use of

⁶¹¹ Arnett, J. J. (2000) Emerging adulthood: A theory of development from the late teens through the twenties, *American Psychologist*, Vol. 55(5); Pp: 469-480

⁶¹² Arnett, J. J., Zukauskienė, R. and Uchimura, K. (2014) The new life stage of emerging adulthood at ages 18-29 years: implications for mental health, *Lancet Psychiatry*, Vol. 1(7); Pp: 569-576

language between interlocutors alone, without the individual playing a role as an agent in the constructive process, can confer the kind of complex and enriched self-concept that develops during adolescence and emerging adulthood (and persists throughout adult life). Postmodernist/poststructuralist thinkers such as Foucault might argue that institutionalised power can be constituted through self-concepts and personal identities (essentially due to passive enculturation), in which case the exercise of individual agency is no more than the exercise of internalised institutional power associated with oppressive self-discipline. However, as I discussed in Chapter 1, resistance to such oppression is key motivation and goal of both the postmodernist and poststructuralist movements, which implies the possibility of independent agency on the part of the individual. This is why feminist philosopher Sandra Bartky states that “if individuals were wholly constituted by the power/knowledge regime Foucault describes, it would make no sense to speak of resistance to discipline at all”.⁶¹³ Therefore, unless a causal role is attributed to individuals as independent agents, social constructionism can only offer an incomplete aetiology of self-concept.

Self-concept can be understood as a form of conceptual self-awareness, but this is not something that is achieved merely through processes of momentary reflection or introspection of particular states of affairs pertaining to ourselves (i.e. autobiographical knowledge). Rather, it is achieved through our conscious attempts, as diachronic agents, to make sense of multiple interacting factors that can profoundly shape our mental states, our experiences, our lives and our place in the world. Our self-concept thus takes on a more elaborate and complex form than that which I have described thus far (i.e. as “conceptual self-awareness”) and becomes part of our sense of personal identity. Therefore, the process of constructing a self-concept or a sense of personal identity is more accurately understood in a hermeneutical and constructivist sense that is associated with what psychologists and psychotherapists describe as “narrative meaning making”.^{614 615 616 617} This implies that individuals play a central role, as agents, in the construction of their self-concept and sense of personal identity. They

⁶¹³ Bartky, S. L (1990) *Femininity and Domination: Studies in the Phenomenology of Oppression*. Routledge: New York and London; Pg. 150

⁶¹⁴ Singer, J. A. (2004) Narrative identity and meaning-making across the adult lifespan: An introduction, *Journal of Personality*, Vol. 72(3), 437–460.

⁶¹⁵ Fivush, R., Booker, J. A. and Graci, M. E. (2017) Ongoing Narrative Meaning-Making Within Events and Across the Life Span, *Imagination, Cognition and Personality*, Vol. 37(2); Pp: 127-52

⁶¹⁶ White, M. and Epston, D. (1990) *Narrative means to therapeutic ends*. New York: W. W. Norton

⁶¹⁷ Freedman, J. and Combs, G. (1996) *Narrative Therapy: The social construction of preferred realities*. New York: W. W. Norton.

do this by constructing autobiographical narratives that represent the relevant states of affairs pertaining to themselves, including their own evaluations of those states of affairs.⁶¹⁸

Narrative forms allow for more complex organization and understanding of experienced events through the provision of subjective evaluations of what occurred and the formation of thematic relations among events separated in time and space but linked through personal meaning making, such as relationships, careers, and so on. (Fivush and Haden, 2003; Pg. viii)

On this view, what is necessary for a self-concept and sense of personal identity is the capacity for an individual, as a diachronic agent, to construct the relevant autobiographical narratives.⁶¹⁹ Hence the idea of construction in this context is more accurately understood from a social constructivist and interactionist perspective, in which both agency and the social environment interact to produce our self-concept and sense of personal identity. This is not to suggest that we need to integrate both constructivist and social constructionist perspectives, as Raskin (forthcoming) has recently advocated.⁶²⁰ Rather, it requires that we take seriously the role that diachronic agency plays in the constructive process, which in turn requires foregoing the parochial adherence to social constructionism and the associated assumption that human development is primarily the result of social determinants acting in unidirectional ways. The same can be said with regard to constructivist theories that posit an essential role for internally pre-specified developmental outcomes where environmental inputs are merely triggers (i.e. radical constructivism, autopoietic constructivism, and to some extent Piagetian constructivism). Clearly, our capacity for diachronic agency plays an important role beyond the mere expression of certain internalised norms. In many cases it enables us to arbitrate over those norms rather than simply subordinating ourselves to them (or passively internalizing them), but at the very least there are important interactions taking place between agent and environment.⁶²¹

⁶¹⁸ Fivush, R. and Haden, C. A. (2003) Introduction: Autobiographical Memory, Narrative and Self. In Fivush, R. and Haden, C. A. (Eds) *Autobiographical Memory and the Construction of a Narrative Self: Developmental and Cultural Perspectives*. Lawrence Erlbaum Associates: NJ; Pp: vii-xiv

⁶¹⁹ This reflects the distinction between social constructionist and constructivist theories of selfhood discussed in Chapter 1.

⁶²⁰ Raskin, J. D. (Forthcoming) Constructivism, Ethics, and Knowing What's Right: A Reply to McNamee, Burr, McWilliams, Osbeck, and Held, *Journal of Constructivist Psychology*, DOI: 10.1080/10720537.2017.1383956 (last accessed 19/05/2019)

⁶²¹ Of course, individual differences reflect the extent to which this is the case. I briefly discuss this in the following chapter.

Conclusion

In this chapter I began by discussing three existing frameworks that can be applied to understanding how minimal human selfhood emerges during early childhood development. I argued that social constructionism overstates the influence of the social context and that constructivism overstates the influence of the individual in the constructive process. I also pointed out that both ideas assume unidirectional determinism in human development. Such a dichotomy offers little scope for a more nuanced understanding of human development that takes into consideration the role of dynamic bidirectional interactions between innate/internal and external/social factors. Therefore, I argued that an interactionist framework, i.e. neuroconstructivism, is the most plausible framework for understanding the development or “construction” (in the metaphorical sense) of minimal human selfhood during early childhood. I discussed some of the empirical evidence for the role of bidirectional interactions between a neonate’s innate capacities and their immediate social environment (i.e. parent/neonate dyad), focusing on the examples of rudimentary facial and language processing. Such capacities are necessary precursors for continuing social interaction between infant and mother/caregiver during early childhood, where such interactions play a crucial role in the development of language, metarepresentation, social cognition, and their neural substrates, as well as socialisation, culminating in the emergence of minimal human selfhood.

The minimal human self constitutes a precursor to the subsequent development of a more complex multidimensional self that emerges in adulthood, which I referred to as the “sociobiographical self”. The second part of this chapter was focused on describing how the minimal human self develops into a sociobiographical self during adolescence. Using the example of adolescent socialisation, I argued that while dynamic interactions between biological, behavioural and social/environmental factors contribute to the development of the sociobiographical self, both agential and social factors begin to play a more determinative role. This is because adolescents find themselves embedded within increasingly complex social environments that extend beyond their immediate family (e.g. schools and the broader community). I also described the developmental trajectory as tending towards resolving a certain kind of tension that is associated with an adolescent having a conscious and conceptual understanding of their goals and how certain constraints are placed on them by their social environment. Using the example of moral development and moral conflict, I argued that those tensions are ultimately resolved by reflective, introspective and evaluative activities, where the outcomes are represented and expressed as autobiographical narratives. When the self becomes the subject of evaluation, a more complex and enriched hermeneutical sense of self-awareness emerges, one that ultimately underpins our self-concept and sense of personal identity.

Such an activity can be broadly understood as an expression of an adolescent's nascent capacity for diachronic agency and it is in this sense that the development of the sociobiographical self can be understood as a literal construction. Hence, I argued that an interactionist and social constructivist framework that emphasises the role of socially situated diachronic agency, was more appropriate than either social constructionism or constructivism. In the following chapter I elaborate on the idea that our self-concept and sense of personal identity are constituted by our autobiographical narratives and I describe the structure of those autobiographical narratives in more detail. I also explain the role of diachronic agency in this process and how a relatively stable, unified and hermeneutical sense of personal identity is constructed during adolescence and emerging adulthood. This forms the basis of an integrative theoretical framework I propose, which I refer to as "narrative constructivism".

Chapter 4 - Narrative Constructivism

Introduction

In the previous chapter I described how the minimal human self develops, during adolescence and emerging adulthood, into the kind of complex multidimensional self that mature human beings possess, which I referred to as the “sociobiographical self”. It is the kind of self that the notions of self-concept, sense of personal identity and diachronic agency are associated with. In this chapter, I want to elaborate on these notions further and explain the role that they play in our understanding of what constitutes human selfhood. This will form the basis of the theoretical framework that I wish to develop and propose in the second part of this chapter. It is a framework that captures and integrates what we currently understand about the neurocognitive underpinnings of human selfhood, the developmental, constructed, and socially situated nature of human selfhood, the centrality of biography, narrative and agency, and the practical significance of unified diachronic selfhood.

In the first part of this chapter, I elaborate on the previous chapter’s discussion about how a minimal human self develops into a sociobiographical self. Minimal human selfhood is associated with a nascent capacity for reflective self-awareness, temporally extended self and language, whereas sociobiographical selfhood is associated with more complex self-concepts and personal/social identities that take the form of autobiographical narratives. Hence, I refer to the developmental process as a transition from reflexivity to narrativity. I also discuss the relationship between our sense of personal identity and our capacity for diachronic agency and describe how they both interact. Indeed, much has been written about how our sense of personal identity shapes the way in which we express our diachronic agency, but I want to focus primarily on the role that diachronic agency plays in the construction of the autobiographical narratives that constitute our sense of personal identity. Thus, I describe how our sense of personal identity derives from instances of reflection and introspection on particular objective and subjective states of affairs pertaining to oneself (i.e. autobiographical knowledge) as well as our conscious attempts to make sense of the multiple interacting factors that shape our experiences, our mental states, and our place in the social world. This is achieved through the construction of autobiographical narratives that represent the relevant states of affairs pertaining to us, including our own evaluations of those states of affairs. I use the phrase “narrative agency” to describe this capacity to construct autobiographical narratives, and I use the phrase “narrative identity” to describe our sense of personal identity. On this view, our sense of personal identity (understood as narrative identity) emerges from hermeneutical and constructivist processes that are closely associated with what psychologists and psychotherapists refer to as

“narrative meaning-making”. The minimal human self can be thought of as a rudimentary narrative agent, one that is socially situated and poised to take on the responsibility of constructing autobiographical narratives that constitute our sense of personal identity (or narrative identity).

The idea that our sense of personal identity is constructed from and constituted by autobiographical narratives is found in a number of theories that come from a variety of philosophical traditions and I discuss some of those theories in the second part of this chapter. While they are generally described as “narrative theories of self”, many of them focus on very different aspects of selfhood. For example, one influential theory in analytic philosophy describes the self as a fictional protagonist of an autobiography, focusing primarily on the metaphysical implications of such an idea. There are also numerous narrative theories of self from both continental and literary philosophy that view the self as essentially hermeneutical in nature and focus on the relationship between meaning, values and how we live our lives as diachronic agents. There is one particularly influential narrative theory of self that also offers an account of the persistence of personal identity by describing how diachronic unity of selfhood is achieved through the construction of autobiographical narratives. This discussion serves as a prelude to the third and final section of this chapter, where I propose a theoretical framework that integrates those narrative theories of self with the other theories of self and self-related phenomena discussed in previous chapters. The framework, which I call “narrative constructivism”, helps us to understand the nature of our sociobiographical selfhood, how it is constructed from minimal human selfhood, how it develops throughout an individual’s lifespan, and how it declines in older age (which will be the subject of the following concluding chapter of my thesis). It emphasises the dynamic/bidirectional relationship that exists between diachronic agency, the autobiographical narratives that constitute our sense of personal identity, and the influence of the social environment.

From Reflexivity to Narrativity

Self-Concept and Practical Identity

As discussed in Chapter 2, language plays a crucial role in the development of metarepresentational capacities necessary for higher level or conceptual forms of mental representation. The use of the first person pronoun “I” emerges during infancy (at around the age of two and a half) which coincides with other capacities such as mirror self-recognition, autobiographical memory and episodic-like recall.⁶²²

⁶²² Lewis, M. and Ramsay, D. (2004) Development of Self-Recognition, Personal Pronoun Use, and Pretend Play During the 2nd Year, *Child Development*, Vol. 75(6); Pp: 1821 – 1831

⁶²³ ⁶²⁴ This in turn enables infants to form a minimal self-concept.⁶²⁵ ⁶²⁶ ⁶²⁷ ⁶²⁸ ⁶²⁹ The emergence of the capacity for mental time travel (MTT) is typically more protracted and takes place anywhere between the ages of three to five.⁶³⁰ ⁶³¹ MTT confers on a child an embodied and affectively charged sense of diachronic self, which can then be represented linguistically (through the use of first-person pronouns) to confer a reflective, diachronic and conceptual sense of self, i.e. a self-concept. It is also at this stage of development that a child can begin to articulate basic narratives that describe their experiences, evaluations, and roles in diachronic contexts (e.g. concerning morally relevant states of affairs).⁶³² This is what it means to be a minimal human self.

As discussed in the previous chapter, a child will become further embedded within increasingly complex social environments during adolescence and emerging adulthood, where their development is significantly shaped by socialisation. As a result, the narratives that represent their experiences take on a more complex nature, encompassing more autobiographical information (in both a descriptive and evaluative sense), giving rise to a more enriched and socially situated self-concept, which forms the basis for a hermeneutical sense of personal identity. Coinciding with this is the development of neural structures during adolescence and their maturation during emerging adulthood, that eventually confers on a young adult the capacity for self-regulation and ultimately diachronic agency. It is the integration of self-concept or sense of personal identity with diachronic agency that enables one to make decisions and act in meaningful ways (i.e. to exercise normative self-government). This explains why the goals, values, and ideals that we identify with, which characterise who we are, can shape subsequent beliefs, judgments and actions. Consequently, some philosophers view our self-concept or sense of personal identity as having a practical nature in virtue of being an integral part of

⁶²³ Meltzoff, A. N. (1995) What infant memory tells us about infantile amnesia: Long-term recall and deferred imitation, *Journal of Experimental Child Psychology*, Vol. 59; Pp: 497–515

⁶²⁴ Howe, M. L., Courage, M. L. and Edison, S. C. (2003) When autobiographical memory begins, *Developmental Review*, Vol. 23(4); Pp: 471–494

⁶²⁵ Atance, C. M. and Meltzoff A. N. (2005) My future self: Young children’s ability to anticipate and explain future states, *Cognitive Development*, Vol. 20(3); Pp: 341–361

⁶²⁶ Scarf, D., Gross, J. Colombo, M. and Hayne, H. (2013) To have and to hold: episodic memory in 3- and 4-year-old children, *Developmental Psychobiology*, Vol. 55(2); Pp: 125-32

⁶²⁷ Ghetti, S. and Bunge, S. A. (2012) Neural Changes Underlying the Development of Episodic Memory During Middle Childhood, *Developmental Cognitive Neuroscience*, Vol. 2(4); Pp: 381-395

⁶²⁸ Povinelli, D. J., Landau, K. R. and Perilloux, H. K. (1996) Self-recognition in young children using delayed versus live feedback: Evidence of a developmental asynchrony, *Child Development*, Vol. 67(4); Pp: 1540-1554

⁶²⁹ Povinelli, D. J. and Simon, B. B. (1998) Young children’s reactions to briefly versus extremely delayed images of the self: Emergence of the autobiographical stance, *Developmental Psychology*, Vol. 34(1); Pp: 188-194

⁶³⁰ Busby, J. and Suddendorf, T. (2005) Recalling yesterday and predicting tomorrow, *Cognitive Development*, Vol. 20(3); Pp: 362-372

⁶³¹ Atance, C. M. (2008) Future Thinking in Young Children, *Current Directions in Psychological Science*, Vol. 17(4); Pp: 295-98

⁶³² Turiel, E. (2015) Moral Development, In Lerner, R.M. (Ed) *Handbook of Child Psychology and Developmental Science (7th edition), Volume 1: Theory and Method*. John Wiley & Sons: New Jersey; Pg.510

diachronic agency. For example, Korsgaard uses the term “practical identity” to describe this practical/normative relationship between one’s sense of personal identity and action.⁶³³

The conception of one’s identity in question here is not a theoretical one, a view about what as a matter of inescapable scientific fact you are. It is better understood as a description under which you value yourself, a description under which you find your life to be worth living and your actions to be worth undertaking. (Korsgaard, 1996; Pg. 101)

The importance of the relationship between identity and behavioural outcomes has been long recognised in traditional psychological theories of volition and cognitive self-regulation. For example, two highly influential theories are Icek Ajzen and Martin Fishbein’s “theory of planned behaviour” and the “expectancy-value theory”.⁶³⁴ ⁶³⁵ The former describes the role of a person’s intentions and beliefs in planned behaviour, such as beliefs about the consequences of action, social/normative expectations, and perceived behavioural control or sense of capability. The latter describes a person’s chosen behaviour as determined by their overall attitude towards a particular course of action. Such attitudes are thought to be proportionate to the most salient or readily accessible beliefs about the degree of expected success of the course of action and the value given to the goals of the action. Those theories were first developed in the 1970s but have recently been integrated into a broader framework known as the “Reasoned Action Approach” (RAA).⁶³⁶ The sense of capability and behavioural control, the perceived norms by which one is judged, and other relevant beliefs/valuations pertaining to oneself in the formation of attitudes and intentions (as described by the RAA), are all important aspects of one’s sense of agency, self-concept and sense of personal identity.

Furthermore, there is also evidence from social cognitive psychology demonstrating that cognitive processes associated with self-regulation and inhibitory/attentional control can override prejudices

⁶³³ Korsgaard, C. M. (1996) *The Sources of Normativity*. Cambridge: Cambridge University Press; Pg. 101

⁶³⁴ Fishbein, M. A. and Ajzen, I. (1975) *Belief, attitude, intention and behavior: an introduction to theory and research*. Reading MA: Addison Wesley

⁶³⁵ Ajzen, I. (1991) The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, Vol. 50(2); Pp: 179–211

⁶³⁶ Fishbein, M. A. and Ajzen, I. (2010) *Predicting and changing behavior: The Reasoned Action Approach*. New York: Taylor & Francis.

and biases associated with automatic, intuitive and emotional responses.^{637 638 639 640 641} This indicates that while many actions and behavioural outcomes might turn out to be non-volitional or non-cognitive (e.g. emotional or intuitive responses) our judgments and actions can often be sensitive to, and influenced by, our personal goals, values and ideals. The prevailing view in empirical psychology is that self-concepts are often structured around particular domains such as race, ethnicity, gender and age, where information relevant to those domains is thought to be processed or recalled more quickly and efficiently.⁶⁴² Self-concepts are also compartmentalized into positive and negative beliefs about oneself, and it is thought that this plays an important role in helping to prevent negative information (about one's *actual* self) impacting on one's desires, goals, and aspirations (in a sense one's "ideal" self).⁶⁴³ Hence such domains and compartments are thought to constitute schemas for action.^{644 645 646}

One might infer from this that stability and consistency of self-concept will give rise to stable and consistent decision-making and behaviour. Conversely, instability and inconsistency of self-concept begets instability and inconsistency of decisions and behaviour. Insofar as one's behaviour is deemed to be inconsistent with one's self-concept or one's sense of identity, such behaviour might be considered "unbecoming", i.e. it does not reflect who one is. This raises the issue of what it takes to maintain consistency and coherence of self over time (i.e. to maintain integrity). An individual can

⁶³⁷ Gabriel, U., Banse, R. and Hug, F. (2007) Predicting private and public helping behaviour by implicit attitudes and the motivation to control prejudiced reactions, *The British Journal of Social Psychology*, Vol. 46(pt2); Pp: 365–382

⁶³⁸ Monteith, M. J. and Mark, A. Y. (2005) Changing one's prejudiced ways: Awareness, affect, and self-regulation, *European Review of Social Psychology*, Vol. 16(1); Pp: 113-154

⁶³⁹ Czopp, A. M., Monteith, M. J. and Mark, A. Y. (2006) Standing up for a change: Reducing bias through interpersonal confrontation, *Journal of Personality and Social Psychology*, Vol. 90(5); Pp: 784-803

⁶⁴⁰ Payne, K. (2005) Conceptualizing control in social cognition: how executive functioning modulates the expression of automatic stereotyping, *Journal of Personality and Social Psychology*, Vol. 89(4); Pp: 488–503

⁶⁴¹ This literature is also reviewed by Fine (2006) in her response to Haidt's "Social Intuitionist Model" of moral judgment. See Fine, C. (2006) Is the Emotional Dog Wagging its Rational Tail, or Chasing it? Reason in Moral Judgment, *Philosophical Explorations*, Vol. 9(1); Pp 83-98

⁶⁴² Oyserman, D., Elmore, K. and Smith, G. (2012) Self, Self-Concept, and Identity. In Leary, M. R. and Tangney, J. P. (Eds) *Handbook of Self and Identity*. The Guilford Press: New York; Pg. 73

⁶⁴³ Showers, C. J., Abramson, L. Y. and Hogan, M. E. (1998) The dynamic self: How the content and structure of the self-concept change with mood, *Journal of Personality and Social Psychology*, Vol. 75(2); Pp: 478-493

⁶⁴⁴ Markus, H., Crane, M., Bernstein, S. and Siladi, M. (1982) Self-schemas and gender, *Journal of Personality and Social Psychology*, Vol. 42(1); Pp: 38-50

⁶⁴⁵ Oyserman, D., Brickman, D. and Rhodes, M. (2007) Racial-ethnic identity in adolescence: Content and consequences for African American and Latino and Latina youth. In A. Fuligni (Ed.), *Contesting stereotypes and creating identities: Social categories, identities and educational participation*. New York: Russell Sage Foundation; Pp: 91-114

⁶⁴⁶ However, Ajzen and Fishbein argue that the empirical evidence supporting the view that global dispositions (e.g. self-esteem, race, ethnicity, gender) explain and predict social behaviour is lacking and thus the RAA is offered as an alternative. See Fishbein, M. A. and Ajzen, I. (2007) Predicting and Changing Behavior: A Reasoned Action Approach, In Ajzen, I., Albarracín, D. and Hornik, R. (Eds) *Prediction and Change of Health Behavior: Applying the Reasoned Action Approach*. Lawrence Erlbaum Associates: Mahwah: NJ; Pg. 3-4

evaluate themselves in light of their beliefs, values, judgments and actions, and then adapt their self-concept, identity and actions accordingly (i.e. their practical identity). While this can be done in either a synchronic or a diachronic sense, it is the latter that we associate with consistency, coherence and unity of self over time. I discuss this in more detail in the following section.

Narrative Identity and Narrative Agency

As discussed in Chapter 2, the first-person pronoun “I” is a form of linguistic self-representation associated with a rudimentary form of conceptual self-awareness that confers on an individual a rudimentary self-concept. The phrase “I am” is a linguistic representation of perhaps the most fundamental or minimal state of reflective self-awareness and autobiographical knowledge that one can have. Subsequent predicates representing additional autobiographical knowledge can be constructed linguistically (e.g. “I am an Australian” or “I am a PhD candidate” or “I know that I know nothing”, etc.) and this is how a rudimentary self-concept can be further elaborated and expanded upon. However, self-concepts are not just limited to momentary representations of autobiographical facts in specific contexts. Self-concepts can also capture the relationship between various past, present and future states of affairs pertaining to an individual and exhibit a degree of stability and unity over time. In other words, self-concepts can be either synchronic or diachronic in nature.

A stable and enduring diachronic self-concept requires an individual to integrate a large amount of autobiographical information into a meaningful whole while performing the relevant deliberations and evaluations. This requires many moments of introspection over time and throughout one’s life in which complex and detailed autobiographical information (autobiographical memory) is processed, evaluated, appropriated and represented in a relatively accurate, stable and coherent manner. This is achieved through the construction of autobiographical narratives, which are judged and felt by the individual themselves to be meaningful, relevant, and appropriately representing who they are. Such autobiographical narratives are thus partly hermeneutical. Some psychologists refer to this as

autobiographical reasoning and regard it as critical for the development of one's sense of personal identity.^{647 648 649 650 651} I will discuss this idea in more detail later in this chapter.

Hence, we can think of diachronic self-concepts as constituting our sense of personal identity. This reflects an important idea discussed in Chapter 1, which is that a person's identity is thought to be situated along a social/personal continuum, which yields a distinction between social identity and personal identity. The former is associated with one's social roles, standing or status within specific social contexts, while the latter is associated with a more stable or essential identity that can exist independently of social contexts. It seems that the synchronic notion of self-concept is more closely related to one's social identity, while the diachronic notion is more closely related to one's sense of personal identity which is more stable and enduring.

Just as our self-concepts are linked to decisions and actions, so too are the autobiographical narratives that constitute our diachronic self-concepts, or more specifically, our sense of personal identity. Kim Atkins uses the phrase "narrative identity" to capture our ability to maintain consistency, coherence and stability of self over time in both a lived/practical sense and an abstract/conceptual sense. It is an adaptation of Korsgaard's conception of "practical identity" discussed above.^{652 653}

When I ask myself who I am and how I should live, I draw upon a self-narrative, an interpretation of my life in which other people are deeply implicated; a life that has a past and a present, and which I project into the future, and in virtue of which I make sense of myself and my world. (Atkins, 2008; Pp: 1-2)

Thus, our capacity to integrate and unify relevant information through autobiographical narratives, not only enables us to construct a stable and enduring sense of personal identity, it can also be applied towards living a relatively coherent, consistent and meaningful practical life. Hence, we enact our narrative identities in order to maintain integrity of self over time in the practical sense. MacKenzie

⁶⁴⁷ McClean, K. C. and Fournier, M. A. (2007) The content and processes of autobiographical reasoning in narrative identity, *Journal of Research in Personality*, Vol. 42(3); Pp: 527-45

⁶⁴⁸ Habermas, T. and Bluck, S. (2000) Getting a life: The emergence of the life story in adolescence, *Psychological Bulletin*, Vol. 126, 748–769

⁶⁴⁹ Habermas, T. (2011) Autobiographical reasoning: arguing and narrating from a biographical perspective, *New Directions for Child and Adolescent Development*, Vol. 2011 (131); Pp: 1-17

⁶⁵⁰ Habermas, T. and Kober, C. (2015) Autobiographical reasoning in life narratives buffers the effect of biographical disruptions on the sense of self-continuity, *Memory*, Vol. 23(5); Pp: 664-74

⁶⁵¹ D'Argembeau, A., Cassol, H., Phillips, C., Baiteau, E., Salmon, E. and Van der Linden, M. (2014) Brains creating stories of selves: the neural basis of autobiographical reasoning, *Social Cognitive and Affective Neuroscience*, Vol. 9(5); Pp: 646-52

⁶⁵² Atkins, K. (2004) Narrative identity, practical identity and ethical subjectivity, *Continental Philosophy Review*, Vol. 37(3); Pp: 341-366

⁶⁵³ Atkins, K. (2008) *Narrative Identity and Moral Identity: A Practical Perspective*. Routledge: NY

and Atkins (2008) refer to this as our capacity for “narrative agency” and describe a narrative agent as “one who unifies herself through adopting normative reasons”.⁶⁵⁴ Narrative agents are thus diachronic agents capable of viewing themselves as existing over time (i.e. reflecting on past, present and future) and exercising normative self-government. The notion of narrative agency is typically used in this practical or enacted sense but it can also be used to describe the way in which we organise and make sense of autobiographical information/memory in narrative form.⁶⁵⁵ So just as narrative agency enables us to unify our practical lives through normative self-government, it also enables us to unify our autobiographical lives through the construction of a diachronic and hermeneutical sense of personal identity. This might be thought of as a form of conceptual or mental normative self-government.

An important implication of this broader notion of narrative agency is that it allows us to make sense of the normative requirements associated with the way in which autobiographical narratives are constructed so as to meaningfully, coherently and accurately represent the complex and detailed biographical information necessary for a diachronic and hermeneutical sense of personal identity. For example, narratives adhere broadly to grammatical/linguistic norms associated with discursive story telling.⁶⁵⁶ They tend to be structured temporally and chronologically and aim towards internal consistency and coherence, as well as consistency/coherence between beliefs and actions. They are also often imbued with moral and evaluative content. There are also norms associated with the function of implicit or unconscious cognitive processes (which I discuss in the following section). These structural features of narratives reflect the basic norms by which an individual can have a psychologically intelligible life. It enables them to make sense of their experiences and beliefs, and derive meaning out of the states of affairs that they find themselves in. Psychologists and psychotherapists refer to this as “narrative meaning making”.^{657 658 659 660 661}

⁶⁵⁴ MacKenzie, C. and Atkins, K. (2008) *Practical Identity and Narrative Agency*. Routledge: New York; Pg. 213

⁶⁵⁵ Mackenzie, C. (2014) Embodied agents, narrative selves, *Philosophical Explorations*, Vol. 17(2); Pp: 154-171

⁶⁵⁶ Presumably, an autobiographical narrative can include an imagistic element or be entirely imagistic as opposed to a written autobiography, where each form of expression is constrained by a relevant grammar. For example, see Douglas, J. K. (2018) Do young people keep diaries anymore?: Instagram as life narrative. *TEXT Special Issue*, No. 50; <http://www.textjournal.com.au/speciss/issue50/Douglas.pdf> (last accessed 18/03/19)

⁶⁵⁷ Singer, J. A. (2004) Narrative identity and meaning-making across the adult lifespan: An introduction, *Journal of Personality*, Vol. 72(3), 437–460.

⁶⁵⁸ Fivush, R., Booker, J. A. and Graci, M. E. (2017) Ongoing Narrative Meaning-Making Within Events and Across the Life Span, *Imagination, Cognition and Personality*, Vol. 37(2); Pp: 127-52

⁶⁵⁹ White, M. and Epston, D. (1990) *Narrative means to therapeutic ends*. New York: W. W. Norton

⁶⁶⁰ Freedman, J. and Combs, G. (1996) *Narrative Therapy: The social construction of preferred realities*. New York: W. W. Norton.

⁶⁶¹ Fivush, R. and Haden, C. A. (2003) Introduction: Autobiographical Memory, Narrative and Self. In Fivush, R. and Haden, C. A. (Eds) *Autobiographical Memory and the Construction of a Narrative Self: Developmental and Cultural Perspectives*. Lawrence Erlbaum Associates: NJ; Pp: vii-xiv

Narrative forms allow for more complex organization and understanding of experienced events through the provision of subjective evaluations of what occurred and the formation of thematic relations among events separated in time and space but linked through personal meaning making, such as relationships, careers, and so on. (Fivush and Haden, 2003; Pg. viii)

Singer and Bluck (2001) describe how narratives contain vivid imagery, familiar plot lines, tropes, archetypal characters, as well as broader cultural themes, but they are also typically associated with personal goals, values, ideals and significantly remembered episodes.⁶⁶² This reminds us that there is also a subjective or interpretive dimension to the construction of autobiographical narratives and the extent to which those norms are applicable or operative is also partly determined by the individual. For example, the individual can consciously decide which evaluative norms are relevant and ought to be operative in the construction of their autobiographical narratives. This reflects the highly interpretive and selective way in which individuals generally construct their autobiographical narratives. The individual can decide which facts are relevant and need to be considered in those evaluations. Certain events in life may be regarded as significant enough to fit into an extended narrative or they may be considered trivial and hence only form part of a shorter narrative that has only temporary/transient significance. As a result, narratives with similar content can have vastly different meaning or significance for different individuals. Narratives can also range from relatively brief anecdotes that are only loosely connected, to fully developed and integrated autobiographies. This perhaps reflects the individual differences between narrative identities that might be said to be relatively synchronic compared to narrative identities that are more diachronic.⁶⁶³

What this also implies is that the narratives need not be accurate representations of the objective state of affairs (i.e. facts) pertaining to the individual. Rather it only needs to be deemed as such by the individual for whom the narrative is constructed (or is deemed by the individual to meet an acceptable standard whether epistemic or non-epistemic). There has been much written on the human susceptibility to false or confabulatory memories^{664 665} as well as the possibility of “self-deception”, where narratives can be deliberately constructed so as to form inaccurate or false

⁶⁶² This manner of constructing narratives that capture and integrate autobiographical information/memories is what they refer to as “narrative processing”. See Singer, J. A. and Bluck, S. (2001) New Perspectives on Autobiographical Memory: The Integration of Narrative Processing and Autobiographical Reasoning, *Review of General Psychology*, Vol. 5(2); Pg. 93

⁶⁶³ Galen Strawson uses the term “episodic” to describe individuals whose narrative identities are relatively synchronic. See Strawson, G. (2004) Against Narrativity, *Ratio*, Vol. 17(4); Pp: 428-52

⁶⁶⁴ Gazzaniga, M. S. (1998) *The mind's past*. Berkeley: University of California Press

⁶⁶⁵ Walker, M. J. (2012) Neuroscience, Self-Understanding, and Narrative Truth, *AJOB Neuroscience*, Vol. 3(4); Pp: 63-74

representations of facts pertaining to the individual.⁶⁶⁶ This reminds us that the construction of autobiographical narratives can also serve a purely pragmatic purpose, for example, to enable an individual to function, to make sense or meaning out of their states of affairs, or to enable them to achieve some goal for which self-deception or false representations may be instrumental or necessary. Therefore, while narratives are the means by which an individual understands the relationship between various events or states of affairs pertaining to the world and themselves, what enables an individual to attribute significance/meaning to those states of affairs, and make sense of them, is perhaps something more idiosyncratic.

Therefore, one's narrative identity can be thought of as partly a product of creative processes, rather than simply a product of discovery or the outcome of deterministic developmental processes. This echoes some of the postmodern/poststructuralist ideas about how we acquire knowledge and the basis on which we come to understand the nature of the world. While this also suggests that narrative identity is kind of *fiction* or artefact of such creative/interpretive processes (in the sense of being narratives or stories) this does not necessarily mean that the content of those narratives is typically or entirely *fictitious* (i.e. that they bear no correspondence with facts or reality). Just as there are stories of either fiction or non-fiction, narrative identities can be veridical or non-veridical representations of autobiographical information and thus can have varying degrees of factual accuracy or inaccuracy.⁶⁶⁷ One might assume that verisimilitude constitutes a normative standard for the construction of narrative identities but this is a normative standard or a virtue that many of us may fall short of achieving (or may contravene for various reasons). In fact, identity disorders and delusions of self can be understood objectively as epistemically false or inaccurate narrative identities, though they are still narrative identities, nonetheless.

Fundamentally, narrative identities serve a pragmatic function enabling us to survive, cope and flourish, but narrative identities can also be dysfunctional and pathological. The individual is the one who is primarily responsible for constructing the autobiographical narratives that constitute their self-concepts and sense of personal identity. That is to say, they are the agent of narrative construction and the norms by which those narratives are constructed are partly subjective, reflecting the preferences, biases and idiosyncrasies of the individual as narrative agent. Of course, this does not take place within a social vacuum. External social factors are highly influential in the constructive

⁶⁶⁶ Deweese-Boyd, Ian, "Self-Deception", The Stanford Encyclopedia of Philosophy (Winter 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2016/entries/self-deception/> (accessed 3/06/2017)

⁶⁶⁷ Walker, M. J. (2012) Neuroscience, Self-Understanding, and Narrative Truth, *AJOB Neuroscience*, Vol. 3(4); Pp: 63-74

process. One's narrative identity is therefore socially situated, which is precisely what it means to be a sociobiographical self. I discuss this in more detail in the following section.

Socially Situated Narrative Agency

In Chapters 2 and 3, I described the development of a minimal human self as involving a transition from pre-reflective self-awareness (i.e. the minimal/proto-self) to synchronic reflective self-awareness during early childhood development. In this chapter, I have described the subsequent development, during adolescence and emerging adulthood, of a form of diachronic reflective self-awareness that consists in autobiographical narratives. Adolescents and young adults construct those narratives as a way of integrating and unifying relevant autobiographical information so as to make sense of their experiences. This is how their first-person subjective sense of personal identity emerges. It also helps to guide their actions, which enables them to live the kind of complex practical life that all human beings typically live. In this regard they are responsible for the constructive process that give rise to their sense of personal identity and thus I refer to them as narrative agents. However, I have referred to the idea of "narrative identity" to capture both the represented (i.e. autobiographical) and enacted (i.e. agential) dimensions of their sense of personal identity. In this section I want to focus on how the construction of one's narrative identity takes place within the context of increasingly complex forms of social interaction within a broader sociocultural environment.

There is a long tradition of studies in experimental social psychology that demonstrate how certain social contexts (or context specific cues) can influence behaviour by causing particular self-concepts or identities linked with personal and social roles, to become salient and thus operative as schemas for action. This has led many to posit that situational factors rather than internal character traits or motivations, determine our behaviour. It is an idea that challenges assumptions about our own free will and agency, and forms the basis of the psychological theory known as "situationism".⁶⁶⁸ Famous experiments such as the "Stanford prison experiment",⁶⁶⁹ the Milgram experiments,^{670 671} and the so called "bystander effect"⁶⁷² are often cited in support of such a theory. More recent examples include studies that investigate the behavioural outcomes of what is referred to as ingroup/outgroup priming

⁶⁶⁸ Mischel, W. (1968) *Personality and Assessment*. London: Wiley

⁶⁶⁹ Haney, C., Banks, W. C. and Zimbardo, P. G. (1973) A study of prisoners and guards in a simulated prison, *Naval Research Review*, Vol. 30; Pp: 4-17

⁶⁷⁰ Milgram, S. (1963) Behavioral Study of Obedience, *Journal of Abnormal and Social Psychology*, Vol. 67(4); Pp: 371-8

⁶⁷¹ Milgram, S (1974) *Obedience to Authority: An Experimental View*. Harper Collins

⁶⁷² Darley, J. M. and Latané, B. (1968) Bystander intervention in emergencies: Diffusion of responsibility, *Journal of Personality and Social Psychology*, Vol. 8; Pp: 377-383

where subjects are primed to identify or contrast themselves with a particular self-concept linked to a particular behavioural trait. One example is a study by Spears et al (2004) where subjects were reminded of their identity as psychology students and were then led to believe that psychology students were either neater or less-neat than an outgroup (economics students). Subjects were found to act in ways that fit their “psychology student” identity, e.g. they coloured pictures neatly when neatness was associated with in-group identity and coloured pictures more messily when neatness was associated with the outgroup.^{673 674}

Such experiments suggest that the autobiographical narratives we construct to represent our decisions and actions are in fact shaped by external social influences. This undermines the idea that we construct our narrative identities as narrative agents. It also provides some empirical support for a social constructionist theory of selfhood. However, situationism is not an exhaustive explanation of the aetiology of our decisions and actions. Such experiments might indicate that we are not immune to external social influences, but as discussed above, our practical or narrative identities are also causal factors in our decisions and actions. We can understand this by considering the discussion in the previous chapter about how conflicts between individual goals and social/familial norms give rise to tensions that fuel the process of socialisation during adolescence. This involves the adolescent actively reconciling those tensions (by applying their own subjective interpretations and evaluations) rather than passively internalising external social norms or subordinating themselves to them. Therefore, I argued that socialisation is best understood within an interactionist framework that posits bidirectional rather than unidirectional causal determinants. This also applies during adulthood in the context of enculturation, where the broader cultural environment can come into conflict with our self-concepts and identities. It is through our capacity to actively resolve those conflicts one way or another, that we either resist or conform to cultural norms. This is also why there are individual differences observed within specific social or cultural contexts.

Consider for example, the kinds of decisions and actions associated with drug addiction. In many cases of drug addiction, the goal of seeking reward from taking drugs is often more salient (and thus in a sense more valued) than any other goals that may be associated with a narrative or social identity that is inconsistent with drug taking.⁶⁷⁵ Continued drug taking is thought to diminish one’s capacity for

⁶⁷³ Spears, R., Gordijn, E., Dijksterhuis, A. and Stapel, F. (2004) Reaction in action: Intergroup contrast in automatic behaviour, *Personality and Social Psychology Bulletin*, Vol. 30(5); Pp; 605-16

⁶⁷⁴ This study and other related studies are described by Oyserman (2012). See Oyserman, D. Elmore, K. and Smith, G. (2012) Self, Self-Concept, and Identity. In Leary, M. R. and Tangney, J. P. (Eds) *Handbook of Self and Identity*. The Guilford Press: New York; Pp: 77-78

⁶⁷⁵ Montague, P. R., Hyman, S. E, Cohen, J. D. (2004) Computational roles for dopamine in behavioural control, *Nature*, Vol. 431(7010); Pp: 760–67

inhibitory/attentional control and decontextualization, which makes drug addicts highly prone to situational priming. Thus, motivated seeking of drugs is sometimes thought to be more or less akin to a stimulus-response driven habit.^{676 677 678} However, this is not to suggest that narrative or social identity (with the associated goals of being a responsible parent, being disciplined, health conscious, fiscally and legally responsible, etc.) cannot have a moderating effect on such behaviour.⁶⁷⁹ The situationist might respond by pointing out that in many cases such goals become salient and operative because of specific contextual cues, e.g. suffering negative health outcomes, getting into legal trouble, having to confront concerned family and friends (perhaps in the context of staged “interventions”), etc. However, the ability of a drug addict to moderate their drug taking behaviour and indeed to quit (as some are able to do) is not fully explained by the effect of contextual cues alone. An addict will take time to contemplate, reflect and apply effortful self-regulation in order to moderate their drug use or to successfully quit. This often involves a conscious and deliberate attempt to avoid being exposed to drug taking/seeking cues, e.g. staying away from the wrong crowd or focusing attention on more valued goals such as parenting, career, job, or saving money. A situationist explanation of drug taking behaviour belies the fact that drug addicts are often conflicted by their drug use and that they often attempt to resolve those conflicts through effortful behaviour linked to goals and values that are also part of their narrative or social identities.⁶⁸⁰

Generally speaking, conflicts of identity can be resolved by achieving some form of narrative unity through appropriate action or adapting one’s narrative identity accordingly. Thus, a drug addict can try to cut down or quit, or they can identify with the drug taking behaviour and endorse it as part of their narrative identity (which may often be linked to being part of certain cultures and sub-cultures). Alternatively, the conflict and the struggle to find a resolution might simply become a part of the narrative itself (or an underlying metanarrative). In other words, there is a role for narrative agency in

⁶⁷⁶ Hence arises the popular notion that an addict’s mind has been “hijacked” and that addiction is a “disease”. See Volkow, N. D. and Fowler, J. S. (2000) Addiction, a disease of compulsion and drive: involvement of the orbitofrontal cortex, *Cerebral Cortex*, Vol. 10(3); Pp: 318–25

⁶⁷⁷ Goldstein, R. Z. and Volkow, N. D. (2002) Drug addiction and its underlying neurobiological basis: neuroimaging evidence for the involvement of the frontal cortex, *The American Journal of Psychiatry*, Vol. 159(10); Pp: 1642–52

⁶⁷⁸ Li, C. R. and Sinha, R. (2008) Inhibitory control and emotional stress regulation: Neuroimaging evidence for frontal-limbic dysfunction and psycho-stimulant addiction, *Neuroscience and Biobehavioral Reviews*, Vol. 32(3); Pp: 581-97

⁶⁷⁹ The idea that an addict’s mind has been “hijacked” might suggest that their capacity for inhibitory/attentional control and decontextualization is completely absent, but this is not the case, nor is it necessarily implied by the use of such a term.

⁶⁸⁰ Of course, it is possible that drug taking is perfectly consistent with their narrative or social identity too. Presumably there are drug addicts who are not conflicted by their behaviour and thus actively seek out drugs and deliberately engage in drug taking, perhaps in fulfilment of their narrative identity. So called “functional drug addicts” may fall into this category.

mediating the response to situational cues. So, on the one hand, narrative agency enables an individual to construct a relatively coherent and consistent autobiographical narrative in order to make sense of their experiences and behaviour despite the persistence of conflict and disunity. On the other hand, it enables an individual to act in accordance with certain beliefs, desires, goals, often in spite of certain contexts or situational factors (i.e. to act as a diachronic agent).

This is not to suggest that decisions and behaviour can only be the result of either contextual/situational cues or narrative agency. Rather, they often arise from the way in which situational or contextual cues are mediated by structures and processes within the individual associated with their narrative identity. The interactionist framework that this implies is supported by a large body of psychological research on the effect that social context has on memory, which has a direct effect on our self-concepts and identities (by affecting autobiographical memory). British psychologist Frederic Bartlett was one of the first to discuss and investigate the role of social context in shaping memory. He is most known for his 1932 book entitled *Remembering*, wherein he discusses a number of experiments that demonstrate how subjects used pre-existing schemas to interpret, infer and reconstruct a storyline that they were told and then asked to recall. He discovered that those storylines tended to be imbued with their own social and cultural norms and that this persisted over subsequent re-telling of the storyline.⁶⁸¹ This led Bartlett to conclude that memories are reconstructions governed by schemas which are developed through social interaction/discourse.⁶⁸² This might constitute one of the ways in which our memories and thus our narrative identities are directly influenced by external contextual factors (particularly social/cultural factors). There is now an emerging body of psychological research and literature that explains some of the ways in which interpersonal interaction (within certain groups) influences and shapes the memories of individuals as well as how individuals themselves shape the memory of the collective group (i.e. collective memory).⁶⁸³ ⁶⁸⁴ Furthermore, given that people often retrieve and shape their memories in the company of others, there is also a growing interest in understanding how collaboration can positively

⁶⁸¹ Bartlett, F. C. (1995) *Remembering: A study in experimental and social psychology*. Cambridge, England: Cambridge University Press (Original work published 1932)

⁶⁸² In this regard, Bartlett's constructivist theory of memory is more closely related to Vygotsky's social constructivist theory than Piaget's theory which posits that schemas develop out of sensory-motor interactions with the physical environment. See Barone, D. F., Maddux, J. E. and Snyder, C. R. (1997) *Social Cognitive Psychology: History and Current Domains*, *The Plenum Series in Social/Clinical Psychology*. Plenum Press: New York; Pg. 80

⁶⁸³ Barnier, A. J. and Sutton, J. (2008) From individual to collective memory: Theoretical and empirical perspectives, *Memory*, Vol. 16(3); Pp: 177-182

⁶⁸⁴ Harris, C. B., Paterson, H. M. and Kemp, R. I. (2008) Collaborative recall and collective memory: What happens when we remember together? *Memory*, Vol. 16(3); Pp: 213–230

or negatively affect individual memory. Such research will undoubtedly contribute towards developing interventions to compensate for age-related memory decline.^{685 686 687 688}

In order to understand how context affects memory and how this can in turn shape one's narrative identity, we need to understand how contextual factors interact with the relevant internal cognitive processes. One particularly interesting and influential theory that describes this is the "Self-Memory System" (SMS) proposed by Martin Conway and colleagues. The SMS consists of two main components, the "working self" and the "autobiographical memory knowledge base". The working self is described as a system consisting of a complex hierarchy of goals and sub-goals, as well as conceptual self-structures that represent abstract knowledge derived from autobiographical memory (i.e. self-concepts). According to the SMS, an individual's goals and self-concepts control the encoding of memories, accessibility of long-term memory, and the construction of memories - "the self is conceived as a complex set of active goals and associated self-images, collectively referred to as the working self".⁶⁸⁹ At the heart of the goal structure of the working self is a principle of conservatism that resists goal change because goal change is cognitively/affectively costly (e.g. goal change affects other goals, destabilizes the self and makes one less capable of operating effectively in the world). Hence the working self may act to lower accessibility of memories which challenge or undermine self-concept and goal structure and may even distort memories of certain events.

Conway cites posttraumatic stress disorder (PTSD) and patients with frontal lobe damage as examples of how memory can be manipulated, distorted or created in a manner that protects against goal change and maintains coherence. Furthermore, a study involving the analysis of the content of memories in older adults (70 years and over) from each decade of their life demonstrates the impact of the working self on the accessibility of memories. Each decade of life is thought to have a general psychosocial theme associated with it such as identity themes during adolescence, intimacy/isolation during emerging and young adulthood, and generativity/stagnation in middle age. The study found that the memories whose content was strongly relevant to a particular psychosocial stage were expressed most often in that particular psychosocial stage. This indicates that memories of events that

⁶⁸⁵ Rajaram, S. (2011) Collaboration both hurts and helps memory: A cognitive perspective, *Current Directions in Psychological Science*, Vol. 20(2); Pp: 76-81

⁶⁸⁶ Rajaram, S. and Periera-Pasarin, L. P. (2010) Collaborative Memory: Cognitive Research and Theory, *Perspectives on Psychological Science*, Vol. 5(6); Pp: 649-63

⁶⁸⁷ Blumen, H. M., Rajaran, S. and Henkel, L. (2013) The applied value of collaborative memory research in aging: Behavioral and neural considerations, *Journal of Applied Research in Memory and Cognition*, Vol. 2(2); Pp: 107-17

⁶⁸⁸ Derksen, B. J., Duff, M. C., Weldon, K., Zhang, J., Zamba, K. D., Tranel, D. and Denburg, N. L. (2015) Older adults catch up to younger adults on a learning and memory task that involves collaborative social interaction, *Memory*, Vol. 23(4); Pp: 612--624

⁶⁸⁹ Conway, M. A. (2005) Memory and the Self, *Journal of Memory and Language*, Vol. 53(4); Pp: 594-628

were once of high relevance to the self remain in a state of high accessibility.⁶⁹⁰ Therefore, in the context of the SMS model, we can think of autobiographical memory as maintaining coherence of self-concept. In this regard autobiographical memory is not simply understood as episodic memory, rather, it is episodic memory constructed/adapted to suit current cognitive context.⁶⁹¹ This explains how there can be bidirectional causal influences between autobiographical memory and self-concept.

The relationship between the working self and long-term memory is a reciprocal one in which autobiographical knowledge constrains what the self is, has been, and can be, whereas the working self-modulates access to long-term knowledge. (Conway, 2005; Pg. 594)

Thus, according to the SMS model, the content and processes of autobiographical memory may provide insight into a person's current self-concept. Conversely, self-concept can affect the content of memory (what is recalled semantically or episodically) and how those memories are recalled. Given that our psychosocial context can have a determinative role in our self-concept (e.g. certain goals become more salient depending on social environment and contextual cues) the SMS model also serves to integrate the psychosocial domain with memory and self-concept. Furthermore, if certain contexts or specific contextual cues (that cause certain self-concepts and identities to become more salient) can affect the accessibility of autobiographical memories/information, this may in turn affect the construction and content of autobiographical narratives over time. Hence, it appears that a highly complex dynamic causal interplay exists between social/environmental context, autobiographical memory, self-concept/identity, and goal directed behaviour.

The discussion so far suggests that our narrative identity fits broadly within an interactionist and social constructivist framework. This is something I will elaborate on in the final section of this chapter, but first I want to consider in more detail and depth, the idea that selfhood in human beings is constituted by autobiographical narratives. This is an idea that forms the basis of several prominent narrative theories of selfhood in philosophy. Those theories describe various crucial aspects of selfhood in human beings and the theoretical framework I propose in the final section of this chapter aims to

⁶⁹⁰ Conway, M. A. and Holmes, A. (2004) Psychosocial stages and the availability of autobiographical memories, *Journal of Personality*, Vol. 72(3); Pp: 461–480

⁶⁹¹ Autobiographical memory is generally understood as encompassing both semantic and episodic memory. However, what makes either *autobiographical* is when they are indexed to a self. Thus, when episodic recall is integrated with the autobiographical knowledge base it becomes part of autobiographical memory (what I have referred to as “autobiographical-episodic memory”). As Martin Conway puts it “autobiographical memory provides the instantiating context for sensory–perceptual episodic memory”. See Conway, M. A. (2001) Sensory-perceptual episodic memory and its context, *Philosophical Transactions of the Royal Society of London*, Vol. 356(1413); Pp: 1375-1384

integrate those theories with several other ideas and theories already discussed in this and previous chapters.

Narrative Theories of Self

Fictional Selves and Narrative Centres of Gravity

Daniel Dennett's theory of narrative self is well-known in analytic philosophy. It is premised on the idea that human beings have evolved the natural tendency to construct autobiographical narratives as a function of "self-protection, self-control, and self-definition", which involves "concocting and controlling the story we tell others, and ourselves, about who we are".⁶⁹² Dennett posits that there is a central character around which our autobiographical narrative is spun, describing it as a "centre of narrative gravity", analogous to the concept of "centre of gravity" in Newtonian physics. According to Dennett, this "centre of narrative gravity" is the self.⁶⁹³

The physicist does an interpretation, if you like, of the chair and its behavior, and comes up with the theoretical abstraction of a center of gravity, which is then very useful in characterizing the behaviour of the chair in the future, under a wide variety of conditions. The hermeneuticist or phenomenologist--or anthropologist--sees some rather more complicated things moving about in the world--human beings and animals--and is faced with a similar problem of interpretation. It turns out to be theoretically perspicuous to organize the interpretation around a central abstraction: each person has a self (in addition to a center of gravity). (Dennett, 1992; Pg. 105)

Dennett describes centres of gravity in physics and narrative centres of gravity as theoretical abstractions or fictional objects. A centre of gravity does not refer to any physical object with physical properties (other than spatio-temporal location). Rather, it is a theoretical abstraction used to understand, explain, measure and predict the motion of objects without equating/identifying it with the object itself (or any part of it whether it is an atom or some other subatomic particle). Analogously, the self as centre of narrative gravity is also a theoretical abstraction or a fiction. Like centres of gravity, narrative selves cannot be identified with objects such as persons or brains. Like centres of gravity,

⁶⁹² Dennett, D. C. (1993) *Consciousness Explained*. Harmondsworth: Penguin Books; Pg. 418

⁶⁹³ Dennett, D. C. (1992) The Self as a Center of Narrative Gravity. In F. Kessel, P. Cole and D. Johnson (Eds) *Self and Consciousness: Multiple Perspectives*. Hillsdale, NJ: Erlbaum; Pp: 103-115

narrative selves have a vaguely defined spatio-temporal location – “one self is here at the lectern and another one is there in front of me, and another on its right, and so forth”.⁶⁹⁴

Dennett also equates selves with fictional characters such as the character Ishmael from “Moby Dick” or the fictional detective Sherlock Holmes. Like centres of gravity, Ishmael and Holmes do not refer to any objects (i.e. persons) in reality. So, it makes no sense to ask whether such fictional characters have *real* properties, because there is no fact of the matter that enables one to attribute *real* properties to them. Similarly, Dennett believes there are no *real* properties that can be attributed to our selfhood, rather there are only fictional properties, which serve the adaptive functions of “self-protection”, “self-control” and “self-definition”. The creation of such a character/protagonist, which we call “the self”, is just the way that human beings, as biological entities, performs those adaptive functions.⁶⁹⁵ Hence according to Dennett’s theory, there is no mind-independent object that corresponds to the fictional character/protagonist. Rather, there are physical/mechanical processes (e.g. a computer/robot designed to write autobiographical novels, or unconscious brain processes) that create such fictional selves, and those processes themselves need not be identified as selves.

...we (unlike professional human story tellers) do not consciously and deliberately figure out what narratives to tell and how to tell them; like spiderwebs, our tales are spun but for the most part we don't spin them; they spin us. Our human consciousness, and our narrative selfhood, is their product, not their source. (Dennett, 1993, pg. 418)

The notion that our stories are “spun” for us in order to constitute our selfhood implies that there is no causally antecedent self acting as an agent to construct the autobiographical narratives that constitute selfhood. The self is understood as a mere fiction or abstraction. Dennett does acknowledge a role for conscious construction of autobiographical narratives with hermeneutical content, which he refers to as “auto-hermeneutics”, but presumably the person engaging in “auto-hermeneutics” remains a mere fiction or abstraction.⁶⁹⁶

We cannot undo those parts of our pasts that are determinate, but our selves are constantly being made more determinate as we go along in response to the way the world impinges on us. Of course it is also possible for a person to engage in auto-hermeneutics, interpretation of

⁶⁹⁴ Ibid. Pg. 109

⁶⁹⁵ This is why Dennett’s theory has been described as anti-realist. See Vollmer, F. (2005) The Narrative Self, *Journal for the Theory of Social Behaviour*, Vol. 35(2); Pp: 189-205

⁶⁹⁶ Dennett, D. C. (1992) The Self as a Center of Narrative Gravity. In F. Kessel, P. Cole and D. Johnson (Eds) *Self and Consciousness: Multiple Perspectives*. Hillsdale, NJ: Erlbaum; Pp: 103-115

one's self, and in particular to go back and think about one's past, and one's memories, and to rethink them and rewrite them. (Dennett, 1992; Pg. 110)

This points to a fundamental distinction between Dennett's theory and the idea of narrative identity discussed in the previous section. On Dennett's account, the self, understood as a fictional protagonist, is a mere abstraction and is not the author of the narrative. The processes that produce the fictional protagonist do not require a causally antecedent self (an author). In contrast, the idea of narrative identity includes a practical and agential dimension (i.e. narrative agency) where one's narrative identity and agency is a causal antecedent to subsequent narrative identities in virtue of playing a determinative role in its construction and development over time. This is precisely the point that David Velleman raises in his critique of Dennett's theory. He argues that a fictional protagonist is not just a mere epiphenomenal fiction or an abstraction but that there really is a sense in which it is also an agent ("an inner locus of agential control") that determines subsequent actions and behavior, which are then represented in autobiographical narratives.⁶⁹⁷

...the "central controller" of a person may indeed be a fiction, not in the sense that it is a fictional character in the person's autobiography, but in the sense that it is the person's autobiography – the reflective representation that feeds back into the person's behaviour. This central controller is in fact what social psychologists call the self. In the social-psychology literature, the word "self" denotes a person's self-conception rather than the entity, real or imagined, that this conception represents. (Velleman, 2006; Pg. 214)

Here we also see another important difference between Velleman and Dennett's view, reflecting the distinction I described in the introductory chapter between persons as subjects versus persons as objects. Velleman adopts a psychological notion of the self, which is concerned with personal-level hermeneutical content and associated phenomenology understood from the first-person subjective point of view. He is describing a person's selfhood from a first-person subjective point of view and is therefore treating the person as a subject. In contrast Dennett's view is a metaphysical one, which describes how those first-personal subjective states are implemented and realised by unconscious processes at the sub-personal level. He is describing a person's selfhood from a third-person objective point of view and is therefore treating the person (and the self) as an object (albeit a fictional one). Of course, Dennett does not deny that the self or one's narrative identity can be understood and experienced at the personal-level, but he regards it as a functional illusion.

⁶⁹⁷ Velleman, J. D. (2006) The Self as Narrator, In Velleman, J. D. (Ed) *Self to Self: Selected Essays*. Cambridge University Press; Pp: 203-23

It is an abstraction one uses as part of a theoretical apparatus to understand, and predict, and make sense of, the behavior of some very complicated things. The fact that these abstract selves seem so robust and real is not surprising. They are much more complicated theoretical entities than a center of gravity... But no one has ever seen or ever will see a center of gravity. As David Hume noted, no one has ever seen a self, either. (Dennett, 1992; Pg. 115)

In this regard Dennett's theory is analogous to Metzinger's theory, which posits that neurocomputational processes at the sub-personal level produce a "phenomenal self model" (PSM) that is naively experienced as a Cartesian self at the personal/phenomenological-level. Metzinger's theory can be thought of as the phenomenological analogue to Dennett's theory. Thus, we can think of Dennett's fictional protagonist as a centre of narrative gravity with an associated "phenomenal self model", whose life and experiences are evaluated, described and represented in the form of autobiographical narratives. Those narratives begin with the use of the first-person pronoun "I", which as discussed previously, is the most rudimentary form of linguistic self-representation. It emerges during early childhood, conferring a child with a rudimentary self-concept and minimal human selfhood. Thus, we can think of the minimal human self as a fictional protagonist in its most basic and undeveloped form. As development proceeds, those linguistic self-representations, and likewise the fictional protagonist, take on a narrative and hermeneutical form. However, given that Dennett denies that the fictional protagonist can also be author of their own autobiographical narratives, his theory is therefore, only applicable to the kinds of selves that lack the capacity for "auto-hermeneutics" or narrative agency and which emerge only from physical or mechanical processes (that lack selfhood or agency), i.e. minimal human selves. Thus, it is in the context of early childhood development that Dennett's theory is most applicable, in which the minimal human self constitutes an undeveloped fictional protagonist "spun" out of the developmental processes I described in the previous chapter. This undeveloped fictional protagonist, however, is poised to develop into a more "determinate" fictional protagonist and will soon take on a hermeneutical nature and be able to exert a determinative effect on the construction of its narrative identity as a narrative agent.

Hermeneutical Selves

The idea of the self as consisting in narrative has been widely discussed from within the literary tradition of philosophy (a tradition which sees literature and fiction as central to both philosophy and public affairs), where autobiographical narratives are thought to have the form or character of narratives found in literary works. One of the most well-known theories of this type is that of Paul Ricoeur's, which I briefly discussed in the introductory chapter. Ricoeur argued for a self that could be

neither directly or indubitably grasped (a “wounded cogito”), nor was it something that consisted in pure embodiment or phenomenology. Rather, the self was something that one *attested* to by an ongoing dialectical process involving hermeneutic interpretation, which would yield a subjective, creative, incomplete and fragmented self as a character “emplotted” within an autobiographical narrative.⁶⁹⁸

Our own existence cannot be separated from the account we can give of ourselves. It is in telling our own stories that we give ourselves an identity. We recognize ourselves in the stories we tell about ourselves. It makes little difference whether these stories are true or false, fiction as well as verifiable history provides us with an identity. (Ricoeur, 1985; Pg. 214)

Alasdair MacIntyre’s narrative theory also emphasises the story-telling aspect, though his theory is more explicitly and distinctively a literary one. According to MacIntyre, we learn about the world and other characters through myths and fairy-tales as children, and in later life, through various other dramatic forms. He also regards human life as teleologically oriented towards the attainment of “the good” (understood in the Aristotelian/Thomistic sense). Thus, he regarded life as a pursuit or “quest” for the attainment of “the good life”, which thus confers on us a “narrative unity of human life”. Furthermore, he points out that our lives are part of a broader history and culture, and thus, our stories are historically and socially situated, where they also form part of the stories of others and are also shaped by the stories of others and the stories of history.^{699 700}

While narrative storytelling is central to both Ricoeur’s and MacIntyre’s accounts, we can see their different emphases. Ricoeur’s theory focuses on hermeneutic interpretation and emphasises the psychological/hermeneutical constructivist aspect of narrative. MacIntyre emphasises the teleological, agential and social constructivist aspects. These elements are also found in a number of narrative theories of self that play a central role in a broader epistemological and metaphysical framework that views knowledge and reality as being constructed out of sociocultural/linguistic practices. In this regard, they may be seen as consistent with either radical constructivist or social constructionist theories of self. There are in fact two further and well-known theories of narrative self that exemplify this. One of those is Charles Taylor’s theory and the other is Jerome Bruner’s. Like MacIntyre’s theory, Taylor’s is also premised on the view that there is an implicit and “inescapable” moral orientation (e.g.

⁶⁹⁸ Ricoeur, P. (1985) “History as Narrative and Practice”, interview with Paul Ricoeur by Peter Kemp, *Philosophy Today*, Vol. 29(3); Pp: 213-22

⁶⁹⁹ MacIntyre, A. (1985) *After Virtue. A Study in Moral Theory*. London: Duckworth.

⁷⁰⁰ MacIntyre, A. (2006) *The Tasks of Philosophy. Selected Essays, vol. 1*. Cambridge: Cambridge University Press

certain instincts and gut reactions) from which we view and interpret the world. According to Taylor this has the following implications for ontology.⁷⁰¹

...we should treat our deepest moral instincts, our ineradicable sense that human life is to be respected, as our mode of access to the world in which ontological claims are discernible and can be rationally argued about and sifted. (Taylor, 1989; Pg. 8)

In fact, Taylor devotes much attention in his book, *Sources of the Self*, to criticising the idea that there can be any possibility of stepping outside of such evaluative orientations (citing naturalism and reductionism as failed attempts to do so). He claims that such orientations are not just a contingent psychological fact about human beings (who he claims cannot avoid making distinctions between what is valuable, worthwhile and dignified and what is not), but that such orientations are constitutive of our human agency. According to Taylor, our identity is one of the best pieces of evidence for this view.

...living within such strongly qualified horizons is constitutive of human agency, that stepping outside these limits would be tantamount to stepping outside what we would recognize as integral... Perhaps the best way to see this is to focus on the issue that we usually describe today as the question of identity... To know who I am is a species of knowing where I stand. My identity is defined by the commitments and identifications which provide the frame or horizon within which I can try to determine from case to case what is good, or valuable, or what ought to be done, or what I endorse or oppose. (Taylor, 1989; Pg. 27)

Because those “commitments and identifications”, and what is “good or valuable”, are also “socially induced”, Taylor claims that a self can only exist within what Taylor refers to as “webs of interlocution”.⁷⁰² Thus, on Taylor’s view, we define who we are by communicating, whether it is in familial contexts, broader social contexts, or more intimate interpersonal contexts, all of which are coloured by our moral/evaluative orientation. He goes on to claim that in order to make sense of our lives and to fulfil our orientation toward the good, everything about ourselves must be woven into an unfolding story or narrative because narratives provide the means by which we answer important questions about ourselves. They provide the necessary temporal structure and unity to one’s life while also enabling the kind of deep reflective evaluation necessary for orientation towards the good and achieving the kind of identity that one is striving for. Ultimately, like MacIntyre, Taylor believes that

⁷⁰¹ Taylor, C. (1989) *Sources of the Self*. Harvard University Press; Pg. 8

⁷⁰² Ibid. Pg. 36

we can only understand this natural orientation in narrative form, and as a “quest” for self-realisation, where self is inextricably linked with morality or the good.⁷⁰³

Jerome Bruner describes narrative as essentially an instrument that we use to *construct* reality and he refers to this as the “narrative construction of reality”. He claims that narrative constructions are “unlike the constructions generated by logical and scientific procedures that can be weeded out by falsification”. Instead they can only achieve “*verisimilitude*” and thus cannot describe reality in a way that is empirically verifiable or consistent with logical necessity.⁷⁰⁴ He originally developed his theory of narrative self by equating various aspects of self (what he refers to as “indicators of selfhood” such as agency, intention, qualia, reflexivity) with what he calls the “constituents of a well-formed narrative”, arguing that those indicators of selfhood are also functions of narrative.

Could it be, then, that what we recognize as Self (in ourselves or in others) is what is convertible into some version of a narrative? Any account that lacks indicators of agentivity, or indicia of commitment, or information about resource deployment, or any indication of social referencing or evaluation, or is without qualia, or any signs of coherence or metacognitive reflexiveness, or finally, any indication of the social positioning of protagonists – such accounts are judged to be not only without a “story,” but as with “no one there.” In brief, such accounts are both without Selves and without narrative. (Bruner, 1997; Pg. 152)

He also argues that we organise our memories and experiences mainly in the form of narrative stories (such as excuses, myths, reasons for doing and not doing etc.), which give rise to “more or less coherent autobiographies centred around a self, acting more or less purposefully in a social world.”⁷⁰⁵ Hence, according to Bruner, the self is constructed through interaction with the social world, which implies a causal role for both the self and the social world and this is what makes his theory a constructivist theory rather than a social constructionist one.⁷⁰⁶ However, in later works Bruner also emphasises the way in which our sense of self is shaped by the social world, which is what makes his theory more aptly described as a social constructivist theory.⁷⁰⁷

⁷⁰³ Ibid. Pp: 51-52

⁷⁰⁴ Bruner, J. (1991) The Narrative Construction of Reality, *Critical Inquiry*, Vol. 18(1); Pp: 4-5

⁷⁰⁵ Ibid. Pg. 18

⁷⁰⁶ “The experienced world may produce Self, but Self also produces the experienced world.” See Bruner, J. (1997) A narrative model of self construction. In J. G. Snodgrass and R. L. Thompson (Eds) *The self across psychology: Self-Recognition, Self-Awareness, and the Self Concept*, *Annals of the New York Academy of Sciences*, Vol. 818(1); Pg. 146-147

⁷⁰⁷ Bruner, J. (2003) *Self-Making Narratives*, In Fivush, R. and Haden, C. A. (Eds) *Autobiographical Memory and the Construction of a Narrative Self: Developmental and Cultural Perspectives*. Lawrence Erlbaum Associates, Inc.: Mahwah, NJ; Pp: 209-25

Self-making, anomalously, is from both the inside and the outside. The inside of it, we like to say in our Cartesian way, is memory, feelings, ideas, beliefs, subjectivity. A part of its insidedness is almost certainly innate and species specific in origin, like our irresistible sense of continuity over time and place, our postural sense of ourselves, and the like. But much of self-making is based on outside sources as well—on the apparent esteem of others, and on the myriad expectations that we early, even mindlessly, pick up from the culture in which we are immersed... Besides, narrative acts of self-making are typically guided by unspoken, implicit cultural models of what selfhood should be and what it might be—and, of course, what it should not be. (Bruner, 2003; Pp: 210-211)

Bruner and Taylor's theories both capture the importance of self-evaluation, language and social interaction, and both exemplify the kind of social constructivism that underpins the general conception of narrative self within literary philosophy. Taylor's theory is somewhat distinctive in that he views knowledge of both the self and the world as inextricably linked to the inescapability of our moral/evaluative orientation. Nevertheless, both theories emerge from a broader constructivist framework that, much like radical constructivism, regards knowledge (and in Bruner's case, reality) as merely an artefact of sociocultural and linguistic practices. If this is an accurate description of the general epistemological state of affairs, then knowledge of the self is merely one instance of constructed knowledge of reality. However, whether this is the general case, extending beyond the self, is highly contentious. To claim that individuals construct an understanding of reality in essentially the same way that they construct their identities seems to be a dubious proposition.⁷⁰⁸ There are epistemic standards that apply to the former that don't necessarily apply to the latter. Identities are amenable to reflective evaluation and endorsement and can be modified or re-constructed according to pragmatic and hermeneutical norms. Our knowledge of the world is also amenable to reflective evaluation and endorsement and can be modified or re-constructed accordingly. However, this is done in accordance with somewhat different normative standards, i.e. standards based on empirical evidence and epistemic justification.⁷⁰⁹ Of course, it may be objected that all normative standards simply reflect a particular kind of sociocultural, psychological, or evaluative orientation, i.e. a pragmatic orientation essentially. This may be so, but it is insufficient to warrant the view that our understanding of reality has the same epistemic status as our understanding of ourselves. The mere fact that all knowledge supervenes on sociocultural, psychological, evaluative contingencies is insufficient justification for such a conclusion. The notion that our knowledge represents a mind-

⁷⁰⁸ These concerns also apply to the social constructionist, radical constructivist, postmodern and poststructuralist critique of the realist assumptions of empirical psychology and analytic philosophy.

⁷⁰⁹ Rather than pragmatic or hermeneutical norms, these are part of the norms of procedural rationality, which I described in Chapter 2.

independent world is perfectly compatible with fact that such contingencies exist (i.e. a sociology of knowledge).⁷¹⁰

Both the construction of the self (or our narrative identities) and our knowledge of reality may indeed be socially, culturally, linguistically, psychologically and conceptually mediated, but the different normative standards applied in each case point to a substantive distinction. For example, we may dis-endorse a statement blurted out in the heat of the moment, so as to no longer identify with it, but such a manoeuvre can hardly have any bearing on whether such a statement was actually made. The fact that there are both mind-dependent and mind-independent dimensions that comprise human selfhood need not be seen as complicating or obscuring our picture of the self and the world. In fact, it explains some very important things, such as the possibility of discordance between our subjective (mind-dependent) sense of personal identity and our objective (mind-independent) personal identity. It also provides the basis on which to distinguish selves from persons, a distinction that brings clarity to a number of issues relating to selfhood, personhood and personal identity, which I will discuss later in this chapter and also in the final chapter.

The Practical Necessity of Personal Identity

So far in this chapter I have focused on the idea of narrative identity, which refers to one's first-person sense of personal identity expressed through autobiographical narratives. This is a psychological notion of personal identity and is distinct from a metaphysical notion of personal identity, which is given from a third-person perspective. As discussed in Chapter 1, this notion of personal identity is assumed in the traditional approach towards addressing the persistence question of personal identity where it is understood as numerical identity. However, in this section and the following one, I discuss a way in which we might address the persistence question of personal identity by using a psychological notion of personal identity, one that is framed in terms of narrative agency and narrative identity.

As I discussed in the introductory Chapter, the persistence question is an important one because it gives us a way of making sense of why we are concerned with our futures and why maintaining a certain quality of life in our old age is important to us. In other words, it provides us with a rationale for our egoistic concerns and thus a rationale for the egoistic imperative that underpins person-

⁷¹⁰ The radical constructivist and social constructionist might be more easily convinced by claims to knowledge or epistemic justification coming from a "view from nowhere" or an "Archimedean point", but if such is the standard required for epistemic justification, then the radical constructivist and social constructionist is also beholden to those standards.

centred care (PCC). Such an imperative may be undermined if personal identity is lost due to psychological disconnectedness over time (something that may be further exacerbated by dementia). This possibility arises from the way some philosophers understand how personal identity persists over time, particularly Parfit's influential reductionist account of personal identity. Recall that on such a view, a person's life consists of states of varying degrees of psychological connectedness and continuity (bundles of "R-relations") and that a loss of those connections over time can result in a loss of personal identity. This means that an individual would not be the same person but would be a "descendent" of their previous self (essentially another person) and it would not make sense for them to have the kind of egoistic concern for their "descendent" self as we have for ourselves. Furthermore, it would not be possible to promote or maintain their own personhood or selfhood. It would only be possible to promote or maintain the personhood or selfhood of another person (i.e. their "descendent" self). As discussed in the introductory chapter, these scenarios challenge the rationale for the egoistic imperative associated with PCC (and I will have more to say about this in the following and final chapter).

Survival is probably the most fundamental of our egoistic concerns. It may not be equally valued by all but it remains a primal instinct expressing itself through our natural tendency to promote our (or one's many potential "descendent" selves) continued existence. Though we may accept Parfit's view that our own interests and survival are not intrinsically important or any more valuable than anyone else's, we as individual agents play a crucial role in promoting our own welfare over time, whether this means promoting the welfare of our immediate future psychologically connected selves or our future "descendent" selves. The role that other people (or non-psychologically connected selves) play in promoting our welfare is typically a subsidiary one. This is why we are expected to take responsibility for ourselves and this can only make sense in virtue of the fact that we are embodied diachronic agents. Hence what may confer unity between our current selves and our many "ancestral" or "descendent" selves is our embodied diachronic agency.

This is precisely the position that Korsgaard argues for in her response to Parfit. According to her argument, persistence of personal identity is conferred by the practical necessity of believing that we persist as the same embodied rational agent over time (henceforth "diachronic agent").⁷¹¹ Her argument is one that distinguishes the metaphysical (or theoretical) considerations about personal identity from the practical considerations, which she describes as different standpoints from which to approach the persistence question of personal identity (the "theoretical standpoint" and "practical

⁷¹¹ Korsgaard, C. M. (1989) Personal Identity and the Unity of Agency: A Kantian Response to Parfit, *Philosophy and Public Affairs*, Vol. 18(2); Pp: 101-132

standpoint” respectively). Thus, while she finds no reason to dispute Parfit’s claim that there is nothing about our subjective experiences that are unified in such a way as to confer persistence of personal identity (i.e. there are only varying degrees of R-relations), she points out that his view only addresses the persistence question of personal identity from a “theoretical standpoint”, whereas her argument is one that addresses it from a “practical standpoint”.

Firstly, she asks us to consider what might make a person unified at any one particular time, despite the possibility that they are no more than Humean bundles that consist of different experiences, dispositions, beliefs, desires, goals (i.e. R-relations). She also asks us to consider how it is that we can act, given that those experiences, beliefs, desires, and dispositions can conflict with one another. Her answer is that we can resolve those conflicts by using reason and deliberation before taking appropriate action, and that such action will therefore manifest a united front. Such a unity is possible in virtue of our diachronic agency. Secondly, because many of our beliefs, desires and goals require time for their realisation, the decisions we make and reasons we offer for them are made in a temporally extended or diachronic context. So, in order to make the right decision at any particular time (i.e. a practically rational decision), we must be able to identify with reasons that extend over time. This has the effect of carrying us into the future, because it requires that we presuppose continuity of identity and agency over time. Thus, Korsgaard argues that we conceive of ourselves as unified and persisting over time because such a view is imposed on us as a matter of practical necessity and also because of the contingent fact that we are embodied diachronic agents.

You normally think you lead one continuing life because you are one person, but according to this argument the truth is the reverse. You are one continuing person because you have one life to lead. (Korsgaard, 1989; Pg. 113)

One might respond by arguing that the practical necessity of a particular idea does not amount to the truth of such an idea, but on Korsgaard’s view, the truth of such an idea can be understood from either a “practical standpoint” or “theoretical standpoint”, neither of which she argues has primacy over the other. However, if practical considerations can be shown to have theoretical import then they are not as distinct from the “theoretical standpoint” as Korsgaard would have it. For example, Locke’s forensic notion of personal identity applies an example of practical necessity (i.e. attributing moral responsibility) as a conceptual parameter on how we understand and address the persistence question of personal identity. His account reflects the strong intuition that there is an inextricable link between our practical concerns and our personal identity.

So, on the one hand, we have Korsgaard's view, which is that persistence of personal identity is conferred by the expression of our embodied diachronic agency towards the fulfillment of our practical lives and egoistic goals. On the other hand, we have the Lockean view that persistence of personal identity is a conceptual necessity linked to the practice of attributing various traits, characteristics, properties and responsibilities to individuals. Both kinds of practical considerations have shaped and continue to shape our ordinary folk concept of personal identity and cannot be reconciled with Parfit's reductionist account. These ideas form the basis of Marya Schechtman's response to Parfit, and her views about personal identity more generally, which I discuss in the following section.

The Narrative Self-Constitution View

Marya Schechtman highlights two important considerations when addressing the persistence question of personal identity. Firstly, she points out that the traditional approach towards addressing the persistence question of personal identity, which relied on the psychological continuity criterion, treats psychological states as independent of the subjects who experience them (i.e. it ignores the subjective dimension of psychological states). As a result, it treats persons as objects rather than as subjects and amounts to an attempt to explain a subjective phenomenon (i.e. psychological continuity) in terms of an objective phenomenon (i.e. numerical identity of objects).^{712 713} She argues that such an approach inevitably runs into problems of circularity. For example, she points out that Parfit's "quasi" states (which I discussed in Chapter 1), do in fact assume personal identity (contrary to Parfit's claim) and thus cannot do the work that Parfit intends them to do, which is to account for the branching forms of psychological continuity.⁷¹⁴ Furthermore, it also misconstrues the persistence question of personal identity as a purely metaphysical question, one that is solely focused on discovering the necessary and sufficient conditions on which we can *re-identify* a person at a later time as being numerically identical (she refers to this as the "reidentification question").⁷¹⁵

Secondly, Schechtman reminds us that we should not lose sight of the practical concerns that gave impetus to the persistence question of personal identity in the first place, namely, to understand the

⁷¹² Schechtman, M. (1990) Personhood and Personal Identity, *The Journal of Philosophy*, Vol. 87(2); Pp: 87-8

⁷¹³ Kim Atkins makes a similar argument about the irreducibility of first-personal embodied consciousness. See Atkins, K. (2004) Narrative identity, practical identity and ethical subjectivity, *Continental Philosophy Review*, Vol. 37(3); Pp: 341-366

⁷¹⁴ Schechtman, M. (1990) Personhood and Personal Identity, *The Journal of Philosophy*, Vol. 87(2); Pp: 71-92

⁷¹⁵ Schechtman, M. (1996) *The Constitution of Selves*. Cornell University Press; Pg. 7

link between responsibility, egoistic concern and survival.⁷¹⁶ Hence Schechtman views personal identity as predicated on an interdependence between persons as unified conscious experiencing subjects and the broad range of practical concerns that they must face. Those practical concerns can be understood as placing a conceptual parameter on how we understand personal identity.⁷¹⁷

If we are to explain the fact that the people who populate our world are genuine individuals, we need an account of identity that defines a single, unified entity which is the target of all of the many practical questions and concerns that are associated with personal identity. If we are to understand these individuals fully, the relation that constitutes their identity must be connected to their practical significance inherently and not just accidentally. (Schechtman, 2014; Pg. 5)

Schechtman then argues that the absence of necessary and sufficient conditions for numerical identity (i.e. a “reidentification” criterion) does not mean that there can be no theory that captures the relationship between personal identity and our practical concerns. Thus, Schechtman reframes the persistence question of personal identity as a question about whether certain characteristics (i.e. actions, experiences, beliefs, values, desires, character traits, etc.) can be *truly* or *genuinely* attributed to a given person. She refers to this as the “characterization question”.⁷¹⁸

...characterization theorists ask what it means to say that a particular characteristic is that of a given person. The most familiar examples of the characterization question are more specifically questions of which characteristics are truly those of some person (as opposed, say, to those which are his as a result of hypnosis, brainwashing, or some other form of coercion). (Schechtman, 1996; Pg. 73; with original emphasis)

There is a key distinction in the logical form of the criteria for personal identity framed as a “characterization question” as opposed to a “reidentification question”. As discussed in the introductory chapter, a major problem for the psychological continuity criterion, in the context of the “reidentification question”, is that relations of numerical identity are transitive, whereas relations of psychological continuity are intransitive. This problem does not exist when the issue is framed as a

⁷¹⁶ The three features that I refer to here (responsibility, prudential concern, survival) are intended to capture more broadly the “four features” linked to personal identity that Schechtman refers to which are “moral responsibility, self-interested concern, compensation and survival”. See Schechtman, M. (1996) *The Constitution of Selves*. Cornell University Press; Pp: 2, 14

⁷¹⁷ Schechtman describes her view as one that expands upon Locke’s forensic notion of personal identity further to include “all of the different interests, judgments, and practices involved in our interactions with other people, forensic judgments included”. See Schechtman, M. (2014) *Staying Alive: Personal Identity, Practical Concerns, and the Unity of a Life*. Oxford University Press: UK; Pg. 68

⁷¹⁸ Schechtman, M. (1996) *The Constitution of Selves*. Cornell University Press; Pg. 73

“characterization question” because matters of transitivity or intransitivity are not relevant to considerations of the relations between a person and their “characteristics” (which also admit of degrees). Furthermore, there can also be a direct relationship between personal identity and responsibility because attributing a crime to a person would simply be an instance of characterisation. However, framing the issue in terms of “reidentification” means there is only ever an indirect relation between a person and their actions. For example, attributing a crime to a person at t2 (who committed a crime at t1) implies that one must be able to “reidentify” the person at t2 as one and the same as the person at t1. Thus, Schechtman regards the “characterization question” as more congenial to explaining the link between personal identity and practical concerns such as attributing responsibility to persons.⁷¹⁹

If the motivation for the persistence question of personal identity is to understand the relationship between personal identity and our practical concerns, then there must be some unifying feature of human beings that confers identity to past present and future characterisations. In other words, the activities and practices of our lives which are linked to those practical concerns depend on our having a sense of self that is necessarily unified and extended over time. In her book, *The Constitution of Selves*, Schechtman offers a psychological account of the persistence of personal identity (understood in this “characterization” sense) in which she claims that psychological continuity is conferred by the autobiographical narratives that we construct in order to make sense of our lives and who we are as persons. She refers to this as the “narrative self-constitution view” (NSCV).⁷²⁰ However, before I discuss this in more detail, I want to first clarify what it means to understand personal identity in the “characterization” sense.

Reframing the question as a “characterization question”, means that we are now only concerned with whether certain phenomena (bodily or psychological) can be *truly* or *genuinely* attributed to an individual. However, what it means to *truly* or *genuinely* attribute psychological phenomena to an individual is slightly more complex and nuanced than for bodily phenomena. For example, whether a strand of hair can be *truly* or *genuinely* attributed to a criminal suspect is a question about whether that strand of hair belongs to a particular person and is determined on the basis of objective criteria (e.g. matching the DNA extracted from the hair with the suspect’s DNA). In contrast, whether certain psychological states can be *truly* or *genuinely* attributed to a particular individual is not just a question about whether those states objectively belong to that particular individual, but also a question about whether the individual subjectively identifies with those states. For example, consider the question of

⁷¹⁹ Ibid. Pp: 90-91

⁷²⁰ Ibid.

whether certain racist beliefs or attitudes can be *truly* or *genuinely* attributed to a particular individual. Like the hair example above, there is one sense in which such psychological states can be *truly* or *genuinely* attributed to them, that is, if they did, as a matter of fact, hold such racist beliefs and attitudes.⁷²¹ However, there is also a sense in which those racist beliefs and attitudes may not be *truly* or *genuinely* attributed to them. Upon reflection, they may choose to dis-endorse or “disown” such beliefs or attitudes, because it does not reflect the person that they believe they are, or that they wish to be. In other words, those racist beliefs and attitudes are not part of their self-concept or their sense of personal identity, and thus they do not identify with them in a subjective sense. This is exemplified in statements such as “that is not who I am” or “I wasn’t myself that day” and highlights the role that reflective endorsement of beliefs and actions plays in our sense of personal identity. Similarly, others may also question whether someone’s beliefs, attitudes and actions reflect the kind of person they know them to be. This is exemplified in statements such as “that is not who you are”, “you are better than that” or “that is not the Matthew I know”. According to Schechtman, these considerations are at the heart of how we understand personal identity in the “characterization” sense.

What this means is that to define a person’s identity in the sense that is at issue in the characterization question, one must not only be able to know which characteristics are part of his history, but also their role in that history – one must know which of the involved characteristics are central to who he is and so part of his “true” identity... (Schechtman, 1996; Pg. 77; with original emphasis)

Schechtman places much emphasis on the individual themselves as an active and creative agent who plays a central role in the construction of their personal identity. According to Schechtman, a person appropriates various states of affairs (“traits, actions and experiences”) and thus identifies with them by incorporating them into an autobiographical narrative. She also claims that such narratives must be intelligible and coherent, meaning that they cannot simply consist of random sequences of events that have no relation to one another. Of course, this can admit of degrees and there are significant differences of intelligibility and cohesiveness in the autobiographical narratives of most mature adults compared with children or people with dementia. Similarly, the structure of those narratives must also reflect the diachronic or temporally extended nature of the practical concerns we have. This is what Schechtman means when she describes this kind of narrative structure as a “conventional linear story”.⁷²² There are also states of affairs that may be unconscious (e.g. repressed memories and post-hypnotic suggestion) and they contribute to what Schechtman refers to as an “implicit narrative”.

⁷²¹ Schechtman refers to this as being “true” or “genuine” in a “gross and literal” sense, a phrase borrowed from Harry Frankfurt. See Schechtman, M. (1996) *The Constitution of Selves*. Cornell University Press; Pg. 73-74

⁷²² Ibid. Pp: 96, 99

However, Schechtman argues that our narratives must be articulable and thus explicitly represented in our minds to some extent. She refers to this as the “articulation constraint” and states that a person “should be able to explain why he does what he does, believes what he believes, and feels what he feels”.⁷²³ Conversely, there is a sense in which implicit memories or narratives are less a part of a person’s identity than their conscious or explicit memories/narratives precisely because “they are not subject to the same kind of scrutiny as are narrative features of which the person can become aware and are not, therefore, as well integrated into his life.”⁷²⁴ This “articulation constraint” highlights the importance of what I discussed above, i.e. the capacity for reflective self-awareness and the ability to endorse a particular belief or desire as one’s own so as to identify with it.

Schechtman also acknowledges that persons are socially situated and it is in virtue of this that she argues for an additional constraint on what qualifies as an identity-constituting narrative, which she refers to as the “reality constraint”. She argues that self-constituting narratives must “cohere with reality” or at least cohere with the narratives that are given by others, so as to enable meaningful engagement with others through relevant activities and interactions.⁷²⁵ Of course, not all autobiographical narratives are entirely factually accurate (reflecting objective facts) or coherent in this manner. However, the point Schechtman is making is that our autobiographical narratives must have some degree of veracity or correspondence with the “real world” (and/or the social world) in order for our practical concerns to be properly and meaningfully addressed. This point is highlighted by considering extreme cases, such as people with grandiose delusions, whose autobiographical narratives are significantly out of touch with reality. Such people are often prone to act against their egoistic concerns, particularly those relating to prudential concerns, posing a risk to their own and others’ welfare. This might suggest that autobiographical narratives must adhere to epistemic norms in order to facilitate meaningful engagement with the world. However, as I have emphasized in this chapter, autobiographical narratives are partly interpretive and evaluative in nature (i.e. hermeneutical) and thus the norms that govern their construction are also partly pragmatic and social in nature. Schechtman’s NSCV can be considered as partly a hermeneutical theory, though it does not regard our autobiographical narratives as necessarily having the “grand” or holistic type of meaning that the hermeneutical theories discussed in the previous section do.⁷²⁶

⁷²³ Ibid. Pg. 114

⁷²⁴ Ibid. Pg. 118

⁷²⁵ Ibid. Pg. 119

⁷²⁶ I share the same view, though I would suggest that there is a broad spectrum of autobiographical narratives, some more hermeneutical or “grand” than others, which gives rise to individual differences in sense of personal identity.

Both the “reality constraint” and what we might regard as a moderate hermeneutical constraint (as per above) are closely interconnected (often in tension with each other) and are necessary for the kind of activities and interactions that are typical of our practical lives. The former describes the epistemic norms by which we come to understand objective facts about ourselves and the world, and the latter describes how we come to understand our lives as meaningful in a humanistic sense.⁷²⁷ Hermeneutical theorists are likely to reject this distinction, however. They are likely to interpret Schechtman’s “reality constraint” as describing the constraints associated with the nature of meaningful intersubjective interaction rather than objective facts about the world.⁷²⁸ This is because they may be more inclined to view the norms governing the meaningfulness or intelligibility of our autobiographical narratives as pragmatic rather than epistemic in nature. This debate about the epistemic status of autobiographical narratives is an interesting one, which also echoes the social constructionist and radical constructivist views about the way in which self-concept or self-knowledge is constructed (discussed in the previous section and in Chapter 1). However, any further discussion of this is beyond the scope of my thesis.⁷²⁹ I want to instead focus on how those normative standards on which we construct our autobiographical narratives helps us to make an important distinction between persons and selves.

Schechtman’s NSCV is presented as a theory about personhood in which persons and selves are treated interchangeably. However, as I mentioned at the start of this section, Schechtman has argued that the problems faced by the traditional approach towards addressing the persistence question of personal identity are due to investigators conflating two notions of personhood, one that treats persons as objects and another that treats persons as subjects. This dual perspective forms the basis of a distinction that Schechtman makes between *persons* and *selves* in a more recent paper in which she claims that the autobiographical narratives of *persons* represent objective facts or sequences of events corresponding to one’s history, while the autobiographical narratives of *selves* consist of subjective interpretations and appropriations of certain events or experiences that one identifies with.⁷³⁰ Distinguishing *persons* from *selves* in this way captures the importance of the “reality constraint” and the hermeneutical nature of our autobiographical narratives, and the tension between

⁷²⁷ Schechtman, M. (2011) The Narrative Self, In Gallagher, S. (Ed) *The Oxford Handbook of the Self*. Oxford University Press; Pp: 402-403

⁷²⁸ Halsema, J. M. (2013) The Narrative Self: Ricoeur in Dialogue with Schechtman and Strawson, *International Conference The Ricoeur Centenary (1913-2013), “Paul Ricoeur and Contemporary English Language Philosophy”*; 18th November, 2013; <https://www.youtube.com/watch?v=0dx5RsWDcn4> (last accessed 18/11/2018)

⁷²⁹ For a succinct discussion of these issues, see Walker, M. J. (2012): Neuroscience, Self-Understanding, and Narrative Truth, *AJOB Neuroscience*, Vol. 3(4); Pp: 63-74

⁷³⁰ Schechtman, M. (2007) Stories, Lives, and Basic Survival: A Refinement and Defense of the Narrative View, *Royal Institute of Philosophy Supplement*, Vol. 60(155); Pp: 155-78

the two. It also captures the distinction between the two ways of understanding what it means to “truly” or “genuinely” attribute characteristics to a person as I discussed above.

One need not deeply identify with past or future actions and experiences, care about them, or take an interest in them, but one does need to recognize them as relevant to one’s options in certain fundamental ways. I need not identify with the self who decided to buy the sports car, but if I signed the loan I need to recognize that it is mine to pay, and that my credit will be impacted if I do not. (Schechtman, 2007; Pg. 170)

It is for these reasons that I previously distinguished “sense of personal identity” from “personal identity” (in Chapter 1) and chose the former to describe human selfhood. Having a “sense of personal identity” refers specifically to our first-person perspective and sense of reflective self-awareness, which cannot be reducible to third-person observations or descriptions of personal identity. In other words, a “sense of personal identity” is a more specific category that describes persons as subjects, whereas “personal identity” is a general category that also describes persons as objects. While the notion of selfhood and personhood can often be used interchangeably, distinguishing between *persons* and *selves* in this manner gives us a way of avoiding any unnecessary connotations of selfhood with personhood. This is particularly important if we are to have a clearer understanding of what it means to maintain or promote continuity of personhood as distinct from selfhood, something that I will discuss in more detail in the following chapter.

Narrative Constructivism

Intersubjective Constructions

There is a general theme that I have tried to emphasise in both current and previous chapters, which is that an individual’s internal structures and processes are indispensable for the construction of the autobiographical narratives that constitute their narrative identity. On the one hand, they involve conscious processes associated with narrative agency, such as autobiographical reasoning and practical reasoning. On the other hand, they also involve unconscious processes associated with neurocognitive functions that modulate access to autobiographical memory to maintain stability of self-concept and identity (i.e. the SMS model at the start of this chapter). Both processes take, as inputs, relevant information about the states of affairs pertaining to oneself (beliefs, concepts, autobiographical memory and sensory experience) to produce adaptive outcomes. One of those outcomes is to enable an individual to make sense of the states of affairs pertaining to themselves and

to guide subsequent action, which is the basis on which their narrative identity is constructed. This implies that the individual is an agent in the constructive process and thus I use the phrase “narrative constructivism” to describe how our sense of personal identity or narrative identity (to be more precise) is constructed.

Narrative constructivism is partly consistent with Piagetian constructivism and radical constructivism insofar as both posit a central role for the individual in the construction of knowledge and meaning. As discussed in Chapter 1, Piaget’s theory posits that a child’s general capacity to learn (and develop cognitively) is given by internal structures referred to as “schemas” (e.g. sensorimotor reflexes and cognitive structures that model the world), which enable a child to *assimilate* and *accommodate* new information from the environment so as to achieve an adaptive state of *equilibrium*.^{731 732} Similarly, radical constructivism posits that knowledge is derived from individuals interpreting and constructing meaning out of their experiences of the phenomenal world, though it also makes the further epistemological claim that such knowledge does not represent objects in the noumenal world. This implies that knowledge of the self does not represent a mind-independent objective self.^{733 734 735}

Unlike radical constructivism, narrative constructivism is not a general theory of the way in which knowledge *per se* is constructed. It describes only the construction of knowledge of states of affairs that pertain to an individual, i.e. autobiographical knowledge. It is not committed to an epistemological view about whether knowledge in general represents objective states of affairs associated with a mind-independent or noumenal world. It is concerned only with how an individual represents their experiences and their internal conceptual structures (i.e. autobiographical knowledge) so as to construct a hermeneutical sense of self-awareness or self-knowledge, which ultimately yields a narrative identity. This suggests that one’s narrative identity does not represent a mind-independent objective self, which I think is partly correct, and speaks to the notion of the self being a fiction or an illusion as discussed in the previous section of this chapter.

Unlike Piagetian constructivism, narrative constructivism posits that external factors (sociocultural and historical factors) have a significant influence on the constructive process. Not only do certain

⁷³¹ According to Piaget’s theory there are four stages of development from birth to the age of 16 years. See Wood, K. C., Smith, H. and Grossniklaus, D. (2001) *Piaget’s Stages of Cognitive Development*. In M. Orey (Ed) *Emerging perspectives on learning, teaching, and technology*. <http://projects.coe.uga.edu/epltt/> (last accessed 7/4/2017)

⁷³² Smith, L. (2005) *Critical Readings on Piaget*. Routledge: Taylor & Francis e-Library

⁷³³ von Glasersfeld, E. (1989) Facts and the Self from a Constructivist Point of View, *Poetics*, Vol. 18(4–5); Pp: 443

⁷³⁴ von Glasersfeld, E. (1995) *Radical constructivism: A way of knowing and learning*. Falmer Press: London; Pp: 1-2; 63

⁷³⁵ von Glasersfeld, E. (2001) The radical constructivist view of science. In A. Riegler (Ed.) *Foundations of Science, special issue on "The Impact of Radical Constructivism on Science"*, Vol. 6(1–3); Pp: 31–43

contextual cues affect the construction and content of autobiographical narratives, broader sociocultural norms also have a wide-ranging influence on various aspects of the constructive process as well as the content of those constructions. The fact that individuals are situated within various social contexts (broad and narrow) and develop within those contexts, means that those contexts will have a significant influence on self-concept and identity. For example, our social roles (e.g. professional occupations) or our social standing (i.e. our standing among various social circles) more or less determines our social identities. There are also developmental (i.e. socialisation) and evaluative norms specific to culture and history that govern how we evaluate others, how others evaluate us, how we evaluate ourselves and how we process this information in the construction of our personal identity (i.e. who we are as persons or selves). However, while social context is highly influential, its influence does not exist in isolation nor is it independent of factors internal to the individual. In fact, social context can only be influential to the extent that internal mechanisms allow it to be influential. Shaun Gallagher aptly captures this idea by describing the self (more specifically, the embodied aspects of *phronesis*) as “endogenously” intersubjective.⁷³⁶

The notion that the self is endogenously intersubjective means that it is not just constrained or conditioned from the outside by its social environment, but is social from the inside out. And only by being intersubjective from the inside out, in a primary way, is it possible for it to be significantly social from the outside in, and subject to the constraints and conditions of social life. (Gallagher, 2007; Pg. 201)

This implies that an adequate theory of the self cannot be predicated on a dichotomy between social constructionist and constructivist theories of the self (as I argued in the previous chapter). The issue here is analogous to the problematic dichotomy between situationism and narrative agency (discussed in an earlier section of this chapter) where I argued that neither situationism nor narrative agency alone, is sufficient to explain our decisions and actions. Here I would argue analogously that neither social constructionism, nor constructivism alone, is sufficient to explain the nature of the human self, how it emerges during development, and how it persists and declines throughout one’s life. Broadly speaking, the idea of construction in narrative constructivism must be understood intersubjectively, and in this regard it highlights the relevance of Vygotsky’s social constructivist theory (and perhaps to a lesser extent Bartlett’s constructivist theory of remembering discussed above).

As discussed in Chapter 1, Vygotsky posits that learning and cognitive development are facilitated by social/environmental scaffolding. A child’s existing capabilities can be developed further by the

⁷³⁶ Gallagher, S. (2007) Moral Agency, Self-Consciousness, and Practical Wisdom, *Journal of Consciousness Studies*, Vol. 14(5); Pp: 199–223

presence of appropriate social guidance (such as parental guidance and formal teaching) and the use of physical artefacts (such as toys, books and tools). Learning and development are streamlined when a child is socially embedded within the “zone of proximal development” (ZPD). The ZPD is essentially a locus of intersubjectivity where development and learning cannot be solely attributed to the individual or their social surroundings alone. As children grow up and develop into mature adults they can, as agents, consciously seek out the right kind of social environments that scaffold further learning and development. Similarly, the construction of self-concept and social identity can be thought of as being scaffolded by social interaction and social embeddedness. This is particularly important during adolescent socialisation as discussed in the previous chapter. By obtaining and integrating relevant information from social situations with our existing store of autobiographical knowledge (e.g. interacting with other people and reflecting on our social roles, whether consciously or unconsciously), we can construct more accurate, detailed, complex and meaningful self-concepts and narrative identities.⁷³⁷ The narrative agent does not act or construct in a social vacuum but they are still authors who narrate and enact the story of their narrative identity.

However, like social constructionist theories of selfhood, a social constructivist account might attribute construction of narrative identity to the sociolinguistic/hermeneutical practices that take place within social/interpersonal contexts. This would suggest that both theories give primacy to personal level sociocultural and folk-psychological explanations over sub-personal level neurobiological and neurocognitive explanations while also assuming their independence. Narrative constructivism, however, aims at integrating both personal and sub-personal levels of explanation (i.e. phenomenology/content of narratives and neurocognitive functions/substrate) and assumes their interdependence. It integrates elements from various other constructivist and social constructionist frameworks into a general theoretical framework that captures all the relevant dimensions of sociobiographical selfhood. It also describes how such a self is constituted and constructed in the context of human lifespan development and can be understood as an elaboration upon the neuroconstructivist framework I discussed in the previous chapter.

It is worth pointing out that narrative constructivism shares some commonality and consistency with a popular and influential view in the philosophy of social science known as “critical realism”.^{738 739} Firstly, it shares with critical realism, the view that ontology does not reduce to epistemology (an idea

⁷³⁷ The phenomenon of collective or collaborative memory, which I discussed in an earlier section of this chapter, is a case in point

⁷³⁸ Bhaskar, R. A. (1975) A Realist Theory of Science, *Philosophical Quarterly*, Vol. 26(104); Pp: 284-285

⁷³⁹ Bhaskar, R. A. (1978) The Possibility of Naturalism, *British Journal for the Philosophy of Science*, Vol. 33(4); Pp: 444-48

often assumed by radical constructivists and social constructionists). Secondly, it shares with critical realism, the view that differentiated social structures exist and that human agency is a necessary determinant of those social structures. However, it does not share with critical realism, the view that social structure is a necessary precondition of human agency. Rather, drawing from the neuroconstructivist framework, it proffers a more nuanced view about determinative versus permissive roles that the broader environment plays (which may include either micro or macro social structures), and the unidirectional and bidirectional influences that shape development of human agency during ontogeny.⁷⁴⁰

From Neuroconstructivism to Narrative Constructivism

Just as diachronic agency is necessary for practical reason, narrative agency is necessary for autobiographical reasoning. We can understand the development of our capacity for narrative agency and autobiographical reasoning broadly in terms of the same neuroconstructivist framework applied to the development of the minimal human self as discussed in the previous chapter. The capacities associated with the minimal human self are precisely the ones that are necessary for autobiographical reasoning (i.e. reflective self-awareness, autobiographical-episodic memory, language, mental time-travel and offline cognition). The minimal human self is essentially a rudimentary narrative agent capable of very basic autobiographical reasoning and poised to construct more complex narrative identities as it becomes more and more embedded within broader and increasingly complex social contexts. A recent neurobiological study by D'Argembeau et al (2014) indicates that autobiographical reasoning (as distinct from autobiographical recall)⁷⁴¹ is underpinned by a left-lateralized network which includes the dorsal medial prefrontal cortex (MPFC), inferior frontal gyrus, middle temporal gyrus and angular gyrus. Interestingly, their study also indicated that individual differences in the willingness or disposition to perform autobiographical reasoning is associated with differential activation of the ventromedial prefrontal cortex (VMPFC). Participants who had a higher disposition to engage in autobiographical reasoning showed greater activation of the VMPFC when reflecting on the importance and meaning of their self-defining memories.

⁷⁴⁰ Those ideas were discussed in Chapter 3. However, any further explication of the relationship between narrative constructivism and critical realism is beyond the scope of my thesis.

⁷⁴¹ Autobiographical reasoning is defined as reflecting on the importance and meaning of self-defining memories. See D'Argembeau, A., Cassol, H., Phillips, C., Balteau, E., Salmon, E. and Van der Linden, M. (2014) Brains creating stories of selves: the neural basis of autobiographical reasoning, *Social Cognitive and Affective Neuroscience*, Vol. 9(5); Pp: 646-52

This is not a surprising result given the VMPFC's role in processing the affective significance of autobiographical memory, which is crucial for both mental time-travel (MTT)⁷⁴² and the evaluation of autobiographical memory/information (which is what autobiographical reasoning is primarily concerned with).⁷⁴³ Furthermore, the development of the VMPFC and autobiographical reasoning during childhood and adolescence are associated with increased cortical density in the VMPFC and cortical thinning in the anterior insula,^{744 745 746} and structural/functional connections between the VMPFC and the amygdala.^{747 748 749} D'Argembeau et al (2014) make the pertinent point that "autobiographical reasoning and the construction of personal narratives go beyond mere remembering in that they require deriving meaning and value from past experiences".⁷⁵⁰ This highlights the importance of the affective component of autobiographical-episodic memory and imaginative prospection in MTT, which as discussed in earlier chapters, confer on us a felt experience of unity and identity over time (i.e. an embodied diachronic self). This is what enables us to identify with our experiences of the past, present and future and is the phenomenological basis on which we construct a narrative and hermeneutical understanding of ourselves.

Additionally, social/cultural factors that shape socialisation throughout childhood and adolescence also influence the development of autobiographical reasoning capacity. For example, Habermas (2010) describes how social interaction within familial contexts during adolescence confers them with a concept of biography. Adolescent autobiographical reasoning is facilitated by drawing parallels

⁷⁴² Benoit, R. G., Szpunar, K. K. and Schacter, D. L. (2014) Ventromedial prefrontal cortex supports affective future simulation by integrating distributed knowledge, *Proceedings of the National Academy of Sciences*, Vol. 111(46); Pp: 16550-16555

⁷⁴³ D'Argembeau, A. (2013) On the Role of the Ventromedial Prefrontal Cortex in Self-Processing: The Valuation Hypothesis, *Frontiers in Human Neuroscience*, Vol. 7(372); Pp: 1-13

⁷⁴⁴ Fandakova, Y., Selmechzy, D., Leckey, S. Grimm, K. J., Wendelken, C. Bunge, S. A. and Ghetti, S. (2017) Changes in ventromedial prefrontal and insular cortex support the development of metamemory from childhood into adolescence, *Proceedings of the National Academy of Sciences*, Vol. 114(29); Pp: 7582-87

⁷⁴⁵ Shaw, P., Greenstein, D., Lerch, J., Clasen, L., Lenroot, R., Gogtay, N., Evans, A., Rapoport, J. and Giedd, J. (2006) Intellectual ability and cortical development in children and adolescents, *Nature*, 440(7084); Pp: 676–679

⁷⁴⁶ Hebscher, M., Barkan-Abramski, M., Goldsmith, M., Aharon-Peretz, J. and Gilboa, A. (2016) Memory, decision-making, and the ventromedial prefrontal cortex (vmPFC): The roles of subcallosal and posterior orbitofrontal cortices in monitoring and control processes, *Cerebral Cortex*, Vol. 26(12); Pp: 4590–4601

⁷⁴⁷ Gabard-Durnam, L. J., Flannery, J., Goff, B., Gee, D. G., Humphreys, K. L. Telzer, E., Hare, T. and Tottenham, N. (2014) The development of human amygdala functional connectivity at rest from 4 to 23 years: A cross-sectional study, *NeuroImage*, Vol. 95; Pp: 193-207

⁷⁴⁸ Jalbrzikowski, M., Larsen, B., Hallquist, M. N., Foran, W., Calabro, F. and Luna, B. (2017) Development of White Matter Microstructure and Intrinsic Functional Connectivity Between the Amygdala and Ventromedial Prefrontal Cortex: Associations With Anxiety and Depression, *Biological Psychiatry*, Vol. 82(7); Pp: 511-521

⁷⁴⁹ Fandakova, Y., Selmechzy, D., Leckey, S. Grimm, K. J., Wendelken, C. Bunge, S. A. and Ghetti, S. (2017) Changes in ventromedial prefrontal and insular cortex support the development of metamemory from childhood into adolescence, *Proceedings of the National Academy of Sciences*, Vol. 114(29); Pp: 7582-87

⁷⁵⁰ D'Argembeau, A., Cassol, H., Phillips, C., Baiteau, E., Salmon, E. and Van der Linden, M. (2014) Brains creating stories of selves: the neural basis of autobiographical reasoning, *Social Cognitive and Affective Neuroscience*, Vol. 9(5); Pg. 646

between their own and their parent's lives, though parents can also guide autobiographical reasoning by informing their children of their distant past (which the children themselves may be unable to remember).⁷⁵¹ Therefore, development of the capacity for autobiographical reasoning, and thus development of narrative agency, is closely associated with development of both neural structures (such as the VMPFC and amygdala) as well as socialisation outcomes during childhood and adolescence. It is during this developmental period that children and adolescents begin to apply autobiographical reasoning to construct coherent autobiographical narratives, which will have the relevant structure, coherence and content, while also reflecting their individual differences so as to constitute their unique narrative identities.

Therefore, broadly speaking, narrative identities that emerge during childhood and adolescence are the result of neuroconstructive processes, where neural development in conjunction with social interaction are necessary for the development of the capacity to perform autobiographical reasoning (i.e. narrative agency) and apply it towards the construction of their narrative identities. In this regard, narrative constructivism during childhood and adolescence is broadly consistent with neuroconstructivism. However, as development proceeds into emerging adulthood and the relevant neural structures have matured, one's narrative identity is shaped by a more stable and developed capacity for narrative agency and autobiographical reasoning. It is during this stage that development of one's narrative identity is more accurately understood as a constructive process in the literal sense, rather than being the outcome of a natural developmental progression. Narrative constructivism is therefore the main force behind the construction of one's narrative identity during emerging adulthood and beyond, rather than neuroconstructivism *per se*. It can be understood as a specific instance of what Paul Baltes refers to as "biocultural co-constructivism", which is the idea that "brain, behavior, and culture are a reciprocal and interactive system of influences, mechanisms, and outcomes, with each being affected by the other – in the past, the present, and the future."⁷⁵²

In addition to drawing on and elaborating on existing frameworks, narrative constructivism also integrates several theories and perspectives on selfhood and self-related phenomena discussed in this and previous chapters. Narrative constructivism is predicated on the view that one's narrative identity is the essence of human selfhood and thus implies a narrative theory of self (like those discussed in the previous section), which turns out to be quite congenial to the naturalist and neurocognitive

⁷⁵¹ Habermas, T. (2010) Autobiographical reasoning: Arguing and narrating from a biographical perspective. In T. Habermas (Ed.) *The development of autobiographical reasoning in adolescence and beyond*, *New Directions for Child and Adolescent Development*, Vol. 131; Pp: 9-10

⁷⁵² Baltes, P. B., Reuter-Lorenz, P. A. and Rosler, F. (2006) *Development and the Brain: The Perspective of Biocultural Co-Constructivism*. Cambridge University Press: New York; Pg. 6

perspectives discussed in Chapter 1. Hence, I had suggested that the first-person pronoun “I” can be thought of as an abstract and linguistic representation of both the experience of Metzinger’s phenomenal self-model (PSM) and Dennett’s “centre of narrative gravity”. I also suggested that we should regard basic subject/predicate statements like “I am hungry” as basic forms of narrative or as elements of narrative. Like the first-person pronoun “I”, those narrative elements are also abstract and linguistic representations of instances of the PSM or “centre of narrative gravity” but they are representations *in context* and with propositional content. For example, “I am” represents the phenomenology of simply being. “I am hungry” represents the phenomenology of being in a particular state associated with the phenomenology or propositional content of “hunger”. The “I” on its own is an undeveloped fictional protagonist, but the “I” in “I am hungry” represents an elaboration on this fictional protagonist such that it begins to take on a conceptual and hermeneutical nature.

Of course, such narrative elements are not sufficient to constitute our narrative identity. They are merely instances of synchronic narratives and further elaboration and integration of those narratives is necessary to yield a more developed and hermeneutical fictional protagonist with a diachronic narrative identity. Thus, we can think of narrative constructivism as a process by which various synchronic instances of PSM *in context*, are integrated and represented in diachronic autobiographical form. In other words, narrative constructivism describes the way in which synchronic instances of PSM are integrated and identified with past, present and future instances of PSM in the construction of our autobiographical narratives. This idea is closely related to the function of Damasio’s “autobiographical self” (discussed in Chapter 1), which consists in “pulses of core self” tied together by what I have described as the linguistic and hermeneutical norms that guide the construction of our diachronic narrative identities in narrative constructivism.

It should be noted that there is a major point of difference between narrative constructivism and Dennett’s narrative theory. According to Dennett’s theory, the self is essentially an epiphenomenon of physical or mechanical processes and not an agent (or author) of narrative construction. However, this is not the view that narrative constructivism proffers. As I discussed at the start of this chapter, our sense of personal identity is closely entwined with how we make decisions as diachronic agents. This is why Korsgaard uses the phrase “practical identity” and why Atkins uses the phrase “narrative identity” (which describes more specifically how our capacity for diachronic agency is entwined with our sense of personal identity). Therefore, I suggested that diachronic agency can be understood more broadly so as to also include the way in which we organise and make sense of autobiographical information/memory (i.e. as a form of conceptual or mental normative self-government). This is how we construct a diachronic and hermeneutical sense of personal identity (i.e. a narrative identity) and

I referred to it as our capacity for “narrative agency”. Therefore, contrary to Dennett, I would agree with Velleman that the fictional protagonist in Dennett’s theory must also be “an inner locus of agential control”.⁷⁵³ This is why I argued that Dennett’s theory is more appropriately understood as a theory that describes an *undeveloped* fictional protagonist. Such an undeveloped fictional protagonist is not constructed by an antecedent fictional protagonist as author or agent, but is instead “spun” from developmental processes during early childhood that yield a minimal human self.⁷⁵⁴ In contrast, the notion of narrative identity describes a more *developed* or “determinate” fictional protagonist that emerges out of processes of narrative constructivism (or “auto-hermeneutics” to use Dennett’s term).

The idea of the self as a fictional protagonist or an abstraction belies the fact that the cognitive mechanisms underpinning our narrative identity are the same mechanisms that underpin our capacity for diachronic agency. In Chapter 2, I described how a temporally extended self (a diachronic self) emerges from mechanisms that integrate synchronic embodied self-awareness with autobiographical-episodic memory during mental time-travel (MTT). Those mechanisms are also part of the same mechanisms that underpin diachronic agency, which is expressed in the way we think, reason, plan and make decisions (i.e. normative self-government). For these reasons and others discussed above, diachronic agency and narrative identity appear to be entwined and so we might consider them to be two sides of the same coin. Narrative constructivism captures this idea and I discuss this in more detail in the following and final section of this chapter.

Unity of Embodied Agency and Narrative

The notion that diachronic agency and narrative identity are entwined does not imply that dissociations cannot occur. Recall that on Schechtman’s view, the narrative identities that we construct are self-constituting in virtue of how they organise and unify our conscious subjective experiences. This in turn confers unity of personhood or selfhood and thus persistence of personal identity on an individual. However, Schechtman also describes certain kinds of individuals who lack diachronic agency in virtue of lacking a deeper sense or meaning or purpose to their lives, yet still appear to retain their narrative identity in virtue of being unified subjects of conscious experience. For example, she cites Albert Camus’s “Myth of Sisyphus”, which describes the possibility of someone living a life that has no meaning or direction, implying a lack of diachronic agency, yet still having value

⁷⁵³ I would add that our narrative identities also shape the character and expression of our narrative agency.

⁷⁵⁴ In other words, an undeveloped fictional protagonist is essentially a minimal human self.

derived from the raw fact of having conscious experiences at any moment in time, which they identify with.^{755 756}

Camus's picture... shows how much we care about being perpetuated into the future as the same experiencing subject. The subject who is conscious now wants to act, and wants meaning, but she also just plain wants to be there in the future, with or without purpose. (Schechtman, 2005; Pg. 21)

We know people in general view their lives as having varying degrees of meaning and significance, ranging from the grander type of meaning, typically assumed in hermeneutical theories, to the more mundane sense of meaning associated with the relatively banal activities of the daily lives of the "average Joe". The latter do not live in accordance with any grand diachronic theme or holistic view of their life but instead live what one might regard as a more synchronically orientated life focused on relatively synchronic goals (such as pulling weeds or catching a train to work).^{757 758} One might also include in this category, the kind of person who is deeply conflicted, whose decisions and actions are often not diachronically meaningful or significant, and whose life often falls short of the expectations associated with diachronic agency (much like the anti-heroes depicted in fiction). Such individuals may lack diachronic agency or may not function as diachronic agents, but there is no reason to think they are unable to view themselves in the past and future as the same experiencing subject and thus having some sort of narrative identity. Schechtman thus views the relationship between unity of subjective experience and diachronic agency, as either one of mutual interdependence,⁷⁵⁹ or one in which the former is a necessary precondition for the latter.⁷⁶⁰

In contrast, recall that Korsgaard views diachronic agency as necessary and sufficient for persistence of personal identity. As discussed previously, her view is one that comes from taking a "practical standpoint" on the matter, which suggests that she does not deny that a unified subject of conscious

⁷⁵⁵ Schechtman, M. (2005) Experience, Agency, and Personal Identity, *Social Philosophy & Policy Foundation*, Vol. 72(2); Pg. 20-21

⁷⁵⁶ Schechtman, M. (2014) *Staying Alive: Personal Identity, Practical Concerns, and the Unity of a Life*. Oxford University Press: UK

⁷⁵⁷ Schechtman, M. (2011) The Narrative Self. In Gallagher, S. (Ed) *The Oxford Handbook of the Self*. Oxford University Press; Pp: 402-403

⁷⁵⁸ This is essentially the same idea that Galen Strawson refers to when he describes the value of the life of an "episodic" as opposed to the life of a "diachronic". See Strawson, G. (2004) *Against Narrativity*, *Ratio*, Vol. 17(4); Pg. 428-52

⁷⁵⁹ Schechtman, M. (2005) Experience, Agency, and Personal Identity, *Social Philosophy & Policy Foundation*, Vol. 72(2); Pg. 1-24

⁷⁶⁰ Schechtman, M. (2014) *Staying Alive: Personal Identity, Practical Concerns, and the Unity of a Life*. Oxford University Press: UK

experience exists (i.e. from a “theoretical standpoint”), but denies its relevance to unity of personhood or selfhood and the persistence of personal identity.^{761 762}

From the theoretical standpoint, an action may be viewed as just another experience, and the assertion that it has a subject may be, as Parfit says, "because of the way we talk." But from the practical point of view, actions and choices must be viewed as having agents and choosers. This is what makes them, in our eyes, our own actions and choices rather than events that befall us... this does not mean that our existence as agents is asserted as a further fact, or requires a separately existing entity that should be discernible from the theoretical point of view... (Korsgaard, 1989; Pg. 120-21)

Nevertheless, I think Schechtman makes a compelling case for the relevance and necessity of the unity of subjective experience for diachronic agency. Like Korsgaard, practical considerations are also a crucial part of her view, but this goes further than taking a “practical standpoint”. Schechtman argues that practical considerations bear on the theoretical or metaphysical questions about personal identity because they presuppose the existence of a more basic metaphysical entity.⁷⁶³ More specifically, she claims that diachronic agency presupposes a “point of contact between practical and metaphysical questions”, which she describes as a “forensic locus” or a “forensic unit”. This “forensic unit” is typically constituted by a subject that is unified in virtue of having the relevant psychological continuity and psychological connections over time that are a precondition for diachronic agency.⁷⁶⁴ She offers a hypothetical example involving a subject Kate who has her cerebrum transplanted into Juliet’s body to yield a “KJ”. It seems we only have reason to believe that Kate’s diachronic agency persists through to KJ if there is some relevant connection between Kate and KJ. It seems that this connection can only exist in virtue of the psychological continuity and connectedness that is conferred by the cerebrum transplant from Kate to KJ⁷⁶⁵

...to have the kinds of psychological connections required to be in a position to integrate and coordinate conscious action is not the same as already to have integrated and coordinated

⁷⁶¹ Korsgaard, C. M. (1989) Personal Identity and the Unity of Agency: A Kantian Response to Parfit, *Philosophy and Public Affairs*, Vol. 18(2); Pp: 101-132

⁷⁶² Korsgaard has stated that “self-constitution is not a state that we achieve and from which action then issues... it is action itself”. See Korsgaard, C. M. (2009) *Self-Constitution: Agency, Identity, and Integrity*. Oxford University Press; Pg. 44

⁷⁶³ Schechtman has referred to this as the “Dependence Model” of the relationship between practical and metaphysical or theoretical considerations. She distinguishes it from the “Strong Independence Model”, which describes Korsgaard’s view. See Schechtman, M. (2014) *Staying Alive: Personal Identity, Practical Concerns, and the Unity of a Life*. Oxford University Press: UK

⁷⁶⁴ Schechtman, M. (2014) *Staying Alive: Personal Identity, Practical Concerns, and the Unity of a Life*. Oxford University Press: UK; Pg. 57

⁷⁶⁵ Ibid. Pp: 57-61

that action. One can be in a cognitive position to do so but remain so hopelessly ambivalent and conflicted that agency is undermined. (Schechtman, 2014; Pg. 60-61)

This argument suggests that unity of subjective experience is a precondition for diachronic agency and provides a theoretical basis for the idea that it is possible to be a unified subject of conscious experience without being a diachronic agent. Some potential examples were mentioned above, i.e. Albert Camus, the “average Joe” and the conflicted anti-hero. However, I think it could be argued that such individuals do not really lack diachronic agency in any substantive sense. For example, they could be merely choosing not to express their diachronic agency or perhaps they are unable to express it due to extraneous circumstances. Consider, for example, the person who shares Camus’s view about the absurdity of our diachronic ideals/values and wishes to forego them in order to find contentment or happiness from the apparent meaninglessness of life.⁷⁶⁶ Such a person may not live the kind of integrated life that a diachronic agent would typically live but they seem to have made a conscious decision to do so. The same thing can be said about the average Joe who sees no need to live their life according to the grander themes or deeper meanings that hermeneutical theorists assume our lives as a whole are oriented towards. One could argue (somewhat ironically) that this is itself an expression of diachronic agency.

We can see this by considering the fact that this way of living does not necessarily come automatically or by default but is likely to require a certain amount of conscious effort and unity of *will* over a period of time (though perhaps becoming less effortful or wilful eventually). It is important to understand what it means to wilfully live in such a manner. In Kantian terms, the *will* is something that is governed by reason and expressed through one’s maxims (the subjective principles that guide our actions). The example of Camus, those inspired by him, and perhaps the “average Joe”, describes the way that one might adopt a maxim of living a synchronic life instead of a diachronic one. In these cases, it appears that their apparent lack of diachronic agency is an expression of their *will*, which is indeed an expression of their capacity for diachronic agency. When it comes to the conflicted anti-hero, one could argue that they retain a capacity for diachronic agency but that its expression is typically a great struggle for them. Their lives are beset by various extraneous circumstances that seem to constantly thwart their diachronic goals, and various beliefs and values that conflict with their diachronic values. As a result, they live a discontented and bittersweet life characterised by having to continuously grapple with various conflicts.

⁷⁶⁶ This possibility leads Camus to claim that “one must imagine Sisyphus happy” - Sisyphus being a character in Greek mythology condemned to forever repeat the task of pushing a boulder up a mountain only to see it roll down again. See Camus, A. (1961) *The Myth of Sisyphus*. New York: Vintage Books; Pg. 91

This is not to suggest that such individuals are in fact diachronic agents, but it does suggest that we need a nuanced understanding of what is going on in those cases. Specifically, we need a more fine-grained understanding of diachronic agency, one that enables us to distinguish between the cognitive capacity for diachronic agency and its application in action and decision making (i.e. normative self-government). This is essentially the kind of distinction that Noam Chomsky made between linguistic *competence* and *performance*. The former refers to our knowledge of the rules of grammar and the latter refers to how we make use of this knowledge in practice while under the influence of various cognitive limitations and interfering factors.⁷⁶⁷

Linguistic theory is concerned primarily with an ideal speaker-listener, in a completely homogeneous speech-communication, who know its (the speech community's) language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his knowledge of this language in actual performance. (Chomsky, N. 1965; Pg. 3)

This distinction constitutes an important foundation in cognitive psychology, allowing us to delineate between theories that characterize how conceptual systems are represented in the mind (i.e. *competence*) and those which attempt to account for actual observed behaviour (i.e. *performance*).⁷⁶⁸ With this distinction in mind, it seems more accurate to describe the person inspired by Camus, the “average Joe” and the conflicted anti-hero, as demonstrating a lack of diachronic agency only in terms of actual observed behaviour, i.e. an inability to *perform* as a diachronic agent (or in the case of the person inspired by Camus and “average Joe”, a desire not to *perform* as a diachronic agent). It does not imply that they lack the capacity to represent their diachronic nature in their minds, i.e. that they lack *competence* in diachronic agency. I think Schechtman’s claim that those individuals are unified subjects of conscious experience speaks to the idea that they still possess the cognitive capacity for diachronic agency or the capacity to represent their diachronic nature in their minds. In fact, unity of conscious subjective experience is a function of the capacity to mentally represent one’s diachronic nature, which suggests that *competence* in diachronic agency is constituted by the very unity of conscious subjective experience.

This helps us to make sense of those who lack diachronic agency in a more fundamental sense due to a lack of relevant cognitive capacities (i.e. *competence*). For example, as discussed in Chapter 2, young children (under the age of three to four) who are not diachronic agents, are at a developmental stage

⁷⁶⁷ Chomsky, N. (1965) *Aspects of the Theory of Syntax*. Cambridge, MA: MIT Press

⁷⁶⁸ Pylyshyn, Z. W. (1972) The Role of Competence Theories in Cognitive Psychology, *Journal of Psycholinguistic Research*, Vol. 2(1); Pg. 22

in which they have yet to develop autobiographical memory or a temporally extended sense of self. Other examples include those with various kinds of dynarrativia (e.g. Korsakov's syndrome, Alzheimer's disease, amnesia) caused by neurological deficits that manifest as pathologies of memory and identity, and result in the fragmentation and disunity of conscious subjective experience.⁷⁶⁹ A somewhat contentious example is that of psychopaths and those with damage to the ventromedial prefrontal cortex (sometimes referred to as "acquired sociopaths"). What seems to stand out most about such individuals is their impulsivity and apparent lack of prudential concern for their future. Jeanette Kennett, has written extensively on this topic and attributes their deficits of diachronic agency to a lack of a temporally extended self.^{770 771 772 773}

As discussed in Chapter 2, normative self-government or decision making in general, requires the capacity to reason in a decontextualised and procedurally rational way. This is achieved through performing mental time-travel (MTT), which enables us to mentally carry ourselves forward in time and mentally rehearse the activity and behaviour that we would perform in real-time and in context. Not only does this enable us to imagine potential outcomes of our decisions, it also enables us to evaluate them in light of the affective responses associated with those imagined outcomes. I also discussed the role of language as necessary for conceptual thought and metarepresentation. More specifically, it is the combinatorial and recursive operations associated with language that enable us to represent various sequences of events, scenarios, and possibilities, which can in turn be combined and recombined in multiple ways over and over again to create new, updated and more complex thoughts. As those thoughts become more complex and detailed, they take on a narrative form. On the one hand, this is precisely how a more complex conceptual and hermeneutical sense of self-awareness (i.e. a narrative identity) arises. On the other hand, those narratives represent various kinds of actual or imagined scenarios, as well as our evaluations of them, and thus underpin our capacity to perform hypothetical reasoning in the service of decision making and normative self-government. Such narrative representations are clearly a necessary precursor of the actions we perform as diachronic agents, which are also actions that express our narrative identity. Therefore, in performing

⁷⁶⁹ Young, K. and Saver, J. L. (2001) The Neurology of Narrative, *SubStance*, Vol. 30(1); Pp: 72-84

⁷⁷⁰ Kennett, J. (2002) Autism, Empathy and Moral Agency, *The Philosophical Quarterly*, Vol. 52(208); Pg. 356

⁷⁷¹ Fine, C. and Kennett, J. (2004) Mental Impairment, Moral Understanding and Criminal Responsibility: Psychopathy and the Purposes of Punishment, *International Journal of Law and Psychiatry*, Vol. 27(5); Pp: 425-43

⁷⁷² Kennett, J. and Matthews, S. (2009) Mental Time Travel, Agency, and Responsibility. In Broome, M. R. and Bortolotti, L. (Eds) *Psychiatry as Cognitive Neuroscience: Philosophical Perspectives*. Oxford: Oxford University Press

⁷⁷³ Gerrans, P. and Kennett, J. (2010) Neurosentimentalism and Moral Agency, *Mind*, Vol. 119(475); Pp: 585-614

MTT, we are not so much *acting* as diachronic agents, but rather we are *thinking* or *reasoning* as diachronic agents.

Of course, thinking or reasoning is a mental activity, which from a “practical stance” can be conceived of as inherently connected with activity or the intention to act (especially in the context of decision making).⁷⁷⁴ However, I would argue that it is possible to think or reason without acting on those thoughts, whether it is because we decided not to act, we were unmotivated to act, we were reasoning hypothetically, or whether certain circumstances prevented us from acting. Analogously, thinking that one is a temporally extended and unified subject of conscious experiences (i.e. a diachronic self) can be distinguished from acting as a diachronic agent, as exemplified by the kinds of individuals I described above. Nevertheless, it is often the case that our actions as diachronic agents serve to facilitate and reinforce our thoughts about ourselves. They can make us more deeply aware of our diachronic nature, in the same way that experiencing something personally gives us a deeper understanding and appreciation of it, as opposed to knowing it in an abstract sense or imagining it. The expression of our diachronic agency is a normative requirement for the kinds of lives that we strive for, and as Schechtman points out, it is from such “practical exigencies of living” that our diachronic selves typically arise and develop.⁷⁷⁵ This is why there appears to be an inextricable link between diachronic agency and the unity of subjective experience, both of which are associated with having a narrative identity. Thus, typically speaking, they are interdependent, though I think their boundaries can be delimited in the ways that I have discussed in this section.

Conclusion

In the previous chapter, I introduced and described the broad notion of the sociobiographical self, which I argued is how we should understand human selfhood in its mature and fully developed form. In this chapter, I focused more narrowly on the role that the individual plays in constituting their sociobiographical selfhood. I began by describing the developmental progression from minimal human selfhood to sociobiographical selfhood as a transition from reflexivity to narrativity. Such a progression results in the emergence of a more complex form of self-awareness that forms the basis of our

⁷⁷⁴ This idea forms the basis of the notion of practical reason which is understood as reasoning that is practical “in its issue” insofar as the reasoner is a rational agent. See Wallace, R. Jay, “Practical Reason”, The Stanford Encyclopedia of Philosophy (Spring 2018 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/spr2018/entries/practical-reason/> (last accessed 20/02/19)

⁷⁷⁵ Schechtman, M. (2005) Experience, Agency, and Personal Identity, *Social Philosophy & Policy Foundation*, Vol. 72(2); Pg. 23

hermeneutical sense of personal identity. This sense of personal identity exists in the form of autobiographical narratives and I argued that the individual, as a diachronic agent (or more specifically as a narrative agent), plays a central role in the construction of those autobiographical narratives. Those autobiographical narratives in turn influence the way in which individuals express their diachronic and narrative agency, which implies that diachronic agency and a sense of personal identity are closely associated. Indeed, I argued they are more or less entwined, constituting two sides of the same coin so to speak. I've used the notion of "narrative identity" to capture this idea.

In the second section of this chapter, I discussed several prominent theories of narrative selfhood. Though they each view human selfhood as constituted by autobiographical narratives, they address different questions relating to narrative selfhood and thus offer slightly different perspectives on narrative selfhood. My aim was to use those perspectives to highlight some of the most important dimensions of narrative selfhood and integrate them into a broader theoretical framework for understanding human selfhood and its construction. One of those is Dennett's theory, which describes human selves as the fictional protagonists of narratives that emerge (are "spun") from processes that, in and of themselves, do not constitute selfhood. Such processes are essentially pre-hermeneutical and hence there is no "author" that constructs those narratives. However, such a theory does not capture the idea of narrative identity, which describes individuals as narrative agents and thus authors of their own narrative identity. Thus, I argued that Dennett's theory is more suited to describing the emergence of minimal human selves rather than sociobiographical selves whose narrative identities emerge from the auto-hermeneutical construction of autobiographical narratives that describe a more developed or "determinate" fictional protagonist.

Narrative theories of selfhood that capture both the agential and hermeneutical aspects are therefore more congenial to the notion of narrative identity. Those theories typically assume that there is a grand thematic unity to the autobiographical narratives that constitute sociobiographical selves. Such a unity implies that our lives and the autobiographical narratives we construct are meaningful as a whole, which also implies a more holistic sense of diachronic agency, i.e. the actions and decisions we make can only be expressions of our diachronic agency insofar as they are relevant to those themes and to our lives as a whole. However, there is likely to be a spectrum of individual differences where such a conception of diachronic agency may apply to some more than others. Furthermore, this sets the bar too high for diachronic agency and autobiographical unity such that many would not qualify as diachronic agents or as having narrative identities (e.g. the "average Joe", the person inspired by Camus and the anti-hero). Nevertheless, such theories highlight the necessity of some form of diachronic unity in the way we live our lives and in the autobiographical narratives that we construct.

Furthermore, insofar as our selfhood is understood in this narrative sense, such unity thus confers persistence of personal identity and this is precisely what Schechtman's theory captures.

The theoretical framework I proposed in the final section of this chapter, which I've dubbed "narrative constructivism", can be understood generally as an explication of the agential, biographical and narrative dimension (i.e. narrative identity) that is central to the notion of sociobiographical selfhood. It posits that the individual plays a central role, as a socially situated narrative agent, in the construction of the autobiographical narratives that constitute its narrative identity and thus its sociobiographical selfhood. It also captures and describes the developmental progression from early childhood, in which a young child with a minimal human self and a proto-narrative identity, begins to construct their narrative identity, through to adolescence and emerging adulthood, in which they continue to construct their narrative identity while embedded within an increasingly complex psychosocial milieu. This typically culminates in the emergence of a relatively stable narrative identity in mature adulthood, constituted by a certain level of agential and autobiographical unity, which as Schechtman argues, confers them with persistence of personal identity. This is a crucial part of the framework because it provides the rationale for having egoistic or prudential self-concern and thus the rationale for the egoistic imperative for PCC.

In proposing this framework, I have also drawn from a number of existing frameworks in developmental psychology (i.e. constructivism and social constructivism), sociology (i.e. social constructionism and interactionism) and developmental cognitive neuroscience (i.e. neuroconstructivism). I have also tried to integrate a number of other perspectives discussed in earlier chapters, which describe the conceptual, embodied and phenomenological dimensions of human selfhood and their linguistic, metarepresentational, affective and neurocognitive underpinnings. On the one hand, this enables us to understand how various causal factors (internal/external and proximal/distal) shape the emergence of one's narrative identity during various developmental stages. On the other hand, it also enables us to understand the various dimensions that constitute one's sociobiographical selfhood. In this way, narrative constructivism captures broadly what it means to be a uniquely human self, one that is embodied, embedded, enacted and equipped with uniquely human cognitive capacities that enable such a self to be constructed and to persist over time.

Conclusion - What Becomes of the Self?

Introduction

I began this thesis by describing how person-centred care (PCC) has been defined as primarily concerned with promoting or maintaining continuity of self. Hence, the central aim of my thesis was to bring some clarity to the notion of selfhood understood in this specific context. I began by emphasising the need for a notion of selfhood that was relevant to human beings and offered two such notions. One describes human selfhood in its most rudimentary form (i.e. the minimal human self) and the other describes human selfhood in its developed and mature form, which consists of having a narrative identity (i.e. the sociobiographical self). The former constitutes the developmental precursor to the latter and the latter in turn constitutes the developmental precursor to the kind of selfhood that is relatively stable throughout adulthood but declines in old age. This highlights the fact that selfhood in human beings continues to develop across the lifespan, during which there are significant developmental milestones that follow a chronological order. The discussion in this thesis has thus far reflected the chronology of this developmental process, so naturally, the topic of this final chapter, selfhood in old age, proceeds accordingly.

In this chapter, I begin with a brief discussion of how human beings are affected by age-related decline, with a particular focus on the effects of normal cognitive aging. I also discuss a few prominent models or theories that explain how older people adjust and adapt so as to achieve healthy and successful aging or “aging well”. Those models are likely to be applicable to abnormal or pathological cognitive aging, of which dementia is an example, and thus might help inform or guide the way that PCC is implemented. This brings me to the main aim of this final chapter, which is to clarify our understanding of PCC, or more specifically, to clarify the notion of promoting or maintaining selfhood for people with dementia. This requires an understanding of how dementia might affect one’s narrative identity, and so in the second part of this chapter I describe some of the deficits associated with dementia and then discuss the various ways in which this might affect one’s narrative identity. I highlight three potential scenarios that may arise, one in which an individual has a diminished narrative identity, one in which an individual has lost their narrative identity but retains the capacity to construct a synchronic narrative identity, and one in which an individual lacks any narrative identity at all. The latter scenario raises the issue of whether it is still possible to promote or maintain the selfhood of such individuals and whether the ethical impetus to provide them with PCC still exists.

I take up this issue briefly in the final section of this chapter where I explain how one might provide a form of PCC for such individuals that can be understood as promoting or maintaining their personhood as distinct from their selfhood (which is no longer present). This is based on the way that selfhood and personhood are distinguished in the philosophical literature, which I discussed in previous chapters. I will argue that there is a substantive distinction to be made between promoting or maintaining continuity of selfhood versus promoting or maintaining continuity of personhood, and that both reflect two different though relevant definitions of PCC. Given that current definitions of PCC appear to treat personhood and selfhood interchangeably, this will bring further clarity to our understanding of PCC.

The Self in Old Age

Lifespan Development and Cognitive Aging

As discussed in Chapter 3, the development of minimal human selfhood during infancy and early childhood consists of both innate biological mechanisms and social/environmental interactions driving a natural process of development (or a construction in a metaphorical sense). This process fits within a neuroconstructivist framework. In contrast, the emergence of sociobiographical selfhood during adolescence and emerging adulthood consists of both agential and social factors playing a more determinative role in a process of development understood as a literal construction. While this process fits broadly within the frameworks of social constructivism and biocultural co-constructivism, the framework of narrative constructivism presented in the previous chapter, is aimed at describing specifically the construction of sociobiographical selfhood (understood in terms of a socially situated narrative identity). It is a process that continues throughout the lifespan, during which significant biological, psychological and social changes continue to occur. As agents, not only do we adapt our lives to such changes, but as narrative agents, we also adapt to them by assimilating them into the ongoing autobiographical narratives that constitute our ongoing narrative identity.

Arnett (2000) regards emerging adulthood (defined as between 18-29 years of age though varying from culture to culture) as a developmentally circumscribed period distinct from both adolescence and early or young adulthood (defined approximately as 20 years of age up to 30 or even 40 years of age on some definitions). It is a period of “relative independence from social roles and from normative expectations”, as well as a period of “identity exploration” in which a person is able to trial life’s

various possibilities, particularly in the domain of “love, work and worldviews”.^{776 777} Emerging adulthood is also a challenging and defining period, particularly in terms of identity-related decisions and preparing for the kinds of social responsibilities, roles and expectations of subsequent early adulthood. In this regard, it is considered as a relatively tumultuous period and one that carries significant risk.^{778 779} In contrast, the transition from early adulthood through to middle adulthood (defined approximately as 40-60 years of age) marks the entry point into a more stable life, characterised by “physical health, emotional maturity, a clearly defined sense of self, competence and power in the work situation, and gratifying relationships with spouse, children, parents, friends, and colleagues”.⁷⁸⁰

Despite this relative stability, it is during this period that the start of a significant biological, physical and cognitive decline is observed. This decline serves as an important and relevant characteristic of subsequent late adulthood (or “old age”), which encompasses a wide range of age brackets, including the so called “young old” (60-69 years of age), the “middle-aged old” (70-79 years of age) and the “old-old” (greater than 80 years of age).⁷⁸¹ An interesting thing to note is that in recent decades, the young-old cohort living in developed countries, despite their age-related decline, have demonstrated greater potential for mental and physical fitness compared to the young-old of previous generations.⁷⁸² They also demonstrate greater expert knowledge, wisdom and emotional intelligence than all other age groups.⁷⁸³ This has resulted in greater health, wellbeing and life expectancy in subsequent stages of old age, what some refer to as the “paradox of well-being”.^{784 785} Such positive outcomes are attributed to various socioeconomic factors (such as advancements in medicine, more

⁷⁷⁶ Arnett, J. J. (2000) Emerging adulthood: A theory of development from the late teens through the twenties, *American Psychologist*, Vol. 55(5); Pp: 469-480

⁷⁷⁷ Arnett, J. J., Zukauskienė, R. and Sugimura, K. (2014) The new life stage of emerging adulthood at ages 18-29 years: implications for mental health, *Lancet Psychiatry*, Vol. 1(7); Pp: 569-576

⁷⁷⁸ Schwartz, S. J., Tanner, J. L. and Syed, M. (2016) Emerging Adulthood. In Whitbourne, S. K. (Ed) *The Encyclopedia of Adulthood and Aging, First Edition*. John Wiley & Sons, Inc.

⁷⁷⁹ Wood, D., Crapnel, T., Lau, L., Bennett, A., Lotstein, D., Ferris, M. and Kuo, A. (2018) Emerging Adulthood as a Critical Stage in the Life Course. In: Halfon N., Forrest C., Lerner R., Faustman E. (Eds) *Handbook of Life Course Health Development*. Springer, Cham

⁷⁸⁰ Colarusso, C. A. (1992) *Middle Adulthood (Ages 40–60): Child and Adult Development. Critical Issues in Psychiatry (An Educational Series for Residents and Clinicians)*. Springer, Boston, MA

⁷⁸¹ von Humboldt, S. and Leal, I. (2014) Adjustment to Aging in late Adulthood: A Systematic Review, *International Journal of Gerontology*, Vol. 8(3); Pp: 108-113

⁷⁸² This is reflected in phrases such as “60 is the new 50”

⁷⁸³ Baltes, P. B. and Smith, J. (2003) New Frontiers in the Future of Aging: From Successful Aging of the Young Old to the Dilemmas of the Fourth Age, *Gerontology*, Vol. 49(2); Pp: 123-35

⁷⁸⁴ Krauss-Whitbourne, S. and Sneed, J. R. (2002) The paradox of well-being, identity processes, and stereotype threat: Ageism and its potential relationships to the self in later life, In Nelson, T. D. (Ed) *Ageism: Stereotyping and prejudice against older persons*. Cambridge, MA: The MIT Press; Pp: 247-276

⁷⁸⁵ Hansen, T. and Slagsvold, B. (2012) The age and subjective well-being paradox revisited: A multidimensional perspective, *Norsk Epidemiologi*, Vol. 22(2); Pp: 187-95

access to resources and support systems) and latent cognitive potential applied towards adapting and adjusting to changing conditions and continued positive self-development.^{786 787 788} However, this phenomenon is not generalisable to people in the older age groups (i.e. the middle-aged and old-old), who as a result of living longer will develop a marked decrease in mental and physical health. This group is characterised by high levels of frailty and multiple comorbidities,^{789 790} and significantly decreased cognitive function as a result of both normal cognitive aging^{791 792} and abnormal or pathological cognitive aging (particularly dementia).⁷⁹³ This decline can also lead to decreased well-being and life satisfaction, increased loneliness and loss of human dignity, all of which can negatively impinge upon their sense of self or identity.⁷⁹⁴

Research into normal cognitive aging has revealed that certain cognitive functions remain relatively preserved while others decline. For example, what psychologists refer to as “crystallised” intelligence, which refers to knowledge, skills and abilities that are well-learned, well-practiced, and familiar to the individual, is unaffected in normal cognitive aging.^{795 796} This is attributed to preservation of capacities

⁷⁸⁶ Baltes, P. B. and Baltes, M. M. (1990) Psychological perspectives on successful aging: The model of selective optimization with compensation. In Baltes, P. B. and Baltes M. M. (Eds) *Successful aging perspectives from the behavioural sciences*. New York, NY: Cambridge University Press; Pp: 1–34

⁷⁸⁷ Swift, H. J., Vauclair, C-M., Abrams, D., Bratt, C., Marques, S. and Lima, M-L. (2014) Revisiting the Paradox of Well-being: The Importance of National Context, *The Journals of Gerontology: Series B*, Vol. 69(6); Pp: 920–29

⁷⁸⁸ Carstensen, L. L., Fung, H. and Charles, S. T. (2003) Socioemotional selectivity theory and the regulation of emotion in the second half of life, *Motivation and Emotion*, Vol. 27(2); Pp: 103–123

⁷⁸⁹ Clegg, A., Young, J., Iliffe, S., Rikkert, M. O. and Rockwood, K. (2013) Frailty in elderly people, *Lancet*, Vol. 381(9868); Pp: 752–62

⁷⁹⁰ Cesari, M., Calvani, R. and Marzetti, E. (2017) Frailty in Older Persons, *Clinics in Geriatric Medicine*, Vol. 33(3); Pp: 293-303

⁷⁹¹ Deary, I. J., Corley, J., Gow, A. J., Harris, S. E., Houlihan, L. M., Marioni, R. E., Penke, L., Rafnsson, S. B. and Starr, J. M. (2009) Age-associated cognitive decline, *British Medical Bulletin*, Vol. 2(1); Pp: 135–152

⁷⁹² Harada, C. N., Natelson Love, M. C. and Triebel, K. (2013) Normal Cognitive Aging, *Clinics in Geriatric Medicine*, Vol. 29(4); Pp: 737-752

⁷⁹³ Irwin, K., Sexton, C., Daniel, T., Lawlor, B. and Naci, L. (2018) Healthy Aging and Dementia: Two Roads Diverging in Midlife? *Frontiers in Aging Neuroscience*, Vol. 10(275); doi:10.3389/fnagi.2018.00275 (last accessed 19/05/2019)

⁷⁹⁴ Baltes, P. B. and Smith, J. (2003) New Frontiers in the Future of Aging: From Successful Aging of the Young Old to the Dilemmas of the Fourth Age, *Gerontology*, Vol. 49(2); Pg. 128

⁷⁹⁵ Horn, J. L. and Donaldson, G. (1976) On the myth of intellectual decline in adulthood, *American Psychologist*, Vol. 31(10); Pp: 701–719

⁷⁹⁶ Salthouse, T. A. (1982) *Adult cognition: An experimental psychology of human aging*. New York, NY: Springer-Verlag

associated with automatic processing,^{797 798 799} and implicit or procedural knowledge.^{800 801} In contrast, there is a decrease in what psychologists refer to as “fluid intelligence”, which describes the capacity to reason, problem solve and process new information, so as to flexibly adapt to novel circumstances. This is attributed to a decline in executive function,^{802 803} and more specifically (though not exclusively) a decline in speed of information processing,^{804 805} working memory,^{806 807} time-based prospective memory,^{808 809 810} and attentional control.^{811 812 813} A decline in fluid intelligence clearly implies a decline in the capacity of people to learn, adjust and adapt to aging. This is particularly important given that older people are confronted with increasing physical, mental and social change, all of which present as challenges or barriers for what we might regard as successful aging or aging-well.

⁷⁹⁷ Craik, F. I. M. and Jennings, J. M. (1992) Human memory. In Craik, F. I. M and Salthouse, T. A. (Eds) *The handbook of aging and cognition*. Hillsdale, NJ: Erlbaum; Pp: 51-110

⁷⁹⁸ Craik, F. I. M. and Jacoby, L. L. (1996) Aging and memory: Implications for skilled performance. In Rogers, W. A., Fisk, A. D. and Walker, N. (Eds) *Aging and skilled performance: Advances in theory and applications*. NJ: Erlbaum; Pp: 113 – 137

⁷⁹⁹ Backman, L., Small, B. J. and Wahlin, A. (2001) Aging and memory: Cognitive and biological perspectives. In Birren, J. E. and Schaie, K. W. (Eds) *Handbook of the psychology of aging. 5th Edition*. San Diego, CA: Academic Press; Pp: 348–376

⁸⁰⁰ Howard, D. V., Howard, J. H., Dennis, N. A., LaVine, S. and Valentino, K. (2008) Aging and implicit learning of an invariant association, *The Journals of Gerontology: Series B*, Vol. 63(2); Pp: 100–5

⁸⁰¹ Song, S., Marks, B., Howard, J. H. and Howard, D. V. (2009) Evidence for parallel explicit and implicit sequence learning systems in older adults, *Behavioural Brain Research*, Vol. 196(2); Pp: 328–32

⁸⁰² Keys, B. A. and White, D. A. (2000) Exploring the relationship between age, executive abilities, and psychomotor speed, *Journal of the International Neuropsychological Society*, Vol. 6(1); Pp: 76-82

⁸⁰³ Silver, H., Goodman, C. and Bilker, W. (2009) Age in high-functioning healthy men is associated with nonlinear decline in some 'executive' functions in late middle age, *Dementia and Geriatric Cognitive Disorders*, Vol. 27(3); Pp: 292-300

⁸⁰⁴ Salthouse, T. A. (1996) The processing-speed theory of adult age differences in cognition, *Psychological Review*, Vol. 103(3); Pp: 403-28

⁸⁰⁵ Albinet, C. T., Boucard, G., Bouquet, C. A. and Audiffren, M. (2012) Processing speed and executive functions in cognitive aging: how to disentangle their mutual relationship? *Brain and Cognition*, Vol. 79(1); Pp: 1-11

⁸⁰⁶ Salthouse, T. A., Mitchell, D. R., Skovronek, E. and Babcock, R. L. (1989) Effects of adult age and working memory on reasoning and spatial abilities, *Journal of experimental psychology Learning, memory, and cognition*, Vol. 15(3); Pp: 507–16

⁸⁰⁷ Keating, J., Affleck-Brodie, C., Wiegand, R. and Morcom, A. M. (2017) Aging, working memory capacity and the proactive control of recollection: An event-related potential study, *PLoS One*, Vol. 12(7); Pp: e0180367

⁸⁰⁸ This refers to the ability to remember to perform an action at a specific point in the future such as remembering to turn off the stove when cooking.

⁸⁰⁹ Henry, J. D., MacLeod, M. S., Phillips, L. H. and Crawford, J. R. (2004) A meta-analytic review of prospective memory and aging, *Psychology and Aging*, Vol. 19(1); Pp: 27–39

⁸¹⁰ Gonneaud, J., Kalpouzos, G., Bon, L., Viader, F., Eustache, F. and Desgranges, B. (2011) Distinct and shared cognitive functions mediate event- and time-based prospective memory impairment in normal ageing, *Memory*, Vol. 19(4); Pp: 360–77

⁸¹¹ Jennings, J. M. and Jacoby, L. L. (1993) Automatic versus intentional uses of memory: Aging, attention, and control, *Psychology and Aging*, Vol. 8(2); Pp: 283–293

⁸¹² Salthouse, T. A., Fristoe, N. M., Lineweaver, T. T. and Coon, V. E. (1995) Aging of attention: does the ability to divide decline? *Memory & Cognition*, Vol. 23(1); Pp: 59–71

⁸¹³ Manard, M., Carabin, D., Jaspard, M. and Collette, F. (2014) Age-related decline in cognitive control: the role of fluid intelligence and processing speed, *BMC Neuroscience*, Vol. 15(7); Pp: doi:10.1186/1471-2202-15-7

As I alluded to above, many older people experience well-being particularly the “young-old” group, and a number of theories and models have been proposed to explain how older people are able to adjust and adapt to age-related decline so as to age-well.⁸¹⁴ For example, an influential and widely cited theory in cognitive neuroscience is the “scaffolding theory of aging and cognition” (STAC), which describes how the brain can compensate for age-related structural declines and associated decline in function. It is based on the observation that despite age-related reductions of brain volume and reduced cortical thickness and connectedness, there is greater activation of the prefrontal cortex in older adults compared to younger adults.⁸¹⁵ ⁸¹⁶ According to STAC, cognitive function can be maintained through recruitment of neural circuitry that can meet the demands of a particular task (referred to as “compensatory scaffolding”).⁸¹⁷ ⁸¹⁸ Another influential and widely cited theory that comes from psychology and behavioural science is Paul Baltes’ “selective optimization with compensation” (SOC). “Selective optimization” refers to the idea of selectively focusing on attainable goals and optimising their fulfilment through relevant means (e.g. persistence, practice and acquisition of relevant skills and resources). “Compensation” refers to maintaining a basic level of function in areas that are significantly affected by aging. SOC is essentially about doing the best that one can with what one has.⁸¹⁹ ⁸²⁰ ⁸²¹

In recent years, an integrative model known as the “Cognitive Health and Environment Life Course Model” (CHELM) has been proposed by Kaarin Anstey. It encompasses the multitude of endogenous and exogenous factors that contribute to cognitive development and age-related cognitive decline. Those factors include various biological and genetic mechanisms, brain pathology, cognitive and brain reserves, physical and mental health, and socio-demographic and environmental factors. In doing so, it aims to provide a framework for understanding how we might minimise cognitive decline and

⁸¹⁴ For a historical review see Martin, P., Kelly, N., Kahana, B., Kahana, E., Willcox, B. J., Willcox, D. C. and Poon, L. W. (2014) Defining successful aging: a tangible or elusive concept? *The Gerontologist*, Vol. 55(1); Pp: 14–25

⁸¹⁵ Salat, D. H., Buckner, R. L., Snyder, A. Z., Greve, D. N., Desikan, R. S., Busa, E., Morris, J. C., Dale, A. M. and Fischl, B. (2004) Thinning of the cerebral cortex in aging, *Cerebral Cortex*, Vol. 14(7); Pp: 721–30

⁸¹⁶ Goh, J. O. and Park, D. C. (2009) Neuroplasticity and cognitive aging: The scaffolding theory of aging and cognition, *Restorative Neurology and Neuroscience*, Vol. 27(5); Pp: 391–403

⁸¹⁷ Park, D. C. and Reuter-Lorenz, P. (2009) The adaptive brain: aging and neurocognitive scaffolding, *Annual review of psychology*, Vol. 60(1); Pp: 173–96

⁸¹⁸ Reuter-Lorenz, P. A. and Park, D. C. (2014) How does it STAC up? Revisiting the scaffolding theory of aging and cognition, *Neuropsychology review*, Vol. 24(3); Pp: 355–70

⁸¹⁹ Baltes, P. B. and Baltes, M. M. (1990) Psychological perspectives on successful aging: The model of selective optimization with compensation. In Baltes, P. B. and Baltes M. M. (Eds) *Successful aging perspectives from the behavioural sciences*. New York, NY: Cambridge University Press; Pp: 1–34

⁸²⁰ Carpentieri, J. D., Elliot, J. Brett, C. E. and Deary, I. J. (2017) Adapting to Aging: Older People Talk About Their Use of Selection, Optimization, and Compensation to Maximize Well-being in the Context of Physical Decline, *The Journals of Gerontology: Series B*, Vol. 72(2); Pp: 351–61

⁸²¹ Donnellan, C. and O’Neill, D. (2014) Baltes’ SOC model of successful ageing as a potential framework for stroke rehabilitation, *Disability and Rehabilitation*, Vol. 36(5); Pp: 424–9

optimise cognitive function through various interventions that target those factors over the course of the lifespan. At the broadest level, this includes the creation of healthy environments, better education during childhood and adolescence to optimize cognitive development and build up cognitive/brain reserves, and relevant social policy to facilitate these interventions. At the level of the individual, this might include better education and nutrition during childhood and better physical and mental health in adulthood (especially in relation to employment, lifestyle and environmental exposure).⁸²²

Interestingly, there are also theories that focus on how identity can mediate psychological and behavioural adjustments in older age. A systematic review by von Humboldt and Leal (2013) highlights two such theories.⁸²³ One of those is known as “identity assimilation”, which is part of Susan Whitbourne’s “Identity Process Theory” (IPT). Her theory applies Piaget’s constructivist model of cognitive development towards understanding how age affects identity via analogous processes of assimilation, accommodation and equilibrium (which I described in Chapter 1).^{824 825} Thus, “identity assimilation” refers to the ability to incorporate age-related changes within one’s sense of identity, while also maintaining a consistent and positive view of oneself. It contrasts with the notion of “identity accommodation”, which refers to a more significant adjustment of one’s goals, aspirations, and ultimately one’s sense of identity in the face of age-related challenges.^{826 827} The review cites a study that found positive associations with age for “identity assimilation” but negative associations with age for “identity accommodation”.⁸²⁸ The other theory highlighted in the review is “continuity theory”, which was originally proposed by Robert Atchley. It describes how older people make appropriate adjustments and adaptations by maintaining continuity in their lives, which consists of preserving both “internal and external structures”. This translates to persisting with certain activities,

⁸²² Anstey, K. J. (2014) Optimizing cognitive development over the life course and preventing cognitive decline: Introducing the Cognitive Health Environment Life Course Model (CHELM), *International Journal of Behavioral Development*, Vol. 38(1); Pp: 1–10

⁸²³ von Humboldt, S. and Leal, I. (2014) Adjustment to Aging in late Adulthood: A Systematic Review, *International Journal of Gerontology*, Vol. 8(3); Pp: 108-113

⁸²⁴ Whitbourne, S. K. (1986) *Adult Development*. Praeger: New York

⁸²⁵ Whitbourne, S. K. (1996) *The aging individual: Physical and psychological perspectives*. New York: Springer

⁸²⁶ Brandstädter, J. and Greve, W. (1994) The aging self: stabilizing and protective processes, *Developmental Review*, Vol. 14(1); Pp: 52-80

⁸²⁷ Brandstädter, J. and Renner, G. (1990) Tenacious goal pursuit and flexible goal adjustment: explication and age-related analysis of assimilation and accommodation strategies of coping, *Psychology and Aging*, Vol. 5(1); Pp: 58-67

⁸²⁸ Sneed, J. R. and Whitbourne, S. K. (2003) Identity Processing and Self-Consciousness in Middle and Later Adulthood, *The Journals of Gerontology: Series B*, Vol. 58(6); Pp: 313-19

behaviours, preferences, opinions, beliefs and relationships that characterised one's life in previous years.^{829 830}

These models more or less reiterate the importance of maintaining one's narrative identity when it comes to adjusting to age-related decline and aging-well. This consists of maintaining one's diachronic sense of personal identity (e.g. "identity assimilation" and "continuity theory") and capacity for autonomy and agency (e.g. STAC and SOC). It also consists of having the appropriate social and environmental forces to facilitate such maintenance (e.g. CHELM). While these models primarily address age-related cognitive decline in the context of normal cognitive aging, they are also applicable in the context of abnormal cognitive aging and thus dementia. Furthermore, when those models are framed in terms of promoting or maintaining narrative identity, they can also help inform our understanding of person-centred care.

Dementia

Dementia is an umbrella term that describes a collection of symptoms that are caused by pathological conditions affecting the brain. It manifests as a chronic or progressive loss of brain function resulting in a disturbance of multiple higher cortical functions, including, memory, thinking, orientation, comprehension, calculation, learning capacity, language and judgment (though phenomenal consciousness is not clouded)⁸³¹. The impairments of cognitive function are commonly accompanied, and occasionally preceded, by deterioration in emotional control, social behaviour, or motivation. In this regard, dementia affects decision making, interferes with the ability to perform normal activities of daily living, and increases one's dependence on care providers. Behavioural symptoms include insomnia, wandering, apathy, anxiety, agitation and aggression, and the final stages of dementia renders a patient fully dependent. Dementia is often co-morbid with other diseases, particularly those that are prevalent in older people (e.g. arthritis, hypertension, hearing loss, depression and stroke) and also occur in a large number of conditions that primarily or secondarily affect the brain. There are four different types of dementia – Alzheimer's disease (which is the most common form of dementia), vascular dementia, Lewy-body dementia and fronto-temporal dementia. The boundaries between those types of dementias are often indistinct and they often co-exist giving rise to what is referred to as "mixed form" dementia. There are also diseases and syndromes that can lead to various forms of

⁸²⁹ Atchley, R. C. (1989) A continuity theory of normal aging, *The Gerontologist*, Vol. 29(2); Pp: 183-90

⁸³⁰ Atchley, R. C. (1999) *Continuity and Adaptation in Aging: Creating Positive Experiences*. Johns Hopkins University Press, Baltimore

⁸³¹ The *Diagnostic and Statistical Manual of Mental Disorders (2013) Fifth Edition (DSM-5)* uses the term "neurocognitive disorder" (NCD) to replace "dementia".

dementia such as Huntington's disease, Parkinson's disease, Korsakoff's syndrome, Creutzfeldt-Jacob disease, Down's syndrome and HIV.^{832 833 834 835}

Warren and Warrington (2007) describe a range of core syndromes of dementia that arise due to dysfunction in cognitive domains such as memory, perception, knowledge, voluntary action, speech, literacy, numeracy, executive function and emotion.⁸³⁶ Their discussion highlights the extent and complexity of the array of deficits associated with dementia. I want to briefly describe some of the discussion about the cognitive domains affected by dementia, namely, memory, language and executive function, which are vital to maintaining narrative identity as part of narrative constructivism. Memory loss is common to various forms of dementia though it is particularly pronounced in Alzheimer's disease. Deterioration of autobiographical-episodic memory can give rise to either retrograde or anterograde amnesia.⁸³⁷ In the case of retrograde amnesia, people may be able to remember and describe significant events of their past using semantic recall, but they cannot evoke those events in their full detail and with the associated affective experience using autobiographical-episodic recall. Studies have shown that people with Alzheimer's disease have diminished autobiographical-episodic memory and must rely on semantic memory for autobiographical information, which leads to "overgenerality of recall" and diminished subjective experience of recall.^{838 839 840} In the case of anterograde amnesia, people are unable to learn and remember new information and thus unable to establish new memories about the events of daily life nor use them to

⁸³² <https://www.dementia.org.au/about-dementia/what-is-dementia> (last accessed 14/03/2019)

⁸³³ Bartlett, H., Gray, J., Byrne, G. J., Travers, C. and Lui, C-W. (2006) *Dementia Research Mapping Project: Final Report*. Ageing Research Online. Australian Government

⁸³⁴ World Health Organization and Alzheimer's Disease International (2012) *Dementia: A Public Health Priority*, World Health Organization

⁸³⁵ Australian Institute of Health and Welfare (2012) *Dementia in Australia. Cat. no. AGE 70. Canberra: AIHW*

⁸³⁶ Warren, J. D. and Warrington, E. K. (2007) Cognitive Neuropsychology of Dementia Syndromes. In Growdon, J. H. and Rossor, M. N. (Eds) *Blue Books of Neurology: The Dementias 2*. Butterworth-Heinemann; Pp: 329-380

⁸³⁷ Retrograde amnesia refers to the loss of memory prior to the onset of illness causing the amnesia, whereas anterograde amnesia refers to loss of ability to form new memories due to the illness causing the amnesia.

⁸³⁸ Barnabe, A., Whitehead, V., Pilon, R., Arsenault-Lapierre, G. and Chertkow, H. (2012) Autobiographical memory in mild cognitive impairment and Alzheimer's disease: a comparison between the Levine and Kopelman interview methodologies, *Hippocampus*, Vol. 22(9); Pp: 1809-18

⁸³⁹ El Haj, M., Antoine, P., Amouyel, P., Lambert, J-C., Pasquier, F. and Kapogiannis, D. (2016) Autobiographical memory decline in Alzheimer's disease, a theoretical and clinical overview, *Ageing Research Reviews*, Vol. 23(PtB); Pp 183-92

⁸⁴⁰ El Haj, M., Roche, J., Gallouj, K. and Gandolphe, M. C. (2017) Autobiographical memory compromise in Alzheimer's disease: a cognitive and clinical overview, *Gériatrie et psychologie neuropsychiatrie du vieillissement*, Vol. 15(4); Pp: 443-451

update their self-knowledge.^{841 842 843} An interesting view that has emerged in recent years is that semantic memory plays an important role in supporting autobiographical-episodic memory and imaginative prospection, and thus mental-time travel.^{844 845 846 847}

In general, deterioration of semantic memory leads to deterioration of knowledge of particular objects, concepts and their relations. The most striking and neurologically well-defined version of this pathological profile is referred to as “semantic dementia” and is attributed to atrophy of the left temporal lobe. Semantic dementia is also one of the three variants of the syndrome known as “primary progressive aphasia” in which people gradually lose the ability to read, write, speak, and comprehend language. They eventually become mute and completely unable to comprehend both written and verbal language. In the initial stages, people with semantic dementia will remain relatively fluent in their speech, belying the actual deficits of language that are present. For example, they will have difficulty reading uncommon words or atypically spelled/sounding words (“surface dyslexia”) and will also have difficulty finding the right words or names for objects or concepts (“anomia”). However, they will be able to use generic or superordinate terms instead, e.g. “bird” instead of “canary”. As the syndrome progresses, the loss of vocabulary begins to encompass those superordinate terms leading to the loss of concepts and category-related semantic deficits. For example, they will struggle to generate lists of kinds of animals or words beginning with a specific letter.⁸⁴⁸ Such deficits lead to further deficits in sentence processing, construction and comprehension. A decline in language, or development of aphasia is thought to be a clinical marker for progression from moderate to severe stages of Alzheimer’s disease.⁸⁴⁹

⁸⁴¹ Klein, S. B, Cosmides, L. and Costabile, K. A. (2003) Preserved knowledge of self in a case of Alzheimer’s dementia, *Social Cognition*, Vol. 21(2); Pp: 157–165

⁸⁴² Warren, J. D. and Warrington, E. K. (2007) Cognitive Neuropsychology of Dementia Syndromes. In Growdon, J. H. and Rossor, M. N. (Eds) *Blue Books of Neurology: The Dementias 2*. Butterworth-Heinemann; Pp: 329-380

⁸⁴³ Weintraub, S., Wicklund, A. H. and Salmon, D. P. (2012) The neuropsychological profile of Alzheimer disease, *Cold Spring Harbor perspectives in medicine*, Vol. 2(4); a006171; Pp: 1-18

⁸⁴⁴ Irish, M., Addis, D. R., Hodges, J. R. and Piguet, O. (2012) Considering the role of semantic memory in episodic future thinking: evidence from semantic dementia, *Brain*, Vol. 135(7); Pp: 2178-91

⁸⁴⁵ Duval, C., Desgranges, B., de La Sayette, V., Belliard, S., Eustache, F. and Piolino, P. (2012) What happens to personal identity when semantic knowledge degrades? A study of the self and autobiographical memory in semantic dementia, *Neuropsychologia*, Vol. 50(2); Pp: 254-265

⁸⁴⁶ Irish, M. and Piguet, O. (2013) The Pivotal Role of Semantic Memory in Remembering the Past and Imagining the Future, *Frontiers in Behavioral Neuroscience*, Vol. 7(27); Pp: 1-11

⁸⁴⁷ El Haj, M., Kapogiannis, D. and Antoine, P. (2016) Phenomenological Reliving and Visual Imagery During Autobiographical Recall in Alzheimer’s Disease, *Journal of Alzheimers Disease*, Vol. 16;52(2); Pp: 421-31

⁸⁴⁸ Henry, J. D., Crawford, J. R. and Phillips, L. H. (2004) Verbal fluency performance in dementia of the Alzheimer’s type: A meta-analysis, *Neuropsychologia*, Vol. 42(9); Pp: 1212-22

⁸⁴⁹ Schwam, E. and Xu, Y. (2010) Cognition and function in Alzheimer’s disease: identifying the transitions from moderate to severe disease, *Dementia and Geriatric Cognitive Disorders*, Vol. 29(4); Pp: 309-16

Deficits in executive function are perhaps the most detrimental for a person with dementia in terms of how their life is affected. As discussed in Chapter 2, executive function encompasses a suite of cognitive processes that enable a person to perform complex mental operations such as problem solving, planning and generating complex behaviour. Those cognitive processes include inhibitory and attentional control, decontextualized processing and various modes of offline cognition (including mental-time travel). Given that the neural substrate of executive function is the prefrontal cortex, it is not surprising that fronto-temporal dementia is characterised by deficits of executive function, which lead to risky or inappropriate behaviour, disinhibition, impulsivity, perseverance, compulsion, apathy and ultimately a loss of agency and autonomy. Warren and Warrington (2007) attribute such deficits of executive function to the loss of the capacity to modulate or “gate” both cognitive inputs and outputs. This means that sensory data, memories and various mental representations (i.e. the cognitive inputs) are not properly evaluated and processed, and additionally, conscious thoughts and mental programs for voluntary action (i.e. cognitive outputs) are not properly generated.

There are two noteworthy implications of such deficits in executive function for understanding how narrative identity is affected. Firstly, an inability to modulate cognitive inputs might imply a loss of access or ability to retrieve stored autobiographical information/memory.⁸⁵⁰ It can also lead to an inability to infer higher order patterns from those inputs, which thus diminishes the capacity for abstract thought. This is likely to affect one’s capacity for conceptual and abstract forms of self-representation and thus diminish the quality of reflective self-awareness. Indeed, studies have indicated that people with fronto-temporal dementia, and to a lesser extent Alzheimer’s disease, have significantly reduced reflective self-awareness (particularly a lack of awareness of their deficits, i.e. anosognosia).^{851 852 853} Recent studies also indicate that while a sense of personal identity and diachronic unity may exist, the quality and sophistication of self-concepts and autobiographical narratives is diminished.^{854 855} Secondly, an inability to generate cognitive outputs that enable conscious thought and voluntary action are associated with the kinds of behaviours often observed in

⁸⁵⁰ El Haj, M., Antoine, P., Amouyel, P., Lambert, J-C., Pasquier, F. and Kapogiannis, D. (2016) Autobiographical memory decline in Alzheimer’s disease, a theoretical and clinical overview, *Ageing Research Reviews*, Vol. 23(PtB); Pp 183-92

⁸⁵¹ Eslinger, P. J., Dennis, K., Moore, P., Antani, S., Hauck, R. and Grossman, M. (2005) Metacognitive deficits in frontotemporal dementia, *Journal of Neurology, Neurosurgery & Psychiatry*, Vol. 76(12); Pp: 1630-35

⁸⁵² Rankin, K. P., Baldwin, E., Pace-Savitsky, C., Kramer, J. H. and Miller, B. L. (2005) Self awareness and personality change in dementia, *Journal of Neurology, Neurosurgery & Psychiatry*, Vol. 76(5); Pp: 632-639

⁸⁵³ Williamson, C., Alcantar, O., Rothlind, J., Cahn-Weiner, D., Miller, B. L. and Rosen, H. J. (2011) Standardised measurement of self-awareness deficits in FTD and AD, *Journal of Neurology, Neurosurgery & Psychiatry*, Vol. 81(2); Pp: 140-145

⁸⁵⁴ Ben Malek, H., Philippi, N., Botzung, A., Cretin, B., Berna, F., Manning, L. and Blanc, F. (2019) Memories defining the self in Alzheimer’s disease, *Memory*, Vol. 27(5); Pp: 698-704

⁸⁵⁵ Tippett, L. J., Prebble, S. C. and Addis, D. R. (2018) The Persistence of the Self over Time in Mild Cognitive Impairment and Alzheimer’s Disease, *Frontiers in Psychology*, Vol. 9(94); Pp: 1-18

people with fronto-temporal dementia, such as apathy, inertia, passivity, perseveration, loss of initiative, compulsive and utilisation behaviours (e.g. unquestioningly peeling a piece of fruit that happens to be in front of them). Such cognitive outputs facilitate the exercise of inhibitory and attentional control, which not only enables deactivation of such automatic behaviours but is also necessary for autobiographical recall.^{856 857 858 859} These kinds of behaviours reflect a diminished capacity for autonomy and agency, resulting in greater dependence on environmental cues to trigger the kinds of behavioural subroutines that yield appropriate behavioural outcomes.⁸⁶⁰ A number of studies have also indicated that people with dementia may have impairments in theory of mind (ToM) ability, which is likely to contribute to the kinds of social and behavioural problems associated with dementia.^{861 862 863}

Generally speaking, the pathological progression of dementia can be roughly divided into three stages – early, moderate and advanced. Deficits associated with dementia become increasingly severe and widespread as the pathological progression proceeds.^{864 865} However, dementia is a heterogenous syndrome and people with the same type of dementia often have different deficit profiles and clinical symptoms.⁸⁶⁶ Nevertheless, it is clear that such deficits pose an enormous challenge for a person with dementia, particularly in relation to their role as individual agents (and as narrative agents) in

⁸⁵⁶ Raichle, M. E, MacLeod, A. M., Snyder, A. Z., Powers, W. J., Gusnard, D. A. and Shulman, G. L. (2001) A default mode of brain function, *Proceedings of the National Academy of Science*, Vol. 98(2); Pp: 676–682

⁸⁵⁷ Greicius, M. D. Srivastava, G., Reiss, A. L. and Menon, V. (2004) Default-mode network activity distinguishes Alzheimer's disease from healthy aging: Evidence from functional MRI, *Proceedings of the National Academy of Science*, Vol. 101(13); Pp: 4637-4642

⁸⁵⁸ Gardini, S., Venneri, A., Sambataro, F., Cuetos, F., Fasano, F., Marchi, M., Crisi, G. and Caffarra, P. (2015) Increased functional connectivity in the default mode network in mild cognitive impairment: a maladaptive compensatory mechanism associated with poor semantic memory performance, *Journal of Alzheimers Disease*, Vol. 45(2); Pp: 457-70

⁸⁵⁹ Grieder, M., Wang, D. J. J., Dierks, T., Wahlund, L. O. and Jann, K. (2018) Default Mode Network Complexity and Cognitive Decline in Mild Alzheimer's Disease, *Frontiers in Neuroscience*, Vol. 12(770); Pp: 1-9

⁸⁶⁰ Warren, J. D. and Warrington, E. K. (2007) Cognitive Neuropsychology of Dementia Syndromes. In Growdon, J. H. and Rossor, M. N. (Eds) *Blue Books of Neurology: The Dementias 2*. Butterworth-Heinemann; Pg. 360-61

⁸⁶¹ Gregory, C., Lough, S., Stone, V., Erzinclioglu, S., Martin, L., Baron-Cohen, S. and Hodges, J. R. (2002) Theory of mind in patients with frontal variant frontotemporal dementia and Alzheimer's disease: theoretical and practical implications, *Brain*. Vol. 125(4); Pp: 752–64

⁸⁶² Duval, C., Bejanin, A., Piolino, P., Laisney, M., de La Sayette, V., Belliard, S., Eustache, F. and Desgrandes, B. (2012) Theory of mind impairments in patients with semantic dementia, *Brain*, Vol. 135(1); Pp: 228–41

⁸⁶³ Le Bouc, R., Lenfant, P., Delbeuck, X., Ravasi, L., Lebert, F., Semah, F. and Pasquier, F. (2012) My belief or yours? Differential theory of mind deficits in frontotemporal dementia and Alzheimer's disease, *Brain*, Vol. 135(10); Pp: 3026-38

⁸⁶⁴ <https://www.dementia.org.au/about-dementia/what-is-dementia/progression-of-dementia> (last accessed 25/03/2019)

⁸⁶⁵ <https://www.alz.org/alzheimers-dementia/stages> (last accessed 25/03/2019)

⁸⁶⁶ Ryan, J., Fransquet, P., Wrigglesworth, J. and Lacaze, P. (2018) Phenotypic Heterogeneity in Dementia: A Challenge for Epidemiology and Biomarker Studies, *Frontiers in Public Health*, Vol. 6(181); Pp: 1-6

maintaining and constructing their narrative identity, and the role of care-givers in providing person-centred care. I discuss these issues in the following section.

The Self in Dementia

The Limits of Egoistic Self-Concern

At the beginning of this thesis, in the introductory chapter, I described some existing models and definitions of person-centred care (PCC) and discussed how they emerge from an ethical standpoint that views people with dementia as having the same kind of dignity, value, and moral status as any other person. This is generally understood in terms of treating people with dementia as persons, where a “person” is understood as having a certain moral status. I referred to this idea as an ethics of personhood. However, I also described the difficulties associated with the use of such a concept as persons or personhood in moral philosophy and normative ethics (namely, the lack of consensus as to necessary and sufficient criteria for personhood). I also pointed out how the notion of persons or personhood is closely related to the notion of self or selfhood and how they are often used interchangeably. However, I suggested that focusing on selfhood might offer us a more precise way of understanding dementia as a disease. This is reflected in the increased focus on how dementia affects selfhood in the dementia care literature and the recent emergence of definitions of PCC as primarily concerned with promoting or maintaining continuity of selfhood.

Thus, I would further refine the definition of PCC as primarily concerned with maintaining or promoting continuity of sociobiographical selfhood, or more specifically, narrative identity. This in turn, consists in maintaining or promoting the autobiographical narratives that constitute one’s sense of personal identity, which occurs in conjunction with maintaining and promoting one’s capacity for autonomous decision making, i.e. one’s diachronic agency. This also reflects the way that our narrative identities are constructed during adolescence and emerging adulthood and how they persist throughout the lifespan and therefore fits within the framework of narrative constructivism proffered in the previous chapter. We can think of PCC more specifically as a way of supporting or contributing to the scaffolding of the process of narrative constructivism. This is also consistent with many of the existing models and definitions of PCC that emphasise individualised care and promoting the autonomy of the individual. It is also consistent with the fact that, as individuals, we exercise prudential concern for ourselves, which reminds us that the impetus for PCC is also based on an egoistic imperative that consists in an individual’s desire to promote their own welfare in later life. I discussed this in the introductory chapter where I described it as an important aspect of the ethical

basis for PCC. However, I also highlighted a problem or limitation that the egoistic imperative faces. The imperative for an individual to promote their own welfare in later life can only be an egoistic one if it is still *their* imperative, meaning that they must remain one and the same person in later life. In other words, the egoistic imperative for PCC I described in the introductory chapter, is a diachronic one, predicated on persistence of personal identity. However, it is possible for dementia to affect or damage the autobiographical narratives that constitute one's narrative identity in such a way that undermines persistence of personal identity.⁸⁶⁷ Thus the way that dementia affects one's narrative identity will determine whether the rationale for this type of egoistic imperative exists. I elaborate on this a little more in the following section and then discuss the implications it will have for our understanding of PCC.

Deconstructing Narrative Identity

With regard to narrative identity, there are three potential scenarios that may arise, which will have a bearing on how we understand person-centred care (PCC). Firstly, dementia may affect narrative identity without diminishing it to a point where there is no persistence of personal identity. Studies have shown that people with mild to moderate forms of Alzheimer's disease display reduced temporal coherence in their autobiographical narratives and have a weaker, vague and more abstract sense of identity, but they still retain a sense of their own persistence over time.^{868 869 870} Hence their narrative identities are affected but they still retain sufficient diachronic unity for the persistence of personal identity. In this scenario there is a rationale for the egoistic imperative for PCC, and I take it that there are many people with dementia who fit into this category, especially those in the earlier stages of dementia where symptoms are only mild to moderate in severity. It should also be noted that there is an emerging view that certain aspects of self and identity necessary for persistence of personal identity (e.g. autobiographical memory, autobiographical narratives, social or role identities, abilities and aesthetic taste) may still be present even in severe cases of dementia.^{871 872} While this is

⁸⁶⁷ That is insofar as persistence of personal identity is understood as persistence of narrative identity, which I argued for in the previous chapter.

⁸⁶⁸ Fazio, S. and Mitchell, D. B. (2009) Persistence of self in individuals with Alzheimer's disease: Evidence from language and visual recognition, *Dementia*, Vol. 8(1); Pp: 39-59

⁸⁶⁹ Addis, D. R. and Tippett, L. J. (2004) Memory of myself: Autobiographical memory and identity in Alzheimer's disease, *Memory*, Vol. 12(1); Pp: 56-74

⁸⁷⁰ Tippett, L. J., Prebble, S. C. and Addis, D. R. (2018) The Persistence of the Self over Time in Mild Cognitive Impairment and Alzheimer's Disease, *Frontiers in Psychology*, Vol. 9(94); Pp: 1-18

⁸⁷¹ Caddell, L. S. and Clare, L. (2010) The impact of dementia on self and identity: A systematic review, *Clinical Psychology Review*, Vol. 30(1); Pp: 113-26

⁸⁷² Caddell, L. S. and Clare, L. (2013) Studying the self in people with dementia: How might we proceed? *Dementia*, Vol. 12(2); Pp: 192-209

supported by a number of recent studies that attest to the existence of diachronic unity between past and present sense of personal identity in people with dementia, those studies also describe the presence of deficits of episodic memory, particularly imaginative prospection, and an inability to update one's self-knowledge. Such deficits are likely to explain observations of anterograde amnesia and the associated inability to incorporate and assimilate new memories or information of recent lived-experiences and daily life into autobiographical knowledge.^{873 874 875}

Therefore, while people with dementia in this scenario still retain their pre-existing narrative identity, maintaining its continuity into the future is somewhat beyond their capabilities and will require significant effort and intervention from external sources. Such efforts and interventions are central to the way in which many dementia-care providers currently understand and operationalise PCC. This is reflected in services, interventions and therapeutic approaches, such as the use of personalised care plans,⁸⁷⁶ "memory support" wards in residential settings,⁸⁷⁷ "memory boxes",^{878 879} and the growing popularity of reminiscence therapy.⁸⁸⁰ Current research indicates that semantic knowledge plays an important role in episodic memory and imaginative prospection, which suggests that interventions aimed at retaining semantic memory may facilitate or scaffold the construction of diachronic autobiographical narratives and thus help maintain and promote continuity of narrative identity.^{881 882}

⁸⁸³ This type of PCC can be understood as a natural extension of the frameworks I discussed above

⁸⁷³ Duval, C., Desgranges, B., de La Sayette, V., Belliard, S., Eustache, F. and Piolino, P. (2012) What happens to personal identity when semantic knowledge degrades? A study of the self and autobiographical memory in semantic dementia, *Neuropsychologia*, Vol. 50(2); Pp: 254-265

⁸⁷⁴ Eustache, M-L., Laisney, M., Juskenaite, A., Letortu, O., Platel, H., Eustache, F. and Desgranges, B. (2013) Sense of identity in advanced Alzheimer's dementia: A cognitive dissociation between sameness and selfhood? *Consciousness and Cognition*, Vol. 22(4); Pp: 1456-1467

⁸⁷⁵ Strikwerda-Brown, C., Grilli, D. M., Andrews-Hanna, J. and Irish, M. (forthcoming) "All is not lost" – Rethinking the nature of the self in dementia. <https://psyarxiv.com/8r3dw/> (last accessed 10/3/2019)

⁸⁷⁶ Rooney, K. E., Molony, S. L., Kolanowski, A. and Van Haitsma, K. (2018) Person-Centered Assessment and Care Planning, *The Gerontologist*, Vol. 58(suppl1); Pp: S32-S47

⁸⁷⁷ Brooke, J. and Semlyen, J. (2017) Exploring the impact of dementia-friendly ward environments on the provision of care: A qualitative thematic analysis, *Dementia*, Vol. 18(2); Pp: 685-700

⁸⁷⁸ <https://www.agedcareguide.com.au/talking-aged-care/memory-boxes-benefit-people-living-with-dementia> (last accessed 20/03/2019)

⁸⁷⁹ <https://www.alzheimers.net/2014-02-06/memory-boxes-for-patients/> (last accessed 20/03/2019)

⁸⁸⁰ Woods, B., O'Philbin, L., Farrell, E. M., Spector, A. E. and Orrell, M. (2018) Reminiscence therapy for dementia, *Cochrane Database of Systematic Reviews 2018*, Issue 3. Art. No.: CD001120. DOI: 10.1002/14651858.CD001120.pub3. (last accessed 19/05/2019)

⁸⁸¹ Irish, M., Addis, D. R., Hodges, J. R. and Piguet, O. (2012) Considering the role of semantic memory in episodic future thinking: evidence from semantic dementia, *Brain*, Vol. 135(7); Pp: 2178-91

⁸⁸² Irish, M. and Piguet, O. (2013) The Pivotal Role of Semantic Memory in Remembering the Past and Imagining the Future, *Frontiers in Behavioral Neuroscience*, Vol. 7(27); Pp: 1-11

⁸⁸³ Tippet, L. J., Prebble, S. C. and Addis, D. R. (2018) The Persistence of the Self over Time in Mild Cognitive Impairment and Alzheimer's Disease, *Frontiers in Psychology*, Vol. 9(94); Pp: 1-18

which describe how aging-well is achieved. Not only do they help to inform current approaches towards PCC, they might also help to shape future innovations in PCC.

Secondly, dementia may affect narrative identity in such a way that a person no longer recognises or identifies in any substantive way with the autobiographical narratives that had previously constituted their narrative identity.⁸⁸⁴ For example, in Alzheimer's disease the decline in autobiographical memory can lead to retrograde amnesia. This prevents a person having access to memories and information (especially episodic-autobiographical memory) relevant to themselves. As a result, there is a loss of correspondence and coherence between past memories and present knowledge, and goals and beliefs.⁸⁸⁵ Similarly, deficits in mental-time travel, which prevent a person from gaining accurate and detailed autobiographical knowledge, can lead to a propensity for confabulation and result in delusions.^{886 887} Such a person may still have a narrative identity but it is one that lacks continuity or unity with their previous narrative identity and thus there is no persistence of personal identity.⁸⁸⁸ They have essentially become a descendant of their former self, or a "descendent" self. Such a selfhood is constituted by a relatively synchronic narrative identity, which can be considered numerically distinct from the one that constituted their "ancestral self".⁸⁸⁹ Therefore, the rationale for the egoistic imperative for PCC that existed in the previous scenario no longer exists in this scenario.

However, this is not to say that there is no egoistic imperative for PCC at all. In this scenario, a person with dementia will still have certain interests and values that form part of their synchronic narrative identity, which form the basis of egoistic concerns that are uniquely their own (but not those of their

⁸⁸⁴ It is important to note that while various autobiographical memories and narrative threads might still be present, this is not sufficient for diachronic narrative identity, which as discussed in the previous chapter, is a holistic notion that requires those memories and narrative threads to be unified by a conscious experiencing subject.

⁸⁸⁵ El Haj, M., Antoine, P., Amouyel, P., Lambert, J-C., Pasquier, F. and Kapogiannis, D. (2016) Autobiographical memory decline in Alzheimer's disease, a theoretical and clinical overview, *Aging Research Reviews*, Vol. 23(PtB); Pp 183-92

⁸⁸⁶ Lee, E., Meguro, K., Hashimoto, R., Meguro, M., Ishii, H., Yamaguchi, S. and Mori, E. (2007) Confabulations in episodic memory are associated with delusions in Alzheimer's disease, *Journal of Geriatric Psychiatry and Neurology*, Vol. 20(1); Pp: 34-40

⁸⁸⁷ Noel, M., Larøi, F., Gallouj, K. and El Haj, M. (2018) Relationships Between Confabulations and Mental Time Travel in Alzheimer's Disease, *The Journal of Neuropsychiatry and Clinical Neurosciences*, Vol. 30(4); Pp: 302-9

⁸⁸⁸ Eustache, M-L., Laisney, M., Juskenaitė, A., Letortu, O. Platel, H., Eustache, F. and Desgranges, B. (2013) Sense of identity in advanced Alzheimer's dementia: a cognitive dissociation between sameness and selfhood? *Consciousness and Cognition*, Vol. 22(4); Pp: 1456-67

⁸⁸⁹ For example, a recent review by Strikwerda-Brown (2019) describes people with semantic dementia as having "a consistent sense of self, albeit one that is largely rooted in the present and recent past". See Strikwerda-Brown, C., Grilli, D. M., Andrews-Hanna, J. and Irish, M. (forthcoming) "All is not lost" – Rethinking the nature of the self in dementia. <https://psyarxiv.com/8r3dw/> (last accessed 10/3/2019)

previous “ancestral” self).⁸⁹⁰ In other words, those egoistic concerns belong to a “descendent” self, constituted by a numerically distinct and synchronic narrative identity. This descendent self may happen to have the same kind, or the same *type*, of egoistic concerns as the ancestral self, but they are not the same *token* egoistic concerns. The kind of egoistic imperative that emerges from this scenario implies a different understanding of PCC, one that is primarily concerned with promoting or maintaining *descendent* selfhood or *descendent* narrative identity. Hence, the standard definition of PCC as primarily concerned with maintaining or promoting continuity of selfhood (where selfhood is understood in the diachronic sense), is no longer applicable in this scenario (as far as egoistic imperatives are concerned). The kinds of services, interventions and therapeutic approaches that I referred to in the previous scenario may still be applicable if they can help a person with dementia reconnect with their past narrative identity. If this is not possible then such approaches will have limited utility.

Thirdly, dementia may affect narrative identity to the point where not only is there no persistence of personal identity, but no substantive or discernible sense of personal identity at all. What I have in mind is the kind of scenario that often arises in advanced stages of dementia where the symptoms are so severe that one might be tempted to describe it as a kind of “living death”. Such a phrase was prevalent in previous decades where it was used in the press and popular media to depict dementia as a catastrophic condition.^{891 892} It is intended to capture the idea that a person with dementia, though still biologically alive, is no longer the person that they themselves, nor their family and friends, once knew. This reflects the idea that dementia strips someone of their personhood, which results in a “social death”. Such an understanding of dementia is also attributed to the prevalence, at the time, of books that describe dementia primarily from the perspective of caregivers facing the challenges and frustrations of caring for a loved one with dementia, while also mourning their loss in life.⁸⁹³ While this idea of dementia as a “living death” may be a crude and politically incorrect generalisation of the disease, and one that does not reflect current research and understanding of the disease, it may unfortunately turn out to be apt in describing the nature of advanced or end stage dementia.

⁸⁹⁰ Chiong, W. (2013) Chapter 32 - Dementia and personal identity: implications for decision-making. In Bernat, J. L. and Beresford, R. (Eds) *Ethical and Legal Issues in Neurology, Handbook of Clinical Neurology*, Vol. 118; Pp: 409-18

⁸⁹¹ Woods, R. T. (1989) *Alzheimer's Disease: Coping With a Living Death*. Souvenir Press: London

⁸⁹² Peel, E. (2014) ‘The living death of Alzheimer's’ versus ‘Take a walk to keep dementia at bay’: representations of dementia in print media and carer discourse, *Sociology of Health & Illness*, Vol. 36(6); Pp: 885-901

⁸⁹³ Leibing, A. (2006) Divided Gazes: Alzheimer's Disease, the Person Within, and Death in Life. In Leibing, A. and Cohen, L. (Eds) *Thinking About Dementia: Culture, Loss, and the Anthropology of Senility*. Rutgers University Press; Pp: 249-50

There is indeed a steep trajectory of decline, a high mortality rate, significant disability and an inevitable requirement of palliative care measures as dementia progresses into its advanced stage. This is why, as I mentioned in the introductory chapter, researchers and health professionals regard dementia as a terminal illness. A recent review by Mitchell et al (2012) describes the progression of dementia according to the “Global Deterioration Scale”, which consists of a scale between 1 to 7, where 7 represents the stage at which the most severe deterioration is observed.⁸⁹⁴ Mitchell et al (2012) claim that Stage-7 provides a useful description of advanced dementia.⁸⁹⁵

Stage-7: Unable to recognize familiar faces, verbal abilities limited to less than 5 words, incontinent of urine and stool, total functional dependence, and unable to walk. (Mitchell et al, 2012; Pg. 47)

While there is no similar type of scale that describes the deterioration of selfhood or narrative identity, one might speculate that if there were a substantive loss of any form of narrative identity over the course of disease progression, it would likely occur during the advanced stages of dementia. This loss of narrative identity would presumably be underpinned by severe and wide-ranging deficits in cognitive domains that are crucial for narrative identity. Studies have indeed demonstrated that people with moderate to advanced forms of dementia are less likely to be able to perform mirror self-recognition compared to people with milder forms.^{896 897 898} Some studies also indicate that people with severe dementia can have a diminished ability to use both first and second-person pronouns (e.g. “I” and “you” respectively)⁸⁹⁹ and an impairment in general pronoun comprehension.⁹⁰⁰ While there do not appear to be many studies that measure the extent to which the kinds of cognitive functions discussed above (i.e. memory, mental-time travel, language and executive function) deteriorate during the latter stages of the progression of dementia,⁹⁰¹ it is possible that some of those cognitive

⁸⁹⁴ Reisberg, B., Ferris, S. H., de Leon, M. J. and Crook, T. (1982) The Global Deterioration Scale for assessment of primary degenerative dementia, *American Journal of Psychiatry*, Vol. 139(9); Pp: 1136–9

⁸⁹⁵ Mitchell, S. L., Black, B. S., Ersek, M., Hanson, L. C., Miller, S. C., Sachs, G. A., Teno, J. M. and Morrison, R. S. (2012) Advanced Dementia: State of the Art and Priorities for the Next Decade, *Annals of Internal Medicine*, Vol. 156(1-1); Pg. 45-52

⁸⁹⁶ Biringer, F. and Anderson, J. R. (1992) Self-recognition in Alzheimer’s disease: a mirror and video study, *Journal of Gerontology*. Vol. 47(6); Pp: 385–38

⁸⁹⁷ Caddell, L. S. and Clare, L. (2010) The impact of dementia on self and identity: A systematic review, *Clinical Psychology Review*, Vol. 30(1); Pp: 113-26

⁸⁹⁸ Chandra, S. R. and Issac, T. G. (2014) Neurodegeneration and Mirror Image Agnosia, *North American Journal of Medical Sciences*. Vol. 6(9); Pp: 472-7

⁸⁹⁹ Small, J. A., Geldhart, K., Gutman, G. and Scott, M. A. C. (1998) The discourse of self in dementia, *Ageing and Society*, Vol. 18(3); Pp: 291-316

⁹⁰⁰ Almor, A., Kempler, D., MacDonald, M. C., Andersen, E. S. and Tyler, L. K. (1999) Why do Alzheimer patients have difficulty with pronouns? Working memory, semantics, and reference in comprehension and production in Alzheimer’s disease, *Brain and Language*, Vol. 67(3); Pp: 202–27

⁹⁰¹ Presumably, this would be very difficult to do given the severely disabled state that a person with advanced dementia is likely to be in.

functions may be more or less absent in advanced dementia. This would imply that the cognitive underpinnings of narrative identity are no longer present, raising the question of whether someone with advanced dementia can still be considered as a narrative agent, capable of constructing or maintaining a narrative identity and thus the relevant sense of selfhood, i.e. sociobiographical selfhood.

The absence of narrative identity and narrative agency implies absence of the kind of subjective dimension and first-person perspective that is unique to human selfhood. Thus, the phrase “living death” can perhaps be used to describe a descent into the relatively diminished forms of selfhood that I discussed in earlier chapters, i.e. minimal selfhood and minimal human selfhood. Therefore, in this scenario, not only is there no longer a rationale for the kind of egoistic imperative for PCC discussed above, there is also no basis on which PCC can be understood as being concerned with promoting or maintaining selfhood (insofar as selfhood is understood as narrative identity). At best one might regard PCC as being concerned with promoting those diminished forms of selfhood. As was the case in Scenario 2, this implies less focus on fulfilling those diachronic egoistic goals that derive from a previous/ancestral narrative identity. For example, it would make little sense to suggest that by helping a person in this scenario continue to participate in a lifelong hobby or interest, they are fulfilling their diachronic egoistic goals. Of course, they can still find enjoyment or pleasure in such hobbies but this would be unrelated to the enjoyment or pleasure associated with identifying with them as part of a narrative identity. The focus of care thus shifts towards fulfilling the egoistic goals associated with their diminished selfhood. However, unlike Scenario 2, the egoistic goals of both minimal selves and minimal human selves are likely to be different from the kinds of egoistic goals that derive from either diachronic or synchronic narrative identities.

Given their lack of narrative identity and advanced state of deterioration, the kind of PCC that makes the most sense for these individuals is one that focuses more on fulfilling certain basic human needs such as food, safety, shelter, toileting and bathing (the so called “activities of daily living”), medical treatment, pain relief, palliative care, social interaction, conversation and friendship.⁹⁰² This is a significant change to how we previously understood PCC as promoting or maintaining continuity of selfhood. Of course, people with advanced dementia, who have lost their narrative identities can still have phenomenal experiences, which have a first-personal givenness or implicit subjectivity, and they may also have a basic capacity for reflective self-awareness and perhaps a rudimentary self-concept. Thus, one way to clarify the definition of PCC in this context might be to define it as concerned with

⁹⁰² We could characterise such needs as consisting of the first three tiers of Abraham Maslow’s 5-tier “Hierarchy of Needs” model, i.e. Physiological needs, Safety needs and Social needs (the upper-most tiers being Esteem needs and Self-actualisation needs). <https://www.simplypsychology.org/maslow.html> (last accessed 5/4/2019)

promoting or maintaining continuity of minimal selfhood or minimal human selfhood. However, this is confusing and inaccurate because the goal is not so much to promote or maintain the first-personal givenness or implicit subjectivity of phenomenal experience (after all, minimal selfhood is supposed to be “given” or implicit), and neither is it to promote or maintain capacity for a rudimentary form of reflective self-awareness or self-concept. The goal is to promote or maintain the quality of those phenomenal experiences, and the positive experiences associated with those self-reflections and self-concepts. This explains why, in this context, it makes sense to shift the focus of care towards meeting the basic needs of individuals. Therefore, in this scenario, it seems the most appropriate way of understanding PCC is one that reflects a more basic or general definition of PCC, i.e. as concerned with promoting quality of life and well-being for people with dementia, rather than promoting or maintaining diminished forms of selfhood.

As discussed in the introductory chapter, the ethical basis for such a definition consists in the idea that people with dementia are still persons, and persons have a particular moral status that entitles them to a special kind of ethical consideration and standard of treatment.⁹⁰³ So even though individuals in this scenario may no longer be selves in the relevant sense (i.e. sociobiographical selves with narrative identities) they are still considered persons.⁹⁰⁴ Thus, PCC in this scenario, can be more accurately defined as promoting or maintaining continuity of personhood rather than selfhood. I discuss this idea in more detail the following section.

Refining the Definition of Person-Centred Care

Personhood as Third-Person Narratives

Throughout most of this thesis, including the current chapter, I have focused mainly on selfhood, subjectivity, the individual and their egoistic concerns. Of course, this belies the relevance and importance of interpersonal and intersubjective considerations. After all, people with dementia are still socially situated beings and this is reflected in the fact that the ethical impetus for person-centred

⁹⁰³ In the context of this thesis, I am assuming that there is no moral obligation to provide non-humans with PCC on the stipulation that they are not “persons”. While this is obviously a controversial issue, it is one that is beyond the scope of this thesis.

⁹⁰⁴ It should be noted that such a distinction remains contentious as there are many who regard first person-subjectivity or self-consciousness to be necessary for personhood. For example, see Frankfurt, H. (1971) Freedom of the Will and the Concept of a Person, *The Journal of Philosophy*, Vol. 68(1); Pp: 5–20; Baker, L. R. (2005) When Does a Person Begin? *Social Philosophy & Policy Foundation*, Vol. 22(2); Pp: 25-48; Smith, Joel, "Self-Consciousness", *The Stanford Encyclopedia of Philosophy* (Fall 2017 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2017/entries/self-consciousness/> (last accessed: 4/4/2018)

care (PCC) is also an altruistic or “other-regarding” one, which concerns both a person with dementia and members of their social circles, particularly their family and close friends. In the previous chapter, I proposed a theoretical framework (narrative constructivism), that describes how individuals, understood as narrative agents, are able to construct their narrative identities and thus their sociobiographical selves. It is in this sense that the individual can be understood as playing a central role in maintaining or promoting continuity of their selfhood.

However, in situations where an individual loses those capacities (i.e. scenario 3), they lose both their selfhood and their ability to maintain or construct their selfhood. As a result, they are no longer able to play a central role in maintaining or promoting continuity of their selfhood and no amount of social scaffolding can compensate for such a loss because a necessary ingredient is missing (i.e. narrative agency). If selfhood and personhood can be distinguished in the way that I have described above, then what remains is their personhood and thus the focus of care must shift onto maintaining or promoting continuity of their personhood. The social environment that once provided the scaffolding necessary for the construction of selfhood, now plays a vital role in maintaining or promoting continuity of personhood. Thus, in this context, personal identity is radically socially embedded and understood primarily from a third-person point of view. In other words, the “who am I?” question that describes the first-person/subjective psychological notion of personal identity is no longer applicable. What is applicable is something like “who are they?” or “who is she/he?”, which describes a third-person/objective notion of personal identity.⁹⁰⁵

Schechtman’s recent work on personal identity is particularly relevant here. In her earlier work, she claims that personal identity is constituted by relevant characterisations incorporated into autobiographical narratives. This is her “Narrative Self-Constitution View” (NSCV), which I discussed in Chapter 4. However, more recently in her book *Staying Alive*, Schechtman expands on the NSCV and offers a broader account of personal identity by describing how biographical narratives can also be created by third-parties and how they are both situated and individuated within the broader social and cultural environment. She refers to this as the “Person-Life View” (PLV). Like the NSCV, the PLV is also predicated on the idea that there is an interdependence between personal identity and the “full range” of relevant practical concerns that we as human beings typically face. According to Schechtman, those practical concerns must include the typical practice of regarding someone as being the same person as their “earlier infant self and later demented self”.⁹⁰⁶ With this example,

⁹⁰⁵ The question of “who are you?”, which reflects a second-person/intersubjective notion of personal identity, is also applicable, especially from the point of view of family and friends of a person with this kind of dementia.

⁹⁰⁶ Schechtman, M. (2014) *Staying Alive: Personal Identity, Practical Concerns, and the Unity of a Life*, Oxford University Press: UK; Pg. 103

Schechtman is trying to highlight the holistic structure of our diachronic autobiographical narratives, which unites various moments in our lives, including moments from our infancy and from later stages in our lives when they may be affected by dementia.

Key to the diachronic unity defined by the Narrative Self-Constitution View is the idea that we should understand that unity not just in terms of relations between individual moments, but also in terms of the overall structure in which those moments play a role. A narrative is not merely certain kinds of connections between one event and the next; it is a structural whole that gives unity to the events within it in virtue of the fact that they together instantiate that structure. (Schechtman, 2014; Pg. 103)

The autobiographical narratives that we construct (as narrative agents) are likely to include moments and events from our infancy and childhood (insofar as we can remember them or at least remember accounts of them given to us by others such as our parents). However, without those memories, there is little material from which we can construct a narrative identity. This is the predicament that infants, people with dementia and people with certain cognitive deficits (such as persistent vegetative state) find themselves in. This suggests that they do not qualify as selves according to the NSCV, however, this is not Schechtman's view. She regards the kinds of interactions that typically occur between those people and others (e.g. between a mother and her infant child) as part of the broad range of practical concerns that are conceptually linked with personal identity. For example, she points out that we talk to infants and treat them as though they have some of the narrative capacities that we as mature adults have even though we know they don't. This is done for a range of practical purposes such as facilitating their "moral and rational development". She also points out that we view people with dementia indeed as people with a continuing narrative, albeit a narrative that is in decline and associated with various psychological and emotional difficulties.

When someone looks at the Alzheimer's patient and claims "Father is gone; that's not him," she does not, as we have said, truly see a brand new being, but rather the sad continuation of a once vigorous life—otherwise it would not be painful in just the way it is. (Schechtman, 2014; Pg. 105)

Therefore, because Schechtman is committed to an account of personal identity that accommodates such individuals and such practices, she must allow for third parties and thus third-person biographical narratives to contribute to the construction of personal identity.

...those without the wherewithal to narrate their own lives (e.g., infants and those with cognitive deficits) can be given an identity through narratives created by others... Infants and

the demented cannot self-narrate, but other people can and do form narrative conceptions of them... they can begin or continue an individual life narrative that anticipates or recalls the unfolding of that individual life, bringing past and future into the present, as it were, on behalf of the person who cannot do it herself. (Schechtman, 2014; Pg. 103-104)

It should be noted that while the PLV is framed explicitly as a theory of personhood (“PLV says that to be a person is to live a person life”) it captures both the first-person/subjective sense of personal identity (i.e. selfhood) and the third-person/objective sense of personal identity (i.e. personhood). According to Schechtman, a person life can consist of three main interconnected components. First are the “physical and psychological capacities and internal structures” that an individual possesses. Second are the general kinds of “activities and interactions that make up the individual’s daily life”. Third is what Schechtman refers to as the “social and cultural infrastructure of personhood”, which describes the background structures (i.e. the set of practices, institutions, norms and traditions) that constitute the parameters for the characteristic kinds of social interactions and practical activities that persons engage in. Those norms and practices also yield presuppositions about personhood including who/what qualifies for personhood.⁹⁰⁷ The first component captures the first-person/subjective sense of personal identity (i.e. selfhood), while the second component captures the third-person/objective sense of personal identity (i.e. personhood). The third component not only provides the context for the previous two components, it also provides the context for how we address various issues such as those relating to PCC.

Thus, PCC can be defined in terms of the PLV, as primarily concerned with promoting or maintaining continuity of person lives through the three components described above. In the more severe cases of dementia, as depicted in scenario 3, there will be significant diminishment of physical and psychological capacities to the extent that selfhood and agency may become more or less absent. The idea of PCC I described as relevant to this scenario, mostly addresses the first component of the PLV, i.e. the physical and psychological aspects (e.g. physical health, nutrition, bathing, toileting, comfort and pain relief). However, the PLV suggests that promoting or maintaining continuity of personhood (understood as person lives) can also be achieved through its second and third components described above. Regarding the second component, there may be certain kinds of activities and interactions that can elicit affective or emotional responses from people with more severe forms of dementia. This

⁹⁰⁷ Schechtman, M. (2014) *Staying Alive: Personal Identity, Practical Concerns, and the Unity of a Life*, Oxford University Press: UK; Pg. 112-3

might include basic forms of social interaction and non-speech communication with family, friends and care givers,^{908 909 910} and also other simple activities such as listening to music.^{911 912}

From the point of view of a person with dementia, such interactions and activities are clearly meaningful and important in a basic synchronic sense, but they also remind us of the relevance of the second-person or interpersonal point of view. As the first-person subjective dimension associated with selfhood diminishes, the relevant point of view shifts toward the second-person/interpersonal and third-person/objective points of view. So what matters is not just the basic well-being or quality of life that is felt and lived by a person with dementia, but also the quality of their interpersonal relationships and the quality of how they are regarded and treated by others.

These considerations also reflect the third component of the PLV, which describes how both people with dementia and their social networks (i.e. the first and second components of the PLV) are situated within a broader social and cultural context (or the “social and cultural infrastructure of personhood” as Schechtman puts it). Thus, to promote or maintain continuity of personhood of a person with dementia also requires the appropriate social and cultural infrastructure to be in place. This not only serves the interests of the individual person with dementia but also the interests of second and third parties. For example, it serves the interests of family members and friends of a person with dementia (i.e. second parties) to see and know that their loved one is being taken care of in the appropriate manner. In fact, the reason why we might maintain a relationship with someone who neither recognises us, nor the relationship we maintain with them, is because it serves *our* interests, i.e. we still get something out of maintaining that relationship. The kind of world in which people with dementia, who have lost their selfhood, are treated as complete strangers by family, friends and loved ones, is not the kind of world we live in. As Schechtman points out, the world that we live in is one in which we still recognise them and one in which we are at least somewhat inclined to uphold the relationship we have with them (at least from our end) even though we know they no longer recognise

⁹⁰⁸ Ellis, M. and Astell, A. (2017) Communicating with people living with dementia who are nonverbal: The creation of Adaptive Interaction, *PLoS One*, Vol. 12(8); Pp: e0180395

⁹⁰⁹ Walmsley, B. D. and McCormack, L. (2014) The dance of communication: retaining family membership despite severe non-speech dementia, *Dementia*, Vol. 13(5); Pp: 626-41

⁹¹⁰ Lee, K. H., Boltz, M. and Lee, H. (2017) Does Social Interaction Matter Psychological Well-Being in Persons With Dementia? *American Journal of Alzheimer's Disease and other Dementias*, Vol. 32(4); Pp: 207-12

⁹¹¹ Garrido, S., Stevens, C. J., Chang, E., Dunne, L. and Perz, J. (2018) Music and Dementia: Individual Differences in Response to Personalized Playlists, *Journal of Alzheimer's Disease*, Vol. 64(3); Pp: 933-941

⁹¹² Garrido, S., Stevens, C. J., Chang, E., Dunne, L. and Perz, J. (forthcoming) Musical Features and Affective Responses to Personalized Playlists in People With Probable Dementia, *American Journal of Alzheimer's Disease and other Dementias*.

us or the relationship. The interpersonal connection is significantly damaged but it is not entirely absent in the same way it is when considering two complete strangers.⁹¹³

Furthermore, and generally speaking, to know that people with dementia (whom we may not have any personal relationship with) are being taken care of in the appropriate manner also serves the interests of the broader community (i.e. third parties). The notion of PCC in its various definitions and iterations, and its implementation in both public policy and aged care settings, is an important component and determinant of the social and cultural infrastructure itself. It was intended not only to change the way that we treat people with dementia but also to create a culture in which people with dementia can continue to live a life of value and quality. In essence, the idea that people with severe forms of dementia, who have lost their selfhood, are still persons and thus worthy of being cared for as persons, is itself an important part of the relevant social/cultural infrastructure.

Thus, in this context, the ethical impetus for PCC consists in the idea that people with severe dementia deserve a certain quality of care and treatment in virtue of their being persons. This is obviously a contentious assumption as discussed at the beginning of this thesis. What qualifies them as persons appears to be a combination of species membership linked to the relevant sociocultural infrastructure, i.e. interpersonal relationships between the person with dementia and relevant members of their social circles. However, this gives rise to a dilemma when we consider the fact that social isolation implies the absence of the kind of sociocultural infrastructure referred to above, something which unfortunately is all too common for many people with dementia. We might therefore appeal to species membership as the criterion for personhood but of course the idea that the human species should occupy such a morally privileged and elite status is a highly contentious issue, especially when the capacities that essentially distinguish human beings from non-human animals (e.g. selfhood) are absent. Rather than appealing to species membership we might be reminded of the fact that social isolation does not imply the complete absence of relevant sociocultural infrastructure, for even the most socially isolated individuals have a place within the broader institutions of law, government and religion, etc. Nevertheless, some might still argue that the basis on which those individuals can still be considered as having a place (albeit a marginal one) in the sociocultural infrastructure is that they are human beings.

As stated in the introductory chapter, identifying necessary and sufficient criteria for personhood remains an elusive (and potentially futile) pursuit, yet we are faced with the need to provide a rationale or justification for why people with dementia in this situation (i.e. advanced dementia) are

⁹¹³ These ideas are elaborated on by Hilde Lindemann in her recent book. See Lindemann, H. (2014) *Holding and Letting Go: The Social Practice of Personal Identities*. Oxford University Press

worthy of PCC. It seems we are left with one of two options – either they are worthy because they are human beings, or they are worthy because they are sentient beings. If the latter is the case then PCC extends to non-human animals, which implies a drastic change to current moral frameworks and practices that privilege human beings over non-human animals. Of course, an alternative to all of this is to bite the bullet and go in the opposite direction where we view such people with advanced dementia as not worthy of PCC.⁹¹⁴

These are all highly complex issues that are beyond the scope of this thesis but I highlight them so as to make it clear that at this present moment in human history, PCC concerns itself only with human beings, and insofar as this is the case, discussion and advocacy of PCC exists within a moral framework of human exceptionalism. This is not to suggest that it is immune to revision or revolution, for there have been many times in human history when moral frameworks were no longer deemed to be relevant, adequate or appropriate. Rather, it is to point out that if such is the moral framework for PCC, it only exists and is relevant insofar as it is actively maintained and operationalised as part of the current sociocultural infrastructure. The case for revision/revolution may exist, and may be proffered, for example, in context of end-of-life decision making, or as a general moral framework that does not privilege human beings over non-human animals, but such is the current sociocultural infrastructure that it seems unfathomable in the context of dementia care and PCC.

Summary

The evidence that certain elements of selfhood or self-related phenomena persist in people with dementia gives us reason to believe that we can and ought to promote or maintain continuity of diachronic narrative identities in person-centred care (PCC). This also provides a rationale for the egoistic impetus for PCC. However, if the persistence of those elements of selfhood or self-related phenomena is not sufficient to confer persistence of diachronic narrative identity, then such an approach towards PCC will be misguided. Furthermore, it might turn out to be counterproductive with regard to establishing an ethical foundation for PCC. The underlying assumption in such an approach is that the value of a human being is conferred primarily by their diachronic selfhood or what remains of it in the form of the remnants of their narrative identity and cognitive capacities. However, there is the view that the value of a human being is not diminished by even the most profound cognitive

⁹¹⁴ Implying they are worthy of something less than PCC, which perhaps brings us back to the kinds of dementia care practices of previous decades that most of us now repudiate.

decline, and that beneficence ought to be extended to those who may no longer have the kind of narrative identity that we seem to value so much.⁹¹⁵

Therefore, I suggested that there may be particular cases, which fit either scenario 2 or 3 above, where the idea of promoting or maintaining continuity of diachronic narrative identity should not be strictly adhered to. In cases that fit scenario 2, PCC ought to be primarily concerned with promoting or maintaining the relatively synchronic narrative identities that constitute descendent selfhood. Less emphasis should be placed on the aspects of selfhood that constitute elements of what was once their diachronic narrative identity. In cases that fit scenario 3, where there is an absence of any form of narrative identity, it no longer makes sense to think of person-centred care as concerned with promoting or maintaining continuity of selfhood understood as narrative identity. PCC must instead be concerned with promoting or maintaining that which remains in the absence of selfhood, i.e. the person. This reflects the distinction between selfhood and personhood that I described in previous chapters, whereby the former describes a person as a subject and the latter describes them as an object. The former refers more specifically to the first-person/subjective dimension, which exists in the form of narrative identity in human beings. When this dimension is stripped down to something like first-personal givenness or implicit subjectivity (minimal selfhood), or a rudimentary form of reflective self-awareness (minimal human selfhood), a conscious experiencing subject still exists, but they are no longer the kind of subject that has a sense of personal identity. This means that for such subjects the question of “who am I?” cannot be answered from their first-person/subjective perspective and cannot be understood in the subjective sense. It can only be answered and understood in the objective sense from a third-person perspective.⁹¹⁶ In this regard, they retain their identity as persons (but not their sense of personal identity) and thus can still be considered persons even though they are no longer selves in the relevant sense.

As selfhood, autonomy and agency diminish during the progression of dementia, the onus of care inevitably shifts and is placed primarily onto the social context in which the individual is situated. This reflects the relevance of the social and interpersonal dimension with regard to both selfhood and personhood. All three scenarios described above are associated with an increasing dependence on the social environment to support (or scaffold) the individual as a self and/or as a person. In the most severe cases (i.e. scenario 3), a person with dementia is indeed totally dependent on others to care for them, and the nature of such care reflects a more basic understanding of PCC that is primarily

⁹¹⁵ Post, S. G. (2000) *The Moral Challenge of Alzheimer Disease: Ethical Issues from Diagnosis to Dying*. The Johns Hopkins University Press: Baltimore and London

⁹¹⁶ For example, a person with advanced dementia may not know who they are, or know how to address such a question, but obviously their family and loved ones do.

concerned with fulfilling the basic needs of human beings. I suggested that this kind of PCC could be defined as promoting or maintaining continuity of *personhood* as distinct from *selfhood*. However, this might be regarded as an unsatisfactory or incomplete notion of PCC because there is nothing uniquely personal about providing someone with food, safety, shelter, toileting, bathing, medical care, etc. The requirement of social interaction as a basic need might offer potential for a more personal approach to PCC. In fact, one could argue that facilitating quality social interactions is central to the idea of promoting or maintaining continuity of personhood in this scenario.

This essentially takes us back to Kitwood's original model of PCC, which emphasised the importance of the psychosocial dimension (i.e. quality social interaction, authentic communication and genuine relationships). However, Kitwood's model is framed at the level of the individual person with dementia where the goal is to promote or maintain their personhood. The notion of PCC I am describing here is a holistic one that also emphasises the importance of having the kind of society and culture that enables us to achieve the more specific goal of providing appropriate care for people with dementia. (i.e. promoting the sociocultural infrastructure necessary for person-lives). This requires that we incorporate certain beliefs and practical considerations into our understanding of personhood. One of those is the idea that people with dementia, despite their deficits and despite possible loss of selfhood, persist as persons in virtue of their humanity (species membership) and their place in the current sociocultural infrastructure.

Conclusion

The general aim of my thesis was to bring some clarity to the notion of self (or selfhood) used in the definition of person-centred care (PCC) as promoting or maintaining continuity of self. Thus, in Chapter 1, I began by reviewing a broad range of literature on the self and self-related phenomena to try and gain an idea of the kinds of definitions, concepts, theories and frameworks that would guide my investigation. It became apparent that the term "self" or "selfhood" was being used to refer to a variety of phenomena, such as self-awareness, subjectivity, phenomenal experience, personal identity, agency, and personhood. So, it was important to establish some parameters within which this investigation could take place. Indeed, there was already an important parameter contained within the general aim of my thesis, which is that promoting or maintaining continuity of the self in PCC implies promoting or maintaining continuity of human selves.

Thus, in Chapter 2, I tried to describe what it was that constituted human selfhood, and what made it unique and distinct from other forms of selfhood that might exist in non-human animals, such as the

“minimal self”, which refers to the first-person givenness or implicit subjectivity of phenomenal experience. I pointed out that as human beings we are endowed with certain kinds of cognitive capacities (associated with language and metarepresentation) that are unique to our species and take us beyond minimal selves. They enable us to have the kind of reflective and conceptual self-awareness that underpins our first-person subjective sense of personal identity, which also shapes our capacity for diachronic agency and social interaction. Human selfhood is therefore a multidimensional phenomenon that consists of an embodied phenomenological dimension (i.e. the minimal self), a linguistic and conceptual or hermeneutical dimension (i.e. a self-concept), an agential and enacted dimension (i.e. diachronic agency), and a sociocultural dimension (i.e. a socially situated self). This is what distinguishes human selfhood from any kind of selfhood in any other species. In its most rudimentary form, human selfhood consists of a basic sense of diachronic self-awareness and self-concept, linked to a nascent capacity for diachronic agency. I referred to this as the “minimal human self”. This minimal human self emerges during ontogeny and is poised to take on a narrative or autobiographical quality as it becomes increasingly situated within complex interpersonal and sociocultural contexts during adolescent development. What emerges from this developmental process is a more complex, mature, multidimensional form of selfhood, which I referred to as the “sociobiographical self”.

In order to understand how human selfhood is constituted and how it is to be promoted or maintained, one must appreciate that it is the outcome of a complex developmental processes across the human lifespan. Thus, my discussion of both minimal human selfhood and sociobiographical selfhood also focused on how those forms of selfhood develop. In Chapter 3, I argued that nativist, empiricist, social constructionist and constructivist theories do not provide an adequate account of how minimal human selfhood develops and instead suggested that an interactionist framework known as neuroconstructivism was the most appropriate. It describes how bidirectional interactions between innate biological factors and social/environmental factors take place during infancy and early childhood development to yield a minimal human self. In contrast, sociobiographical selfhood emerges as a result of an adolescent’s capacity to use their basic sense of diachronic self-awareness and nascent diachronic agency (in virtue of being minimal human selves) to build upon their self-concept and produce a more complex and detailed hermeneutical self-concept. This reflects a literal notion of construction, as opposed to a natural developmental progression, because it describes the creative activity or behaviour of an individual agent.

While the discussion about minimal human selfhood and sociobiographical selfhood constitute original contributions to the philosophical literature on selfhood (and a synthesis of relevant

knowledge outside of philosophy), my main original contribution is given in Chapter 4, where I developed and proposed a theoretical framework that describes the process by which sociobiographical selfhood is constructed. I called this framework “narrative constructivism”. It posits that the individual plays a central role as an agent in structuring and organising pre-reflective, reflective, linguistic, conceptual and hermeneutical forms of self-awareness (or self-representation) in the form of autobiographical narratives (I referred to this more specifically as our capacity for “narrative agency”). Those autobiographical narratives not only help us to make sense of, and derive meaning from our lives, they represent who we are and constitute our first-person subjective sense of personal identity. Furthermore, they also inform our actions and decisions as diachronic agents, which enable us to navigate the physical and social world and survive and function within it. In this regard, our sense of personal identity is entwined with our capacity for agency and thus some philosophers use the term “practical identity” or “narrative identity” to capture this relationship. I use the latter because it emphasizes the diachronic nature of identity and agency. I also argued that our narrative identities inform and shape the subsequent structuring and organising of autobiographical information as part of an ongoing constructive and auto-hermeneutical process. Thus, my use of the term is also intended to capture the relationship between narrative identity and narrative agency.

Narrative constructivism is an interactionist framework that describes the bidirectional influences between diachronic narrative agency, narrative identity, and the social environment. It also integrates what we currently understand about the neurocognitive underpinnings of human selfhood, the developmental, constructed, and socially situated nature of human selfhood, the centrality of biography, narrative and agency, and the practical significance of unified diachronic selfhood. The latter is particularly relevant to issues concerning the ethical impetus for PCC because it describes the very basis on which one can have egoistic or prudential self-concern. As I stated in the introductory chapter, PCC represents the recognition of a moral obligation towards people suffering from dementia and age-related decline. In this regard PCC is fundamentally based on an ethics of altruism. However, it is also motivated by one’s sense of prudential self-concern for the future, based on the recognition that we may one day find ourselves in the same vulnerable predicament as those people with dementia. This constitutes an egoistic imperative for PCC, but for such an imperative to exist, it requires that we remain one and the same person in the future, i.e. that our personal identity persists over time. In other words, it only makes sense for someone to have prudential self-concern for the future if they persist into the future.

As I discussed in Chapter 1, identifying the conditions on which personal identity persists over time (“the persistence question of personal identity”) is a problem that has occupied analytic philosophers

since the time of John Locke. The predominant view is that persistence of personal identity is conferred by psychological states that connect our past, present and future. However, as time goes by, we may lose those psychological connections and thus no longer identify with our past, which would imply that we lose our personal identity. This is something that may happen naturally over the course of time or it could also be caused by dementia. In Chapter 4, I discussed a view (Schechtman's "Narrative Self-Constitution View") that describes how persistence of personal identity is conferred by the diachronic unity of the autobiographical narratives that constitute our narrative identity. Such a view offers us a way of understanding how personal identity persists during the normal course of lifespan where our narrative identities are relatively intact and unified in a diachronic sense. However, dementia poses a significant threat to this diachronic unity and in some cases, it may even destroy one's narrative identity altogether. Thus, insofar as one's narrative identity persists over time, it makes sense to think of PCC as also concerned with upholding one's interests in the future. This constitutes the rationale for the egoistic imperative for PCC and it also forms part of what it means to promote or maintain continuity of selfhood (where selfhood is understood as narrative identity).

However, where one's narrative identity is diminished or lost due to dementia, the rationale for the egoistic imperative for PCC no longer exists and this has implications for the way that PCC is delivered. This was one of the main issues I addressed in the present chapter, where I outlined three potential scenarios for how narrative identity can be affected by dementia and how our understanding of PCC might have to be modified accordingly. Firstly, in scenarios where narrative identity is only moderately diminished or affected by dementia, the egoistic imperative will still exist, where part of what it means to promote or maintain continuity of selfhood is to fulfil the goals and interests that are not only still part of an individual's ongoing narrative identity, but also recognised by them as being so. This reflects the current operative definition of PCC. Secondly, there may be scenarios where narrative identity is more significantly diminished by dementia in which an individual's narrative identity is no longer unified with the past and is only unified in a synchronic sense. This might constitute an entirely novel narrative identity which one might argue constitutes a new self (or descendent self). The kind of egoistic imperative that exists in this type of scenario is a relatively synchronic one, based on fulfilling the goals and interests that are part of a novel synchronic narrative identity. In this context, PCC is primarily concerned with promoting or maintaining continuity of synchronic narrative identity. It makes no sense to promote the goals and interests of someone who this individual was in the past but is no longer. This is inconsistent with the current operative definition of PCC, which assumes persistence of narrative identity. Finally, there may be scenarios where no discernible narrative identity exists and so the kind of egoistic imperative that exists is one that is only based on fulfilling certain basic needs and interests of such an individual (e.g. food, safety, shelter, toileting, bathing and

medical care). Those needs and interests exist independently of narrative identity and thus PCC in this context can be understood more specifically as promoting or maintaining the basic welfare of an individual rather than their narrative identity. This is at odds with the current operative definition of PCC, which is specifically concerned with promoting or maintaining continuity of selfhood. However, as I argued in this chapter, this can be understood as part of what it means to promote or maintain continuity of personhood, as distinct from selfhood, where it also involves promoting or maintaining relevant and appropriate social relationships. In this regard, PCC extends beyond the individual to also focus on the interpersonal context (i.e. family and friends of the person with dementia) and the broader sociocultural context (i.e. members of a community and the values promoted within those communities). This idea is captured in Schechtman's "Person-Life View", which provides a framework for understanding what promoting or maintaining continuity of personhood and the relevant sociocultural infrastructure that is necessary to support personhood, consists in.

The central contention in this discussion is that where selfhood is significantly diminished or absent, personhood still remains. In this context, PCC should be framed in terms of promoting or maintaining continuity of personhood, rather than selfhood. This enables us to avoid the implicit and implausible view (perhaps born out of political correctness) that people with dementia never completely lose their selfhood in any meaningful sense, without undermining the ethical imperative to provide them with care and support, and to promote their quality of life and well-being. While this particular discussion has been relatively brief and limited in its scope, it does highlight the relevance of Kitwood's original model of PCC, which emphasised the importance of relationships and psychosocial well-being. It also reminds us of the challenges facing the way that PCC is implemented in current public policy (such as in Australia), where the focus is on promoting individualism, independence, autonomy and self-determination. This represents a relatively narrow conception of PCC, one that is somewhat consistent with Kitwood's model, but tends to ignore other aspects of PCC that are important, particularly promoting quality relationships, interpersonal interaction and social equity. Such a conception of PCC risks neglecting and de-valuing some of the most vulnerable members of the community, i.e. those who have a significantly diminished capacity for individualism, independence, autonomy and self-determination. What becomes of our selfhood and personhood in dementia will in large part be shaped by our values and the kind of sociocultural infrastructure that we as a society construct for ourselves.

Bibliography

Books, Chapters and Journal Articles

Addis, D. R. and Tippett, L. J. (2004) Memory of myself: Autobiographical memory and identity in Alzheimer's disease, *Memory*, Vol. 12(1); Pp: 56–74

Ajzen, I. (1991) The theory of planned behaviour, *Organizational Behavior and Human Decision Processes*, Vol. 50(2); Pp: 179–211

Albert, D., Chein, J. and Steinberg, L. (2013) The teenage brain: Peer influences on adolescent decision-making, *Current Directions in Psychological Science*, Vol. 22(2); Pp: 114–20

Albinet, C. T., Boucard, G., Bouquet, C. A. and Audiffren, M. (2012) Processing speed and executive functions in cognitive aging: how to disentangle their mutual relationship? *Brain and Cognition*, Vol. 79(1); Pp: 1-11

Almor, A., Kempler, D., MacDonald, M. C., Andersen, E. S. and Tyler, L. K. (1999) Why do Alzheimer patients have difficulty with pronouns? Working memory, semantics, and reference in comprehension and production in Alzheimer's disease, *Brain and Language*, Vol. 67(3); Pp: 202–27

Anstey, K. J. (2014) Optimizing cognitive development over the life course and preventing cognitive decline: Introducing the Cognitive Health Environment Life Course Model (CHELM), *International Journal of Behavioral Development*, Vol. 38(1); Pp: 1–10

Anzures, G., Quinn, P. C., Pascalis, O., Slater, A. M., Tanaka, J. W. and Lee, K. (2013) Developmental origins of the other-race effect, *Current Directions in Psychological Science*, Vol. 22(3); Pp: 173–78

Argyle, E. (2012) Person centred dementia care: problems and possibilities, *Working with Older People*, Vol. 16(2); Pp: 69-77

Arnett, J. J. (2000) Emerging adulthood: A theory of development from the late teens through the twenties, *American Psychologist*, Vol. 55(5); Pp: 469-80

Arnett, J. J., Zukauskienė, R. and Sugimura, K. (2014) The new life stage of emerging adulthood at ages 18-29 years: implications for mental health, *Lancet Psychiatry*, Vol. 1(7); Pp: 569-76

Atance, C. M. and Meltzoff A. N. (2005) My future self: Young children's ability to anticipate and explain future states, *Cognitive Development*, Vol. 20(3); Pp: 341–61

Atance, C. M. (2008) Future Thinking in Young Children, *Current Directions in Psychological Science*, Vol. 17(4); Pp: 295-98

Atchley, R. C. (1989) A continuity theory of normal aging, *The Gerontologist*, Vol. 29(2); Pp: 183-90

Atchley, R. C. (1999) *Continuity and Adaptation in Aging: Creating Positive Experiences*. Johns Hopkins University Press, Baltimore

- Atkins, K. (2004) Narrative identity, practical identity and ethical subjectivity, *Continental Philosophy Review*, Vol. 37(3); Pp: 341-66
- Atkins, K. (2008) *Narrative Identity and Moral Identity: A Practical Perspective*. Routledge: NY
- Backman, L., Small, B. J. and Wahlin, A. (2001) Aging and memory: Cognitive and biological perspectives. In Birren, J. E. and Schaie, K. W. (Eds) *Handbook of the psychology of aging. 5th Edition*. San Diego, CA: Academic Press; Pp: 348–376
- Baker, L. R. (2005) When Does a Person Begin? *Social Philosophy & Policy Foundation*, Vol. 22(2); Pp: 25-48
- Baltes, P. B. and Baltes, M. M. (1990) Psychological perspectives on successful aging: The model of selective optimization with compensation. In Baltes, P. B. and Baltes M. M. (Eds) *Successful aging perspectives from the behavioural sciences*. New York, NY: Cambridge University Press; Pp: 1–34
- Baltes, P. B. and Smith, J. (2003) New Frontiers in the Future of Aging: From Successful Aging of the Young Old to the Dilemmas of the Fourth Age, *Gerontology*, Vol. 49(2); Pp: 123-35
- Baltes, P. B., Reuter-Lorenz, P. A. and Rosler, F. (2006) *Development and the Brain: The Perspective of Biocultural Co-Constructivism*. Cambridge University Press: New York
- Bar-Haim, Y., Ziv, T., Lamy, D. and Hodes, R. M. (2006) Nature and nurture in own-race face processing, *Psychological Science*, Vol. 17(2); Pp: 159–63
- Barnabe, A., Whitehead, V., Pilon, R., Arsenault-Lapierre, G. and Chertkow, H. (2012) Autobiographical memory in mild cognitive impairment and Alzheimer's disease: a comparison between the Levine and Kopelman interview methodologies, *Hippocampus*, Vol. 22(9); Pp: 1809–18
- Barnier, A. J. and Sutton, J. (2008) From individual to collective memory: Theoretical and empirical perspectives, *Memory*, Vol. 16(3); Pp: 177-82
- Baron-Cohen, S. (1998) Does the study of autism justify minimalist innate modularity? *Cognitive Development*, Vol. 10(3); Pp: 179–91
- Baron-Cohen, S., Leslie, A. M. and Frith, U. (1985) Does the autistic child have a "Theory of mind"? *Cognition*, Vol. 21(1); Pp: 37-46
- Baron-Cohen, S., O'Riordan, M., Stone, V., Jones, R. and Plaisted, K. (1999) Recognition of faux pas by normally developing children and children with Asperger Syndrome or high-functioning autism, *Journal of Autism and Developmental Disorders*, Vol. 29(5); Pp: 407-18
- Barone, D. F., Maddux, J. E. and Snyder, C. R. (1997) Social Cognitive Psychology: History and Current Domains, *The Plenum Series in Social/Clinical Psychology*. Plenum Press: New York
- Bartky, S. L (1990) *Femininity and Domination: Studies in the Phenomenology of Oppression*. Routledge: New York and London
- Bartlett, F. C. (1995) *Remembering: A study in experimental and social psychology*. Cambridge, England: Cambridge University Press (Original work published 1932)

- Beach, M. C. and Inui, T. (2006) Relationship- centred Care: A Constructive Reframing, *Journal of General Internal Medicine*, Vol. 21(S1); Pp: S3-S8
- Ben Malek, H., Philippi, N., Botzung, A., Cretin, B., Berna, F., Manning, L, and Blanc, F. (2019) Memories defining the self in Alzheimer's disease, *Memory*, Vol. 27(5); Pp: 698-704
- Benoit, R. G., Szpunar, K. K. and Schacter, D. L. (2014) Ventromedial prefrontal cortex supports affective future simulation by integrating distributed knowledge, *Proceedings of the National Academy of Sciences*, Vol. 111(46); Pp: 16550-55
- Bergelson, E. and Swingle, D. (2012) At 6–9 months, human infants know the meanings of many common nouns, *Proceedings of the National Academy of Sciences*, Vol. 109(9); Pp: 3253–3258
- Bermudez, J. L. (2003) Ascribing Thoughts to Non-linguistic Creatures, *Facta Philosophica*, Vol. 5(2); Pp: 313-334
- Bermudez, J. L. (2003) *Thinking without words*. Oxford University Press
- Bermudez, J. L. (2006) Thinking Without Words: An Overview For Animal Ethics, *The Journal of Animal Ethics*, Vol. 11(3); Pp: 319 - 35
- Bermudez, J. L. (2010) Two arguments for the language dependence of conceptual thought', *Grazer Philosophische Studien*, Vol. 81; Pp: 37-54
- Bigelow, A. E. (1981) The correspondence between self and image movement as a cue to self-recognition for young children, *The Journal of Genetic Psychology*, Vol. 139(1st half); Pp: 11-26
- Biringer, F. and Anderson, J. R. (1992) Self-recognition in Alzheimer's disease: a mirror and video study, *Journal of Gerontology*. Vol. 47(6); Pp: 385–38
- Block, N. (1995) On a confusion about the function of consciousness, *Behavioral and Brain Sciences*, Vol. 18; Pp: 227–47
- Blumen, H. M., Rajaran, S. and Henkel, L. (2013) The applied value of collaborative memory research in aging: Behavioral and neural considerations, *Journal of Applied Research in Memory and Cognition*, Vol. 2(2); Pp: 107–17
- Borrell-Carrio, F., Suchman, A. L. and Epstein, R. M. (2004) The Biopsychosocial Model 25 Years Later: Principles, Practice, and Scientific Inquiry, *The Annals of Family Medicine*, Vol. 2(6); Pp: 576-82
- Brandstädter, J. and Greve, W. (1994) The aging self: stabilizing and protective processes, *Developmental Review*, Vol. 14(1); Pp: 52-80
- Brandstädter, J. and Renner, G. (1990) Tenacious goal pursuit and flexible goal adjustment: explication and age-related analysis of assimilation and accommodation strategies of coping, *Psychology and Aging*, Vol. 5(1); Pp: 58-67
- Brooke, J. and Semlyen, J. (2017) Exploring the impact of dementia-friendly ward environments on the provision of care: A qualitative thematic analysis, *Dementia*, Vol. 18(2); Pp: 685-700

- Brooker, D. (2003) What is person-centred care in dementia? *Reviews in Clinical Gerontology*, Vol. 13(3); Pp: 215-22
- Brooker, D. (2007) Person-Centred Dementia Care: Making Services better. *Jessica Kingsley Publishers*
- Brown, J. (2017) Self and identity over time: dementia, *Journal of evaluation in clinical practice*, Vol. 23(5); Pp: 1006-12
- Bruner, J. (1991) The Narrative Construction of Reality, *Critical Inquiry*, Vol. 18(1); Pp: 1-21
- Bruner, J. (1997) A narrative model of self construction. In J. G. Snodgrass and R. L. Thompson (Eds) *The self across psychology: Self-Recognition, Self-Awareness, and the Self Concept*, *Annals of the New York Academy of Sciences*, Vol. 818(1); Pg. 146-147
- Bruner, J. (2003) Self-Making Narratives, In Fivush, R. and Haden, C. A. (Eds) *Autobiographical Memory and the Construction of a Narrative Self: Developmental and Cultural Perspectives*. Lawrence Erlbaum Associates, Inc.: Mahwah, NJ; Pp: 209-25
- Burianova, H. and Grady, C. L. (2007) Common and unique neural activations in autobiographical, episodic, and semantic retrieval, *Journal of Cognitive Neuroscience*, Vol. 19(9); Pp: 1520-34
- Busby, J. and Suddendorf, T. (2005) Recalling yesterday and predicting tomorrow, *Cognitive Development*, Vol. 20(3); Pp: 362-72
- Byers-Heinlein, K., Burns, T. C. and Werker, J. F. (2010) The roots of bilingualism in newborns, *Psychological Science*, Vol. 21(3); Pp: 343-48
- Caddell, L. S. and Clare, L. (2010) The impact of dementia on self and identity: A systematic review, *Clinical Psychology Review*, Vol. 30(1); Pp: 113-26
- Caddell, L. S. and Clare, L. (2011) Interventions supporting self and identity in people with dementia: A systematic review, *Aging and Mental Health*, Vol. 15(7); Pp: 797-810
- Caddell, L. S. and Clare, L. (2013) Studying the self in people with dementia: How might we proceed? *Dementia*, Vol. 12(2); Pp: 192-209
- Call, J. and Tomasello, M. (2008) Does the chimpanzee have a theory of mind? 30 years later, *Trends in Cognitive Sciences*, Vol. 12(5); Pp: 187-92
- Camus, A. (1961) *The Myth of Sisyphus*. New York: Vintage Books
- Caplan, A. L. and Virnig, B. (1990) Is Altruism Enough? *Critical Care Clinics*, Vol. 6(4); Pp: 1007-18
- Cardona, B. (2007) New analysis identifies potential pitfalls of a consumer-driven market, *Community Care Review*, Autumn edition:
<https://www.australianageingagenda.com.au/2017/04/13/new-analysis-identifies-potential-pitfalls-consumer-driven-market/> (last accessed 26/04/2018)

- Carlson, S. M. and Moses, L. J. (2001) Individual differences in inhibitory control and children's theory of mind, *Child Development*, Vol. 72(4); Pp: 1032–53
- Carpendale, J. I. M. and Lewis, C. (2004) Constructing an understanding of the mind: The development of children's social understanding within social interaction, *Behavioral and Brain Sciences*, Vol. 27(1); Pp: 79-151
- Carpentieri, J. D., Elliot, J. Brett, C. E. and Deary, I. J. (2017) Adapting to Aging: Older People Talk About Their Use of Selection, Optimization, and Compensation to Maximize Well-being in the Context of Physical Decline, *The Journals of Gerontology: Series B*, Vol. 72(2); Pp: 351–61
- Carruthers, P. (2006) *The Architecture of the Mind*. Oxford: Oxford University Press
- Carstensen, L. L., Fung, H. and Charles, S. T. (2003) Socioemotional selectivity theory and the regulation of emotion in the second half of life, *Motivation and Emotion*, Vol. 27(2); Pp: 103–23
- Casey, B. J, Getz, S. and Galvan, A. (2008) The adolescent brain, *Developmental Neuropsychology*, Vol. 28(11); Pp: 62–77
- Caspi, A., McClay, J., Moffitt, T., Mill, J., Martin, J., Craig, I., Taylor, A. and Poulton, R. (2002) Role of genotype in the cycle of violence in maltreated children, *Science*, Vol. 297(5582); Pp: 851–54
- Cedervall, Y., Torres, S. and Aberg, A. C. (2015) Maintaining well-being and selfhood through physical activity: experiences of people with mild Alzheimer's disease, *Aging & Mental Health*, Vol. 19(8); Pp: 679-88
- Cesari, M., Calvani, R. and Marzetti, E. (2017) Frailty in Older Persons, *Clinics in Geriatric Medicine*, Vol. 33(3); Pp: 293-303
- Chalmers, D. J. (1996) *The Conscious Mind: In Search of a Fundamental Theory*. New York and Oxford: Oxford University Press
- Chandra, S. R. and Issac, T. G. (2014) Neurodegeneration and Mirror Image Agnosia, *North American Journal of Medical Sciences*. Vol. 6(9); Pp: 472-7
- Cherniak, C. (1981) Minimal Rationality, *Mind*, Vol. 90(358); Pp: 161-83
- Chiong, W. (2013) Chapter 32 - Dementia and personal identity: implications for decision-making. In Bernat, J. L. and Beresford, R. (Eds) *Ethical and Legal Issues in Neurology, Handbook of Clinical Neurology*, Vol. 118; Pp: 409-18
- Chomsky, N. (1965) *Aspects of the Theory of Syntax*. Cambridge, MA: MIT Press
- Chung, H. (2016) Psychological Egoism and Hobbes, *Filozofia*, Vol. 71(3); Pp: 197-208
- Churchland, P. M. (1989) *A neurocomputational perspective: the nature of mind and the structure of science*. MIT Press: Cambridge, MA
- Churchland, P. S. (2003) Self-Representation in Nervous Systems, *Annals of the New York Academy of Sciences*, Vol. 1001(1); Pp: 31-8

- Churchland, P. S. (2011) The Brain and Its Self, *Proceedings of the American Philosophical Society*, Vol. 155(1); Pp: 41-50
- Churchland, P. S. and Sejnowski, T. J. (2017) *The Computational Brain*, *Bedfordshire Historical Record Society*. MIT Press
- Claire H. Noble, Caroline F. Rowland, Julian M. Pine. (2011) Comprehension of Argument Structure and Semantic Roles: Evidence from English-Learning Children and the Forced-Choice Pointing Paradigm, *Cognitive Science*, Vol. 35 (5); Pp: 963-82
- Clayton, N. S. and Dickinson, A. (1998) Episodic-like memory during cache recovery by scrub jays, *Nature*, Vol. 395(6699); Pp: 272–78
- Clegg, A., Young, J., Iliffe, S., Rikkert, M. O. and Rockwood, K. (2013) Frailty in elderly people, *Lancet*, Vol. 381(9868); Pp: 752–62
- Colarusso, C. A. (1992) *Middle Adulthood (Ages 40–60): Child and Adult Development. Critical Issues in Psychiatry (An Educational Series for Residents and Clinicians)*. Springer, Boston, MA
- Conway, M. A. (2001) Sensory-perceptual episodic memory and its context, *Philosophical Transactions of the Royal Society of London*, Vol. 356(1413); Pp: 1375-84
- Conway, M. A. (2005) Memory and the Self, *Journal of Memory and Language*, Vol. 53(4); Pp: 594-628
- Conway, M. A. and Holmes, A. (2004) Psychosocial stages and the availability of autobiographical memories, *Journal of Personality*, Vol. 72(3); Pp: 461–80
- Cooney, A. and O’Shea, E. (2018) The impact of life story work on person-centred care for people with dementia living in long-stay care settings in Ireland. *Dementia*, Article first published online: February 7, 2018; <https://doi.org/10.1177/1471301218756123> (last accessed 19/05/2019)
- Cooper, R. P. and Aslin, R. N. (1990) Preference for infant-directed speech in the first month after birth, *Child Development*, Vol. 61(5); Pp: 1584-95
- Cooper, R. P., Abraham, J., Berman, S. and Staska, M. (1997) The Development of Infants’ Preference for Motherese, *Infant Behaviour and Development*, Vol. 20(4); Pp: 447-88
- Cosmides, L. and Tooby, J. (1992) Cognitive adaptations for social exchange. In J. Barkow, L. Cosmides, and J. Tooby, (Eds) *The Adapted Mind*. Oxford: Oxford University Press; Pp: 163–228
- Cowie, Fiona, "Innateness and Language", *The Stanford Encyclopedia of Philosophy* (Winter 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2016/entries/innateness-language/> (last accessed 19/05/2019)
- Cox, Damian, La Caze, Marguerite and Levine, Michael, "Integrity", *The Stanford Encyclopedia of Philosophy* (Fall 2013 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/fall2013/entries/integrity/> (last accessed 19/05/2019)

- Craig, A. D. B. (2009) How do you feel-now? The anterior insula and human awareness, *Nature Reviews Neuroscience*, Vol. 10(1); Pp: 59-70
- Craik, F. I. M. and Jacoby L. L. (1996) Aging and memory: Implications for skilled performance. In Rogers, W. A., Fisk, A. D. and Walker, N. (Eds) *Aging and skilled performance: Advances in theory and applications*. NJ: Erlbaum; Pp: 113 – 137
- Craik, F. I. M. and Jennings, J. M. (1992) Human memory. In Craik, F. I. M and Salthouse, T. A. (Eds) *The handbook of aging and cognition*. Hillsdale, NJ: Erlbaum; Pp: 51-110
- Critchley, H. D. and Garfinkel, S. N. (2017) Interoception and emotion, *Current Opinion in Psychology*, Vol. 17; Pp: 7-14
- Czopp, A. M., Monteith, M. J. and Mark, A. Y. (2006) Standing up for a change: Reducing bias through interpersonal confrontation, *Journal of Personality and Social Psychology*, Vol. 90(5); Pp: 784-803
- D'Argembeau, A. (2013) On the Role of the Ventromedial Prefrontal Cortex in Self-Processing: The Valuation Hypothesis, *Frontiers in Human Neuroscience*, Vol. 7(372); Pp: 1-13
- D'Argembeau, A., Cassol, H., Phillips, C., Balteau, E., Salmon, E. and Van der Linden, M. (2014) Brains creating stories of selves: the neural basis of autobiographical reasoning, *Social Cognitive and Affective Neuroscience*, Vol. 9(5); Pp: 646-52
- Daddis, C. (2008) Influence of close friends on the boundaries of adolescent personal authority, *Journal of Research on Adolescence*, Vol. 18(1); Pp: 75–98
- Dally, J. M., Emery, N. J. and Clayton, N. S. (2006) Food-caching western scrub-jays keep track of who was watching when, *Science*, Vol. 312(5780); Pp: 1662–65
- Damasio, A. (2010) *Self comes to mind: Constructing the conscious brain*. New York: Pantheon Books
- Darley, J. M. and Latané, B. (1968) Bystander intervention in emergencies: Diffusion of responsibility, *Journal of Personality and Social Psychology*, Vol. 8; Pp: 377–383
- Darling, N., Cumsille, P., Caldwell, L. L. and Dowdy, B. (2006) Predictors of adolescents' disclosure to parents and perceived parental knowledge: Between- and within-person differences, *Journal of Youth and Adolescence*, Vol. 35(4); Pp: 667–78
- Davidov, M., Zahn-Waxler, C., Roth-Hanania, R. and Knafo, A. (2013) Concern for others in the first year of life: Theory, evidence, and avenues for research, *Child Development Perspectives*, Vol. 7(2); Pp: 126-31
- De Bellis, A. M., Bradley, S., Wotherspoon, A. J., Walter, B. K., Guerin, P. B., Cecchin, M. L. and Paterson, J. (2009) *Come into my world: How to interact with a person who has dementia*. Bedford Park, SA: Flinders University.
- Deary, I. J., Corley, J., Gow, A. J., Harris, S. E., Houlihan, L. M., Marioni, R. E., Penke, L., Rafnsson, S. B. and Starr, J. M. (2009) Age-associated cognitive decline, *British Medical Bulletin*, Vol. 2(1); Pp: 135–52

DeCasper, A. J. and Fifer, W. P. (1980) Of Human Bonding: Newborns Prefer their Mothers' Voices, *Science*, Vol. 208(4448); Pp: 1174-6

Delfour, F. and Marten, K. (2001) Mirror image processing in three marine mammal species: killer whales (*Orcinus orca*), false killer whales (*Pseudorca crassidens*) and California sea lions (*Zalophus californianus*), *Behavioural Processes*, Vol. 53(3); Pp: 181-90

Dennett, D. C. (1989) The Origin of Selves. In Kolak, D. and Martin, R. (Eds) *Self & Identity: Contemporary Philosophical Issues*. Macmillan; <http://cogprints.org/257/1/originss.htm> (last accessed 10/5/2019)

Dennett, D. C. (1992) The Self as a Center of Narrative Gravity. In F. Kessel, P. Cole and D. Johnson (Eds) *Self and Consciousness: Multiple Perspectives*. Hillsdale, NJ: Erlbaum; Pp: 103-115

Dennett, D. C. (1993) *Consciousness Explained*. Harmondsworth: Penguin Books

Dennett, D. C. (2000) Making Tools for Thinking. In Sperber, D. (Ed) *Metarepresentations: A Multidisciplinary Perspective*. Oxford University Press: New York; Pp: 17-30

Derksen, B. J., Duff, M. C., Weldon, K., Zhang, J., Zamba, K. D., Tranel, D. and Denburg, N. L. (2015) Older adults catch up to younger adults on a learning and memory task that involves collaborative social interaction, *Memory*, Vol. 23(4); Pp: 612--24

Deweese-Boyd, Ian, "Self-Deception", The Stanford Encyclopedia of Philosophy (Winter 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2016/entries/self-deception/> (accessed 3/06/2017)

Dewing, J. (1999) Dementia. Part 1: Person-centred care. *Professional Nurse*, Vol. 14(8); Pp: 585-8

Dishion, T. J. and Owen, L. D. (2002) A longitudinal analysis of friendships and substance use: Bidirectional influence from adolescence to adulthood, *Developmental Psychology*, Vol. 38(4); Pp: 480-491

Donnellan, C. and O'Neill, D. (2014) Baltes' SOC model of successful ageing as a potential framework for stroke rehabilitation, *Disability and Rehabilitation*, Vol. 36(5); Pp: 424-9

Doremus-Fitzwater, T. L., Varlinskaya, E. I. and Spear, L. P. (2010) Motivational systems in adolescence: possible implications for age differences in substance abuse and other risk-taking behaviors, *Brain and Cognition*, Vol. 72(1); Pp: 114-23

Driver, J., Davis, G., Ricciardelli, P., Kidd, P., Maxwell, E. and Baron-Cohen, S. (1999) Gaze perception triggers reflexive visuospatial orienting, *Visual Cognition*, Vol. 6(5); Pp: 509-40

Duval, C., Bejanin, A., Piolino, P., Laisney, M., de La Sayette, V., Belliard, S., Eustache, F. and Desgranges, B. (2012) Theory of mind impairments in patients with semantic dementia, *Brain*, Vol. 135(1); Pp: 228-41

Duval, C., Desgranges, B., de La Sayette, V., Belliard, S., Eustache, F. and Piolino, P. (2012) What happens to personal identity when semantic knowledge degrades? A study of the self and autobiographical memory in semantic dementia, *Neuropsychologia*, Vol. 50(2); Pp: 254-65

Easterbrook, M. A., Kisilevsky, B. S., Muir, D. W. and Laplante, D. P. (1999) Newborns discriminate schematic faces from scrambled faces, *Canadian Journal of Experimental Psychology*, Vol. 53(3); Pp: 231-41

Edvardsson, D., Fetherstonhaugh, D. and Nay, R. (2010) Promoting a continuation of self and normality: person-centred care as described by people with dementia, their family members and aged care staff, *Journal of Clinical Nursing*, Vol. 19(17-18); Pp: 2611–2618

Edvardsson, D., Winblad, B. and Sandman, P. O. (2008) Person-centred care for people with severe Alzheimer's disease – current status and ways forward, *Lancet Neurology*, Vol. 7(4); Pp: 362–367

Ekman, I., Swedberg, K., Taft, C., Lindseth, A., Norberg, A., Brink, E., Carlsson, J., Dahlin-Ivanoff, S., Johansson, I. L., Kjellgren, K., Liden, E., Ohlen, J., Olsson, L. E., Rosen, H., Rydmark, M. and Sunnerhagen, K. S. (2011) Person-centered care - ready for prime time, *European Journal of Cardiovascular Nursing*, Vol. 10(4); Pp: 248-51

El Haj, M., Antoine, P., Amouyel, P., Lambert, J.-C., Pasquier, F. and Kapogiannis, D. (2016) Autobiographical memory decline in Alzheimer's disease, a theoretical and clinical overview, *Aging Research Reviews*, Vol. 23(PtB); Pp: 183-92

El Haj, M., Kapogiannis, D. and Antoine, P. (2016) Phenomenological Reliving and Visual Imagery During Autobiographical Recall in Alzheimer's Disease, *Journal of Alzheimers Disease*, Vol. 16;52(2); Pp: 421-31

El Haj, M., Roche, J., Gallouj, K. and Gandolphe, M. C. (2017) Autobiographical memory compromise in Alzheimer's disease: a cognitive and clinical overview, *Gériatrie et psychologie neuropsychiatrie du vieillissement*, Vol. 15(4); Pp: 443-51

Eliot, L. (1999) *Early Intelligence*. London: Penguin Books

Ellis, M. and Astell, A. (2017) Communicating with people living with dementia who are nonverbal: The creation of Adaptive Interaction, *PLoS One*, Vol. 12(8); Pp: e0180395

Engel, G. L. (1977) The Need for a New Medical Model: A Challenge for Biomedicine, *Science*, Vol. 196(4286); Pp: 129-36

Erikson, E. H. (1959) Identity and the life cycle: Selected papers, *Psychological Issues*, Vol. 1(1); Pp: 1-171

Erikson, E. H. and Erikson, J. M. (1998) *The Life Cycle Completed: Extended Version*. W. W. Norton

Eshleman, Andrew, "Moral Responsibility", *The Stanford Encyclopedia of Philosophy* (Winter 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2016/entries/moral-responsibility/> (last accessed 26/04/2018)

Eslinger, P. J., Dennis, K., Moore, P., Antani, S., Hauck, R. and Grossman, M. (2005) Metacognitive deficits in frontotemporal dementia, *Journal of Neurology, Neurosurgery & Psychiatry*, Vol. 76(12); Pp: 1630-35

- Ettema, T. P., Droes, R-M., de Lange, J., Ooms, M. E., Mellenbergh, G. J. and Ribbe, M. W. (2005) The concept of quality of life in dementia in the different stages of the disease, *International Psychogeriatrics*, Vol. 17(3); Pp: 353-70
- Eustache, M-L., Laisney, M., Juskenaite, A., Letortu, O. Platel, H., Eustache, F. and Desgranges, B. (2013) Sense of identity in advanced Alzheimer's dementia: a cognitive dissociation between sameness and selfhood? *Consciousness and Cognition*, Vol. 22(4); Pp: 1456-67
- Evans, J. St. B. T. (2002) Dual-Processing Accounts of Reasoning, Judgment, and Social Cognition, *Annual Review of Psychology*, Vol. 59; Pp: 255–78
- Evans, J. St. B. T. (2002) The influence of prior belief on scientific thinking. In Carruthers, P., Stich, S. and Siegal. M. (Eds) *The Cognitive Basis of Science*. Cambridge University Press; Pp: 193-210
- Evans, J. St. B. T. and Frankish, K. (2009) *In Two Minds: Dual Processes and Beyond*. Oxford University
- Evans, J. St. B. T. and Over, D. E. (1996) *Rationality and reasoning*. Hove, England: Psychology Press
- Evans, M. (1999) Ethics: Reconciling Conflicting Values in Health Policy. Policy Futures for UK Health, No. 9. Nuffield Trust, London
- Fandakova, Y., Selmecky, D., Leckey, S. Grimm, K. J., Wendelken, C. Bunge, S. A. and Ghetti, S. (2017) Changes in ventromedial prefrontal and insular cortex support the development of metamemory from childhood into adolescence, *Proceedings of the National Academy of Sciences*, Vol. 114(29); Pp: 7582-87
- Farah, M. J. and Heberlein, A. S. (2007) Personhood and neuroscience: Naturalizing or nihilating? *The American Journal of Bioethics*, Vol. 7(1); Pp: 37-48
- Farroni, T., Csibra, G., Simion, F. and Johnson, M. H. (2002) Eye contact detection in humans from birth, *Proceedings of the National Academy of Sciences*, Vol. 99(14); Pp: 9602-5
- Fazio, S. (2008) The enduring self in people with Alzheimer's: Getting to the heart of individualized care. Baltimore, MD: Health Professions Press
- Fazio, S. and Mitchell, D. B. (2009) Persistence of self in individuals with Alzheimer's disease: Evidence from language and visual recognition, *Dementia*, Vol. 8(1); Pp: 39-59
- Fine, C. (2006) Is the Emotional Dog Wagging its Rational Tail, or Chasing it? Reason in Moral Judgment, *Philosophical Explorations*, Vol. 9(1); Pp: 83-98
- Fine, C. and Kennett, J. (2004) Mental Impairment, Moral Understanding and Criminal Responsibility: Psychopathy and the Purposes of Punishment, *International Journal of Law and Psychiatry*, Vol. 27(5); Pp: 425-43
- Fishbein, M. A. and Ajzen, I. (1975) *Belief, attitude, intention and behavior: an introduction to theory and research*. Reading MA: Addison Wesley

- Fishbein, M. A. and Ajzen, I. (2007) Predicting and Changing Behavior: A Reasoned Action Approach, In Ajzen, I., Albarracin, D. and Hornik, R. (Eds) *Prediction and Change of Health Behavior: Applying the Reasoned Action Approach*. Lawrence Erlbaum Associates: Mahwah: NJ; Pg. 3-4
- Fishbein, M. A. and Ajzen, I. (2010) *Predicting and changing behavior: The Reasoned Action Approach*. New York: Taylor & Francis.
- Fivush, R. and Haden, C. A. (2003) Introduction: Autobiographical Memory, Narrative and Self. In Fivush, R. and Haden, C. A. (Eds) *Autobiographical Memory and the Construction of a Narrative Self: Developmental and Cultural Perspectives*. Lawrence Erlbaum Associates: NJ; Pp: vii-xiv
- Fivush, R., Booker, J. A. and Graci, M. E. (2017) Ongoing Narrative Meaning-Making Within Events and Across the Life Span, *Imagination, Cognition and Personality*, Vol. 37(2); Pp: 127-52
- Foot, P. (1972) Morality as a System of Hypothetical Imperatives, *The Philosophical Review*, Vol. 81(3); Pp: 305-16
- Frankfurt, H. G. (1971) Freedom of the Will and the Concept of a Person, *The Journal of Philosophy*, Vol. 68(1); Pp: 5-20
- Freedman, J. and Combs, G. (1996) *Narrative Therapy: The social construction of preferred realities*. New York: W. W. Norton
- Frolich, R. W. (2009) *Evolutionary Intelligence: The Anatomy of Human Survival (2nd ed)*. Xlibris Corporation; Pp: 347-348
- Gabard-Durnam, L. J., Flannery, J., Goff, B., Gee, D. G., Humphreys, K. L. Telzer, E., Hare, T. and Tottenham, N. (2014) The development of human amygdala functional connectivity at rest from 4 to 23 years: A cross-sectional study, *NeuroImage*, Vol. 95; Pp: 193-207
- Gabriel, U., Banse, R. and Hug, F. (2007) Predicting private and public helping behaviour by implicit attitudes and the motivation to control prejudiced reactions, *The British Journal of Social Psychology*. Vol. 46(pt2); Pp: 365–82
- Gallagher, S. (2000) Philosophical conceptions of the self: implications for cognitive science, *Trends in Cognitive Sciences*, Vol. 4(1); Pp: 14-21
- Gallagher, Shaun and Zahavi, Dan, "Phenomenological Approaches to Self-Consciousness", The Stanford Encyclopedia of Philosophy (Winter 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2016/entries/self-consciousness-phenomenological/> (last accessed 19/05/2019)
- Gallagher, S. (2007) Moral Agency, Self-Consciousness, and Practical Wisdom, *Journal of Consciousness Studies*, Vol. 14(5); Pp: 199–223
- Gallese, V. and Goldman, A. (1998) Mirror neurons and the simulation theory of mind-reading, *Trends in Cognitive Sciences*, Vol. 2(12); Pp: 493–501
- Gallup Jr., G. G., Anderson, J. R. and Shillito, D. J. (2002) The mirror test. In M. Bekoff, C. Allen and G.M. Burghardt (Eds) *The Cognitive Animal*. Cambridge, MA: MIT Press

- Gallup Jr., G. G. (1970) Chimpanzees: Self-Recognition, *Science*, Vol. 167(3914); Pp: 86-87
- Galvan, A., Hare, T. A., Parra, C. E., Penn, J., Voss, H., Glover, G. and Casey, B. J. (2006) Earlier development of the accumbens relative to orbitofrontal cortex might underlie risk-taking behavior in adolescents, *The Journal of Neuroscience*, Vol. 26(25); Pp: 6885–92
- Gardini, S., Venneri, A., Sambataro, F., Cuetos, F., Fasano, F., Marchi, M., Crisi, G. and Caffarra, P. (2015) Increased functional connectivity in the default mode network in mild cognitive impairment: a maladaptive compensatory mechanism associated with poor semantic memory performance, *Journal of Alzheimers Disease*, Vol. 45(2); Pp: 457-70
- Garrido, S., Stevens, C. J., Chang, E., Dunne, L. and Perz, J. (2018) Music and Dementia: Individual Differences in Response to Personalized Playlists, *Journal of Alzheimer's Disease*, Vol. 64(3); Pp: 933-41
- Garrido, S., Stevens, C. J., Chang, E., Dunne, L. and Perz, J. (forthcoming) Musical Features and Affective Responses to Personalized Playlists in People With Probable Dementia, *American Journal of Alzheimer's Disease and other Dementias*.
- Gazzaniga, M. S. (1998) *The mind's past*. Berkeley: University of California Press
- Gerrans, P. (2006) Mechanisms of madness: evolutionary psychiatry without evolutionary psychology, *Biology and Philosophy*, Vol. 22; Pp: 35–56
- Gerrans, P. (2015) All the self we need. In T. Metzinger and J. M. Windt (Eds) *Open MIND*: 15(T). Frankfurt am Main: MIND Group; Pp: 1-19
- Gerrans, P. and Kennett, J. (2010) Neurosentimentalism and Moral Agency, *Mind*, Vol. 119(475); Pp: 585-614
- Gerrans, P. and Kennett, J. (2017) Mental time travel, dynamic evaluation, and moral agency, *Mind*, Vol. 126(501); Pp: 259-68
- Gert, B. (1967) Hobbes and Psychological Egoism, *Journal of the History of Ideas*, Vol. 28(4); Pp: 503-20
- Ghetti, S. and Bunge, S. A. (2012) Neural Changes Underlying the Development of Episodic Memory During Middle Childhood, *Developmental Cognitive Neuroscience*, Vol. 2(4); Pp: 381-95
- Gibney, B. C. (2017) *A Generation of Sociopaths: How the Baby boomers Betrayed America*, Hachette Books: New York
- Gigerenzer, G. (1991) How to make Cognitive Illusions Disappear: Beyond “Heuristics and Biases”, *European Review of Social Psychology*, Vol. 2(1); Pp: 83-115
- Gigerenzer, G. and Todd, P. M. (1999) *Simple heuristics that make us smart*. New York: Oxford University Press
- Gilboa, A. (2004) Autobiographical and Episodic Memory—One and the Same? Evidence from Prefrontal Activation in Neuroimaging Studies, *Neuropsychologia*, Vol. 42(10); Pp: 1336–49

- Gill, L., Bradley, S. L., Cameron, I. A. and Ratcliffe, J. (2008) How do clients in Australia experience Consumer Directed Care? *BMC Geriatrics*, Vol. 18(148); Pp: 1-12
- Gillihan, S. J. and Farah, M. J. (2005) Is Self Special? A Critical Review of Evidence from Experimental Psychology and Cognitive Neuroscience, *Psychological Bulletin*, Vol. 131(1); Pp: 76–97
- Goh, J. O. and Park, D. C. (2009) Neuroplasticity and cognitive aging: The scaffolding theory of aging and cognition, *Restorative Neurology and Neuroscience*, Vol. 27(5); Pp: 391–403
- Goldman, A. (2009) Mirroring, simulating, and mindreading, *Mind and Language*, Vol. 24(2); Pp: 235–52
- Goldstein, R. Z. and Volkow, N. D. (2002) Drug addiction and its underlying neurobiological basis: neuroimaging evidence for the involvement of the frontal cortex, *The American Journal of Psychiatry*, Vol. 159(10); Pp: 1642–52
- Gonneaud, J., Kalpouzos, G., Bon, L., Viader, F., Eustache, F. and Desgranges, B. (2011) Distinct and shared cognitive functions mediate event- and time-based prospective memory impairment in normal ageing, *Memory*, Vol. 19(4); Pp: 360–77
- Goodman, Russell, "William James", *The Stanford Encyclopedia of Philosophy* (Fall 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2016/entries/james/> (last accessed 19/05/2019)
- Gopnik, A. and Wellman, H. M. (1994) The theory theory, In Hirschfeld, L. and Gelman, S. (Eds) *Mapping the Mind*. Cambridge University Press, New York; Pp: 257–293
- Gottlieb, G. (1992) *Individual development and evolution*. Oxford University Press
- Gottlieb, G. (2007) Probabilistic epigenesis, *Developmental Science*, Vol. 10(1); Pp: 1–11
- Greene, J. and Haidt, J (2002) How (and where) does moral judgment work? *Trends in Cognitive Sciences*, Vol. 6(12); Pp: 517–23
- Gregory, C., Lough, S., Stone, V., Erzincliglu, S., Martin, L., Baron-Cohen, S. and Hodges, J. R. (2002) Theory of mind in patients with frontal variant frontotemporal dementia and Alzheimer's disease: theoretical and practical implications, *Brain*. Vol. 125(4); Pp: 752–64
- Greicius, M. D. Srivastava, G., Reiss, A. L. and Menon, V. (2004) Default-mode network activity distinguishes Alzheimer's disease from healthy aging: Evidence from functional MRI, *Proceedings of the National Academy of Science*, Vol. 101(13); Pp: 4637-42
- Grice, H. P. (1975/1957) Logic and conversation. In R. Cole and J. Morgan (Eds) *Syntax and Semantics: Speech Acts*. New York: Academic Press
- Grieder, M., Wang, D. J. J., Dierks, T., Wahlund, L. O. and Jann, K. (2018) Default Mode Network Complexity and Cognitive Decline in Mild Alzheimer's Disease, *Frontiers in Neuroscience*, Vol. 12(770); Pp: 1-9

- Grilli, M. D. and Verfaellie, M. (2014) Personal semantic memory: Insights from neuropsychological research on amnesia, *Neuropsychologia*, Vol. 61(1); Pp: 56-64
- Grondahl, V. A., Persenius, M., Baath, C. and Helgesen, A. K. (2017) The use of life stories and its influence on persons with dementia, their relatives and staff – a systematic mixed studies review, *BMC Nursing*, Vol. 16(28); Pp: 1-11
- Gross, R. (2012) *Being Human: Psychological and Philosophical Perspectives*, Routledge: New York
- Gruen, Lori, "The Moral Status of Animals", The Stanford Encyclopedia of Philosophy (Fall 2017 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2017/entries/moral-animal/> (last accessed 26/04/2018)
- Gu, X., Hof, P. R., Friston, K. J. and Fan, J. (2013) Anterior Insular Cortex and Emotional Awareness, *The Journal of Comparative Neurology*, Vol. 521(15); Pp: 3371-88
- Habermas, T. (2010) Autobiographical reasoning: Arguing and narrating from a biographical perspective. In T. Habermas (Ed.) The development of autobiographical reasoning in adolescence and beyond, *New Directions for Child and Adolescent Development*, Vol. 131; pp: 9-10
- Habermas, T. (2011) Autobiographical reasoning: arguing and narrating from a biographical perspective, *New Directions for Child and Adolescent Development*, Vol. 2011 (131); Pp: 1-17
- Habermas, T. and Kober, C. (2015) Autobiographical reasoning in life narratives buffers the effect of biographical disruptions on the sense of self-continuity, *Memory*, Vol. 23(5); Pp: 664-74
- Habermas, T. and Bluck, S. (2000) Getting a life: The emergence of the life story in adolescence, *Psychological Bulletin*, Vol. 126, 748–769
- Haden, C. A. (2003) Joint Encoding and Joint Reminiscing: Implications for Young Children's Understanding and Remembering of Personal Experiences, In Fivush, R. and Haden, C. A. (Eds) *Autobiographical Memory and the Construction of a Narrative Self: Developmental and Cultural Perspectives*. Lawrence Erlbaum Associates, Inc.: Mahwah, NJ; Pp: 49-70
- Hadley, H., Rost, G. C., Fava, E. and Scott, L. S. (2014) A Mechanist Approach to Cross-Domain Perceptual Narrowing in the First year of Life, *Brain Sciences*, Vol. 4(4); Pp: 613-34
- Haidt, J. (2001) The emotional dog and its rational tail: A social intuitionist approach to moral judgment, *Psychological Review*, Vol. 108(4); Pp: 814–34
- Halsema, J. M. (2013) The Narrative Self: Ricoeur in Dialogue with Schechtman and Strawson, *International Conference The Ricoeur Centenary (1913-2013), "Paul Ricoeur and Contemporary English Language Philosophy"*; 18th November, 2013; <https://www.youtube.com/watch?v=0dx5RsWDcn4> (last accessed 18/11/2018)
- Hamlin, J. K. (2012) A developmental perspective on the moral dyad, *Psychological Inquiry*, Vol. 23(2); Pp: 166-71
- Haney, C., Banks, W. C. and Zimbardo, P. G. (1973) A study of prisoners and guards in a simulated prison, *Naval Research Review*, Vol. 30; Pp: 4-17

- Hannon, E. E. and Trehub, S. E. (2005) Metrical categories in infancy and adulthood, *Psychological Science*, Vol. 16(1); Pp: 48–55
- Hansen, T. and Slagsvold, B. (2012) The age and subjective well-being paradox revisited: A multidimensional perspective, *Norsk Epidemiologi*, Vol. 22(2); Pp: 187-95
- Harada, C. N., Natelson Love, M. C. and Triebel, K. (2013) Normal Cognitive Aging, *Clinics in Geriatric Medicine*, Vol. 29(4); Pp: 737-52
- Hardt, R. (forthcoming) Storytelling agents: why narrative rather than mental time travel is fundamental, *Phenomenology and the Cognitive Sciences*, (published online 24 August 2017) <https://doi.org/10.1007/s11097-017-9530-2> (last accessed 20/5/2018)
- Hare, B., Call, J. and Tomasello, M. (2001) Do chimpanzees know what conspecifics know? *Animal Behavior*, Vol. 61(1); Pp: 139–51
- Harre, R. (1991) The Discursive Production of Selves, *Theory and Psychology*, Vol. 1(1); Pp: 51-63
- Harre, R. (1998) *The Singular Self: An Introduction to the Psychology of Personhood*. London: Sage
- Harris, C. B., Paterson, H. M. and Kemp, R. I. (2008) Collaborative recall and collective memory: What happens when we remember together? *Memory*, Vol. 16(3); Pp: 213–30
- Hatfield, Gary, "René Descartes", *The Stanford Encyclopedia of Philosophy* (Summer 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/sum2016/entries/descartes/> (Last accessed 19/07/2018)
- Hauser, M. D. (2008) The Seeds of Humanity, *The Tanner Lectures on Human Values*; Delivered at Princeton University, November 12, 2008
- Hauser, M. D. (2009) Origin of the mind, *Scientific American*, Vol. 301(3); Pp: 44-51
- Hayden, A., Bhatt, R. S., Joseph, J. E. and Tanaka, J. W. (2007) The other-race effect in infancy: Evidence using a morphing technique, *Infancy*, Vol. 12(1); Pp: 95–104.
- Hefscher, M., Barkan-Abramski, M., Goldsmith, M., Aharon-Peretz, J. and Gilboa, A. (2016) Memory, decision-making, and the ventromedial prefrontal cortex (vmPFC): The roles of subcallosal and posterior orbitofrontal cortices in monitoring and control processes, *Cerebral Cortex*, Vol. 26(12); Pp: 4590–4601
- Hedman, R., Hansebo, G., Ternestedt, B. M., Hellstron, I. and Norberg, A. (2012) How people with Alzheimer's disease express their sense of self: analysis using Rom Harre's theory of selfhood. *Dementia*, Vol. 12(6); Pp: 713-33
- Hedman, R., Hansebo, G., Ternestedt, B. M., Hellstron, I. and Norberg, A. (2016) Expressed Sense of Self by People With Alzheimer's Disease in a Support Group Interpreted in Terms of Agency and Communion, *Journal of Applied Gerontology*, Vol. 35(4); Pp: 421-43
- Heiphetz, L. and Young, L. (2014) A social cognitive developmental perspective on moral judgment, *Behaviour*, Vol. 151(2-3); Pp: 315-35

- Henry, J. D., Crawford, J. R. and Phillips, L. H. (2004) Verbal fluency performance in dementia of the Alzheimer's type: A meta-analysis, *Neuropsychologia*, Vol.42(9); Pp: 1212-22
- Henry, J. D., MacLeod, M. S., Phillips, L. H. and Crawford, J. R. (2004) A meta-analytic review of prospective memory and aging, *Psychology and Aging*, Vol. 19(1); Pp: 27–39
- Hepper, P. G, Scott, D. and Shahidullah, S. (1993) Newborn and fetal response to maternal voice, *Journal of Reproductive and Infant Psychology*, Vol. 11(3); Pp: 147-53
- Higgs, P. and Gilleard, C. (2016) Interrogating personhood and dementia, *Aging and Mental Health*, Vol. 20(8); Pp: 773-80
- Hobson, P. (2002) *The Cradle of Thought: Exploring the Origins of Thinking*. London: Macmillan
- Holm, A. K., Lepp, M. and Ringsberg, K. C. (2005) Dementia: involving patients in storytelling--a caring intervention. A pilot study, *Journal of Clinical Nursing*, Vol. 14(2); Pp: 256-63
- Holmes, H. A., Black, C. and Miller, S. A. (1996) A cross-task comparison of false-belief understanding in a Head Start population, *Journal of Experimental, Child Psychology*, Vol. 63(2); Pp: 263–85
- Horn, J. L. and Donaldson, G. (1976) On the myth of intellectual decline in adulthood, *American Psychologist*, Vol. 31(10); Pp: 701–19
- Howard, D. V., Howard, J. H., Dennis, N. A., LaVine, S. and Valentino, K. (2008) Aging and implicit learning of an invariant association, *The Journals of Gerontology: Series B*, Vol. 63(2); Pp: 100–5
- Howe, M. L., Courage, M. L. and Edison, S. C. (2003) When autobiographical memory begins, *Developmental Review*, Vol. 23(4); Pp: 471–94
- Hughes, C. and Ensor, R. (2005) Executive function and theory of mind in 2 year olds: A family affair? *Developmental Neuropsychology*, Vol. 28(2); Pp: 645–68
- Hughes, D., Rodriguez, J., Smith, E. P., Johnson, D. J., Stevenson, H. C. and Spicer, P. (2006) Parents' ethnic–racial socialization practices: A review of research and directions for future study, *Developmental Psychology*, Vol. 42(5); Pp: 747–70.
- Hughes, J. C. (2013) Philosophical issues in dementia, *Current Opinion in Psychiatry*, Vol. 26(3); Pp: 283-8
- Hunter, P. (2010) The psycho gene, *EMBO reports*, Vol. 11(9); Pp: 667-69
- Hunter, P. V., Hadjistavropoulos, T., Smythe, W. E., Malloy, D. C., Kaasalainen, S. and Williams, J. (2013) The Personhood in Dementia Questionnaire (PDQ): Establishing an association between beliefs about personhood and health providers' approaches to person-centred care, *Journal of Aging Studies*, Vol. 27(3); Pp: 276-87
- Irish, M. and Piguet, O. (2013) The Pivotal Role of Semantic Memory in Remembering the Past and Imagining the Future, *Frontiers in Behavioral Neuroscience*, Vol. 7(27); Pp: 1-11
- Irish, M., Addis, D. R., Hodges, J. R. and Piguet, O. (2012) Considering the role of semantic memory in episodic future thinking: evidence from semantic dementia, *Brain*, Vol. 135(7); Pp: 2178-91

- Irwin, K., Sexton, C., Daniel, T., Lawlor, B. and Naci, L. (2018) Healthy Aging and Dementia: Two Roads Diverging in Midlife? *Frontiers in Aging Neuroscience*, Vol. 10(275); doi:10.3389/fnagi.2018.00275 (last accessed 19/05/2019)
- Jalbrzikowski, M., Larsen, B., Hallquist, M. N., Foran, W., Calabro, F. and Luna, B. (2017) Development of White Matter Microstructure and Intrinsic Functional Connectivity Between the Amygdala and Ventromedial Prefrontal Cortex: Associations With Anxiety and Depression, *Biological Psychiatry*, Vol. 82(7); Pp: 511-21
- Jennings, J. M. and Jacoby, L. L. (1993) Automatic versus intentional uses of memory: Aging, attention, and control, *Psychology and Aging*, Vol. 8(2); Pp: 283–93
- Johnson, M. H. (2005) Subcortical face processing, *Nature Reviews Neuroscience*, Vol. 6(10); Pp: 766-74
- Johnson, M. H. (2011) Interactive Specialization: A domain-general framework for human functional brain development? *Developmental Cognitive Neuroscience*, Vol. 1(1); Pp: 7-21
- Johnson, M. H. and Morton, J. (1991) *Biology and Cognitive Development: The Case of Face Recognition*. Blackwell, Oxford
- Johnson, M. H., Dziurawiec, S., Ellis, H. and Morton, J. (1991) Newborns' preferential tracking of face-like stimuli and its subsequent decline, *Cognition*. Vol. 40(1-2); Pp: 1-19
- Johnson, M. H., Senju, A. and Tomalski, P. (2015) The two-process theory of face processing: Modifications based on two decades of data from infants and adults, *Neuroscience and Biobehavioral Reviews*, Vol. 50; Pp: 169-79
- Jones, S. S. (2009) The development of imitation in infancy, *Philosophical Transactions of the Royal Society B*, Vol. 364(1528); Pp: 2325-35
- Kahana, E. and Kahana, B. (2014) Baby Boomers' Expectations of Health and Medicine, *Virtual Mentor*, Vol. 16(5); Pp: 380-84
- Kant, I. *Foundations of the Metaphysics of Morals*. Translated by Lewis White Beck. Library of Liberal Arts, 1956
- Kant, I. *The Metaphysics of Morals*. Translated by Mary J. Gregor. Cambridge University Press, 1991
- Karmiloff-Smith, A. (1992) *Beyond modularity: A developmental perspective on cognitive science*. MIT Press
- Keating, J., Affleck-Brodie, C., Wiegand, R. and Morcom, A. M. (2017) Aging, working memory capacity and the proactive control of recollection: An event-related potential study, *PLoS One*, Vol. 12(7); Pp: e0180367
- Keijsers, L., Branje, S., Hawk, S. T., Schwartz, S. J., Frijns, T., Koot, H. M. and Meeus, W. (2012) Forbidden friends as forbidden fruit: Parental supervision of friendships, contact with deviant peers, and adolescent delinquency, *Child Development*, Vol. 83(2); Pp: 651–66

- Kelly, D. J., Liu, S., Lee, K., Quinn, P. C., Pascalis, O., Slater, A. M, and Ge, L. (2009) Development of the other-race effect during infancy: Evidence toward universality? *Journal of Experimental Child Psychology*, Vol. 104(1); Pp: 105–14
- Kelly, D. J., Quinn, P. C., Slater, A. M., Lee, K., Gibson, A., Smith, M. and Pascalis, O. (2005) Three-month-olds, but not newborns, prefer own-race faces, *Developmental Science*, Vol. 8(6); F31–F36
- Kelly, F. (2010) Recognising and supporting self in dementia: A new way to facilitate a person-centred approach to dementia care, *Ageing and Society*, Vol. 30(1); Pp: 103–24
- Kennett, J. (2002) Autism, Empathy and Moral Agency, *The Philosophical Quarterly*, Vol. 52(208); Pg. 356
- Kennett, J. and Matthews, S. (2009) Mental Time Travel, Agency, and Responsibility. In Broome, M. R. and Bortolotti, L. (Eds) *Psychiatry as Cognitive Neuroscience: Philosophical Perspectives*. Oxford: Oxford University Press
- Keys, B. A. and White, D. A. (2000) Exploring the relationship between age, executive abilities, and psychomotor speed, *Journal of the International Neuropsychological Society*, Vol. 6(1); Pp: 76–82
- Kieling, C., Kieling, R. R, Rohde, L. A., Frick, P. J., Moffitt, T., Nigg, J. T., Tannock, R. and Castellanos, F. X. (2010) The age at onset of attention deficit hyperactivity disorder, *The American Journal of Psychiatry*, Vol. 167(1); Pp: 14–6
- Kim, S. K. and Park, M. (2017) Effectiveness of person-centered care on people with dementia: a systematic review and meta-analysis, *Clinical Interventions in Aging*, Vol. 12; Pp: 381–39
- Kitwood, T. (1993) Person and process in dementia, *International Journal of Geriatric Psychiatry*, Vol. 8(7); Pp: 541–45
- Kitwood, T. (1997) *Dementia reconsidered: The person comes first*. Buckingham, U.K.: Open University Press
- Klein, S. B, Cosmides, L. and Costabile, K. A. (2003) Preserved knowledge of self in a case of Alzheimer’s dementia, *Social Cognition*, Vol. 21(2); Pp: 157–65
- Kochanska, G. (2002) Mutually responsive orientation and children’s moral emotion, conduct, and cognition, *Journal of Child Psychology and Psychiatry*, Vol. 46(1); Pp: 19–34
- Kochanska, G. (2002) Mutually Responsive Orientation Between Mothers and Their Young Children: A Context for the Early Development of Conscience, *Current Directions in Psychological Science*, Vol. 11(6); Pp: 191–95
- Kochanska, G. and Kim, S. (2012) Toward a new understanding of legacy of early attachments for future antisocial trajectories: Evidence from two longitudinal studies, *Development and Psychopathology*, Vol. 24(3); Pp: 783–806
- Kochanska, G., Aksan, N., Prisco, T. R. and Adams, E. E. (2008) Mother–child and father–child mutually responsive orientation in the first 2 years and children’s outcomes at preschool age: Mechanisms of influence, *Child Development*, Vol. 79(1); Pp: 30–44

- Kochanska, G., Forman, D. R. Aksan, N. and Dunbar, S. B. (2005) Pathways to conscience: early mother–child mutually responsive orientation and children's moral emotion, conduct, and cognition, *Journal of Child Psychology and Psychiatry*, Vol. 46(1); Pp: 19-34
- Kochanska, G., Gross, J. N., Lin, M. H. and Nichols, K. E. (2002) Guilt in young children: Development, determinants, and relations with a broader system of standards, *Child Development*, Vol. 73(2); Pp: 461-82
- Korsgaard, C. M. (1989) Personal Identity and the Unity of Agency: A Kantian Response to Parfit, *Philosophy and Public Affairs*, Vol. 18(2); Pp: 101-32
- Korsgaard, C. M. (1996) *The Sources of Normativity*. Cambridge: Cambridge University Press
- Korsgaard, C. M. (2009) *Self-Constitution: Agency, Identity, and Integrity*. Oxford University Press
- Korsgaard, C. M. (2010) Reflections on the evolution of morality. Amherst Lecture in Philosophy. The Department of Philosophy at Amherst College - <http://www.amherstlecture.org/korsgaard2010> (last accessed 19/05/2019)
- Korsgaard, C. M. (2013) Personhood, Animals and the Law, *Think*, Vol. 12(34); Pp: 25-32
- Krauss-Whitbourne, S. and Sneed, J. R. (2002) The paradox of well-being, identity processes, and stereotype threat: Ageism and its potential relationships to the self in later life, In Nelson, T. D. (Ed) *Ageism: Stereotyping and prejudice against older persons*. Cambridge. MA: The MIT Press; Pp: 247-276
- Kraut, Richard, "Altruism", *The Stanford Encyclopedia of Philosophy* (Spring 2018 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/spr2018/entries/altruism/> (last accessed 5/11/2018)
- Kraut, Richard, "Aristotle's Ethics", *The Stanford Encyclopedia of Philosophy* (Summer 2014 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/sum2014/entries/aristotle-ethics/> (last accessed 19/05/2019)
- Kuhl, P. K. (2007) Is speech learning 'gated' by the social brain? *Developmental Science*, Vol. 10(1); Pp: 110-20
- Kuhl, P. K., Tsao, F-M. and Liu, H-M. (2003) Foreign-language experience in infancy: Effects of short-term exposure and social interaction on phonetic learning, *Proceedings of the National Academy of Sciences*, Vol. 100(15); Pp: 9096-9101
- Laible, D., Thompson, R. A. and Froimson, J. (2015) Early Socialization; The Influence of Close Relationships. In Grusec, J. E and Hastings, P. D (Eds) *Handbook of Socialization: Theory and Research (2nd Edition)*. The Guilford Press: New York; Pp: 35-59
- Lasky, R. E. and Williams, A. L. (2005) The development of the auditory system from conception to term, *NeoReviews*, Vol. 6(3); Pp: e141–e152
- Latimer, T., Roscamp, J. and Papanikitas, A. (2017) Patient-centredness and consumerism in healthcare: an ideological mess. *Journal of the Royal Society of Medicine*, Vol. 110(11); Pp: 425-27

Lazaridis, M. (2013) The Emergence of a Temporally Extended Self and Factors that Contribute to its Development: From Theoretical and Empirical Perspectives, *Monographs of the Society for Research in Child Development*, Vol. 78(2); Pp: 1-29

Le Bouc, R., Lenfant, P., Delbeuck, X., Ravasi, L., Lebert, F., Semah, F. and Pasquier, F. (2012) My belief or yours? Differential theory of mind deficits in frontotemporal dementia and Alzheimer's disease, *Brain*, Vol. 135(10); Pp: 3026-38

Lee, E., Meguro, K., Hashimoto, R., Meguro, M., Ishii, H., Yamaguchi, S. and Mori, E. (2007) Confabulations in episodic memory are associated with delusions in Alzheimer's disease, *Journal of Geriatric Psychiatry and Neurology*, Vol. 20(1); Pp: 34-40

Lee, K. H., Boltz, M. and Lee, H. (2017) Does Social Interaction Matter Psychological Well-Being in Persons With Dementia? *American Journal of Alzheimer's Disease and other Dementias*, Vol. 32(4); Pp: 207-12

Leibing, A. (2006) Divided Gazes: Alzheimer's Disease, the Person Within, and Death in Life. In Leibing, A. and Cohen, L. (Eds) *Thinking About Dementia: Culture, Loss, and the Anthropology of Senility*. Rutgers University Press; Pp: 249-50

Lewis, M. and Ramsay, D. (2004) Development of Self-Recognition, Personal Pronoun Use, and Pretend Play During the 2nd Year, *Child Development*, Vol. 75(6); Pp: 1821–31

Lewis, M. and Todd, R. (2007) The self-regulating brain: Cortical-subcortical feedback and the development of intelligent action, *Cognitive Development*, Vol. 22(4); Pp: 406-30

Lewkowicz, D. J. and Ghazanfar, A. A. (2006) The decline of cross-species intersensory perception in human infants, *Proceedings of the National Academy of Sciences*, Vol. 103(17); Pp: 6771–74

Li, C. R. and Sinha, R. (2008) Inhibitory control and emotional stress regulation: Neuroimaging evidence for frontal-limbic dysfunction and psycho-stimulant addiction, *Neuroscience and Biobehavioral Reviews*, Vol. 32(3); Pp: 581-97

Lloyd, Sharon A. and Sreedhar, Susanne, "Hobbes's Moral and Political Philosophy", *The Stanford Encyclopedia of Philosophy* (Summer 2018 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/sum2018/entries/hobbes-moral/> (last accessed 5/11/2018)

Locke, J. (1689) An Essay Concerning Humane Understanding. In Fuller, G., Stecker, and Wright J. P. (Eds) *John Locke: An Essay concerning Human Understanding*. Routledge: London and New York

Louden, R. B. (2011) *Kant's Human Being: Essays on his theory of human nature*. Oxford University Press

Lycan, William, "Representational Theories of Consciousness", *The Stanford Encyclopedia of Philosophy* (Summer 2015 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/sum2015/entries/consciousness-representational/> (last accessed 19/05/2019)

Machan, T. R (2006) Altruism's Bad Influence, *Free Inquiry*, Vol. 26(6); Pp: 24-24

- MacIntyre, A. (1985) *After Virtue. A Study in Moral Theory*. London: Duckworth.
- MacIntyre, A. (2006) *The Tasks of Philosophy. Selected Essays, vol. 1*. Cambridge: Cambridge University Press
- Mackenzie, C. (2014) Embodied agents, narrative selves, *Philosophical Explorations*, Vol. 17(2); Pp: 154-71
- MacKenzie, C. and Atkins, K. (2008) *Practical Identity and Narrative Agency*. Routledge: New York
- Mahy, C. E. V., Moses, L. J. and Pfeifer, J. H. (2014) How and where: Theory-of-mind in the brain, *Developmental Cognitive Neuroscience*, Vol. 9; Pp: 68-81
- Malti, T. and Krettenauer, T. (2013) The relation of moral emotion attributions to prosocial and antisocial behavior: A meta-analysis, *Child Development*, Vol. 84(2); Pp: 397-12
- Malti, T. and Ongley, S. F. (2014) The development of moral emotions and moral reasoning. In Killen M. and Smetana J. G. (Eds) *Handbook of Moral Development*. New York: Psychology Press; Pp: 163–183
- Manard, M., Carabin, D., Jaspard, M. and Collette, F. (2014) Age-related decline in cognitive control: the role of fluid intelligence and processing speed, *BMC Neuroscience*, Vol. 15(7); Pp: doi:10.1186/1471-2202-15-7
- Manthorpe, J. and Samsi, K. (2016) Person-centered dementia care: current perspectives, *Clinical Interventions in Aging*, Vol. 11; Pp: 1733-40
- Mareschal, D., Johnson, M. H., Sirois, S., Spratling, M. W., Thomas, M. S. C. and Westermann, G. (2007) *Neuroconstructivism: How the Brain Constructs Cognition*. Oxford: Oxford University Press
- Markus, H., Crane, M., Bernstein, S. and Siladi, M. (1982) Self-schemas and gender, *Journal of Personality and Social Psychology*, Vol. 42(1); Pp: 38-50
- Marr, D. (1982) *Vision. A computational investigation into the human representation and processing of visual information*. San Francisco, CA: W.H. Freeman & Company
- Marten, K. and Pasarakos, S. (1994) Evidence of self-awareness in the bottlenose dolphin (*Tursiops truncatus*). In Parker, S. T., Mitchell, R. W. and Boccia, M. L. (Eds) *Self-awareness in animals and humans: Developmental perspectives*. Cambridge University Press: NY
- Martin, P., Kelly, N., Kahana, B., Kahana, E., Willcox, B. J., Willcox, D. C. and Poon, L. W. (2014) Defining successful aging: a tangible or elusive concept? *The Gerontologist*, Vol. 55(1); Pp: 14–25
- Maurer, D. and Werker, J. F. (2014) Perceptual narrowing during infancy: A comparison of languages and faces, *Developmental Psychobiology*, Vol. 56(2); Pp: 154–78
- May, L., Byers-Heinlein, K., Gervain, J. and Werker, J. F. (2011) Language and the newborn brain: does prenatal language experience shape the neonate neural response to speech? *Frontiers in Psychology*, Vol. 2(Article 222); Pp: 1-9

- McCance, T., McCormack, B. and Dewing, J. (2011) An Exploration of Person-Centredness in Practice, *The Online Journal of Issues in Nursing*, Vol. 16(2); Manuscript 1
- McClellan, K. C. and Fournier, M. A. (2007) The content and processes of autobiographical reasoning in narrative identity, *Journal of Research in Personality*, Vol. 42(3); Pp: 527-45
- McClelland, M. M., Geldhoff, J. G., Cameron, C. E. and Wanless, S. B. (2015) Development and Self-regulation, In Lerner, R. M. (Ed) *Handbook of Child Psychology and Developmental Science (7th edition), Volume 1: Theory and Method*. John Wiley & Sons: New Jersey; Pp: 523-565
- McCormack, B. (2004) Person-centredness in gerontological nursing: an overview of the literature, *Journal of Clinical Nursing*, Vol. 13(3a); Pp: 31-8
- McCormack, B. (2001) Autonomy and the relationship between nurses and older people, *Ageing and Society*, Vol. 21(4); Pp: 417-46
- McCormack, B. (2001) *Negotiating Partnerships with Older People: A Person-Centred Approach*. Ashgate, Aldershot
- McCormack, B. and McCance, T. (2010) *Person-centred Nursing: Theory and Practice*. Oxford: Wiley Blackwell
- McHale, S. M., Updegraff, K. A. and Whiteman, S. D. (2012) Sibling relationships and influences in childhood and adolescence, *Journal of Marriage and Family*, Vol. 74(5); Pp: 913–30
- McKeown, J. Clarke, A. Ingleton, C. Ryan, T. and Repper, J. (2010) The use of life story work with people with dementia to enhance person-centred care, *International Journal of Older People Nursing*, Vol. 5(2); Pp: 148-58
- McKone, E., Crookes, K., Jeffery, L. and Dilks, D. D. (2012) A critical review of the development of face recognition: Experience is less important than previously believed, *Cognitive Neuropsychology*, Vol. 29(1-2); Pp: 174-212
- Mehler, J., Jusczyk, P., Lambertz, G., Halsted, N., Bertoncini, J. and Amiel-Tison, C. (1988) A precursor of language acquisition in young infants, *Cognition*, Vol. 29(2); Pp: 143–78
- Meltzoff, A. N. (1995) What infant memory tells us about infantile amnesia: Long-term recall and deferred imitation, *Journal of Experimental Child Psychology*, Vol. 59(3); Pp: 497–15
- Meltzoff, A. N. and Moore, M. K. (1977) Imitation of Facial and Manual Gestures by Human Neonates, *Science*, Vol. 198(4312); Pp: 75–78
- Milgram, S. (1974) *Obedience to Authority: An Experimental View*. Harper Collins
- Milgram, S. (1963) Behavioral Study of Obedience, *Journal of Abnormal and Social Psychology*, Vol. 67(4); Pp: 371–8
- Millett, S. (2011) Self and embodiment: A bio-phenomenological approach to dementia, *Dementia*, Vol. 10(4); Pp: 509-22

- Mills, M. and Melhuish, E. (1974) Recognition of mother's voice in early infancy, *Nature*, Vol. 252(5479); Pp: 123-4
- Milte, R., Shulver, W., Killington, M., Bradley, C., Ratcliffe, J. and Crotty, M. (2016) Quality in residential care from the perspective of people living with dementia: The importance of personhood, *Archives of Gerontology and Geriatrics*, Vol. 63; Pp: 9-17
- Mischel, W. (1968) *Personality and Assessment*. London: Wiley
- Mitchell, R. W. (1997) A Comparison of the Self-awareness and Kinesthetic-visual Matching Theories of Self-recognition: Autistic Children and Others', *Annals of the New York Academy of Sciences*, Vol. 818; Pp: 39-62
- Mitchell, S. L., Black, B. S., Ersek, M., Hanson, L. C., Miller, S. C., Sachs, G. A., Teno, J. M. and Morrison, R. S. (2012) Advanced Dementia: State of the Art and Priorities for the Next Decade, *Annals of Internal Medicine*, Vol. 156(1-1); Pg. 45-52
- Mitchell, S. L., Teno, J. M., Kiely, D. K., Shaffer, M. L., Jones, R. N., Prigerson, H. G., Volicer, L., Givens, J. L. and Hamel, M. B. (2009) The Clinical Course of Advanced Dementia, *New England Journal of Medicine*, Vol. 361(16); Pp: 1529-38
- Montague, P. R., Hyman, S. E, Cohen, J. D. (2004) Computational roles for dopamine in behavioural control, *Nature*, Vol. 431(7010); Pp: 760-67
- Monteith, M. J. and Mark, A. Y. (2005) Changing one's prejudiced ways: Awareness, affect, and self-regulation, *European Review of Social Psychology*, Vol. 16(1); Pp: 113-154
- Moon, C., Cooper, R. P. and Fifer, W. P. (1993) Two-day-olds prefer their native language, *Infant Behavior and Development*, Vol. 16(4); Pp: 495-500
- Moore, G. A., Cohn, J. F. and Campbell, S. B. (2001) Infant affective responses to mother's still face at 6 months differentially predict externalizing and internalizing behaviors at 18 months, *Developmental Psychology*, Vol. 37(5); Pp: 706-14
- Moore, L., Britten, N., Lydahl, D., Naldemirci, O., Elam, M. and Wolf, A. (2017) Barriers and facilitators to the implementation of person-centred care in different healthcare contexts, *Scandinavian Journal of Caring Science*, Vol. 31(4); Pp: 662-73
- Morgan, S. and Yoder, L. H. (2012) A Concept Analysis of Person-Centred Care, *Journal of Holistic Nursing*, Vol. 30(1); Pp: 6-15
- Moyle, W., Murfield, J., Venturto, L., Griffiths, S., Grimbeek, P., McAllister, M. and Marshall, J. (2011) Factors influencing quality of life for people with dementia: a qualitative perspective, *Aging and Mental Health*, Vol. 15(8); Pp: 970-77
- Munthe, C., Sandman, L. and Cutas, D. (2011) Person Centred Care and Shared Decision Making: Implications for Ethics, Public Health and Research, *Journal of Health Philosophy and Policy*, Vol. 20(3); Pp: 231-49

- Nado, J. Kelly, D. and Stich, S. (2009) Moral Judgment. In Symons, J. and Calvo, P. (Eds) *Routledge Companion to the Philosophy of Psychology 4th edition*. Routledge: Taylor and Francis
- Nagy, E., Pilling, K., Watt, R., Pal, A. and Orvos, H. (2017) Neonates' responses to repeated exposure to a still face, *PLoS One*, Vol. 12(8): e0181688
- Nay, R., Bird, M., Edvardsson, D., Fleming, R. and Hill, K. (2009) Person-centred care. In R. Nay and S. Garratt (Eds) *Older People: Issues and Innovations in Care*. Sydney: Elsevier Australia; Pp: 107–120
- Neisser, U. (1988) Five kinds of self-knowledge, *Philosophical Psychology*, Vol. 1(1); Pp: 35–59
- Nelson, K. (2003) Narrative and the Emergence of a Consciousness of Self. In Fireman, G. D., McVay Jr, T. E. and Flanagan, O. J. (Eds) *Narrative and Consciousness*, New York: Oxford University Press
- Nichols, S. and Stich, S. (2003) *Mindreading*. Oxford, Oxford University Press
- Nielsen, M. Suddendorf, T. and Slaughter, V. (2006) Mirror Self-Recognition Beyond the Face, *Child Development*, Vol. 77(1); Pp: 176–85
- Noel, M., Larøi, F., Gallouj, K. and El Haj, M. (2018) Relationships Between Confabulations and Mental Time Travel in Alzheimer's Disease, *The Journal of Neuropsychiatry and Clinical Neurosciences*, Vol. 30(4); Pp: 302-9
- Nolan, M. R. (2001) Successful ageing: keeping the 'Person' in person-centred care, *British Journal of Nursing*, Vol. 10(7); Pp: 450-54
- Nolan, M. R. Davies, S. Brown, J. Keady, J. and Nolan, J. (2004) Beyond 'person-centred' care: a new vision for gerontological nursing, *International Journal of Older People Nursing*, Vol. 13(3a); Pp: 45–53
- Nolan, M. R., Brown, J., Davies, S., Nolan, J. and Keady, J. (2006) The Senses Framework: improving care for older people through a relationship-centred approach. Getting Research into Practice (GRIP) Report No 2. Project Report. University of Sheffield.
- Nozick, R. (1981) *Philosophical Explanations*. Harvard University Press
- Nundy, S. and Oswald, J. (2014) Relationship-centred care: A new paradigm for population health management, *Healthcare*, Vol. 2(40); Pp: 216-19
- Oostenbroek, J., Suddendorf, T., Nielsen, M., Redshaw, J., Kennedy-Costantini, S., Davis, J. Clark, S. and Slaughter, V. (2016) Comprehensive Longitudinal Study Challenges the Existence of Neonatal Imitation in Humans, *Current Biology*, Vol. 26(10); Pp: 1334-38
- Oyserman, D. Elmore, K. and Smith, G. (2012) Self, Self-Concept, and Identity. In Leary, M. R. and Tangney, J. P. (Eds) *Handbook of Self and Identity*. The Guilford Press: New York; Pp: 69-104
- Oyserman, D., Brickman, D. and Rhodes, M. (2007) Racial-ethnic identity in adolescence: Content and consequences for African American and Latino and Latina youth. In A. Fuligni (Ed.), *Contesting stereotypes and creating identities: Social categories, identities and educational participation*. New York: Russell Sage Foundation

- Packer, T. (2003) Turning rhetoric into reality: person-centred approaches for community mental health nursing. In Keady, J., Clarke, C. and Adams, T. (Eds) *Community Mental health nursing and dementia Care*. Open university Press: Maidenhead; Pp: 104–119
- Park, D. C. and Reuter-Lorenz, P. (2009) The adaptive brain: aging and neurocognitive scaffolding, *Annual review of psychology*, Vol. 60(1); Pp: 173–96
- Patterson, F. and Gordon, W. (1993) The case for personhood of gorillas. In Cavalieri, P. and Singer, P. (Eds) *The Great Ape Project*. St. Martin's Griffin; Pp: 58–77
- Payne, K. (2005) Conceptualizing control in social cognition: how executive functioning modulates the expression of automatic stereotyping, *Journal of Personality and Social Psychology*, Vol. 89(4); Pp: 488–503
- Peel, E. (2014) 'The living death of Alzheimer's' versus 'Take a walk to keep dementia at bay': representations of dementia in print media and carer discourse, *Sociology of Health & Illness*, Vol. 36(6); Pp: 885-901
- Penn, D. C. and Povinelli, D. J. (2007) On the lack of evidence that non-human animals possess anything remotely resembling a "theory of mind", *Philosophical Transactions of the Royal Society B*; Vol. 362(1480); Pp: 731–44
- Penn, D. C. and Povinelli, D. J. (2009) On Becoming Approximately Rational: The Relational Reinterpretation Hypothesis. In Watanabe, S., Blaisdell, A. P., Huber, L. and Young, A. (Eds) *Rational Animals, Irrational Humans*. Tokyo: Keio University Press
- Penn, D. C., Holyoak, K. L. and Povinelli, D. J. (2008) Darwin's mistake: Explaining the discontinuity between human and nonhuman minds, *Behavioral and Brain Sciences*, Vol. 31(2); Pp: 109-30
- Pennington, B., Bennetto, L., McAleer, O. and Roberts, R. (1996) Executive functions and working memory. In G. Lyon and N. Krasnegor (Eds) *Attention, Memory, and Executive Function*. Baltimore: Paul H Brookes Publishing; Pp: 327-346
- Penrod, J., Yu, F., Kolanowski, A., Fick, D. M., Loeb, S. J. and Hupcey, J. E. (2007) Reframing Person-Centered Nursing Care for Persons With Dementia, *Research and Theory for Nursing Practice*, Vol. 21(1); Pp: 57–72
- Perner, J., Ruffman, T. and Leekam, S. R. (1994) Theory of mind is contagious: You catch it from your sibs, *Child Development*, Vol. 65(4); Pp: 1228–38
- Peterson, G. (2013) Philosophical Naturalism. In Runehov A.L.C., Oviedo L. (Eds) *Encyclopedia of Sciences and Religions*. Springer: Dordrecht
- Plotnik, J. M., de Wall, F. B. M. and Reiss, D. (2006) Self-recognition in an Asian elephant, *Proceedings of the National Academy of Sciences*, Vol. 103(45); Pp: 17053–17057
- Post, S. G. (2000) *The Moral Challenge of Alzheimer Disease: Ethical Issues from Diagnosis to Dying*. The Johns Hopkins University Press: Baltimore and London
- Potts, D. C. (2012) The art of preserving personhood, *Neurology*, Vol. 78(11); Pp: 836-37

- Povinelli, D. J. (1995) The unduplicated self. In P. Rochat (Ed) *The self in infancy: Theory and research*. Amsterdam: Elsevier; Pp: 161–192
- Povinelli, D. J. (1998) Can Animals Empathize? Maybe not, *Scientific American Present: Exploring Intelligence*, Vol. 9(4); Pp: 72-5
- Povinelli, D. J. and Vonk, J. (2003) Chimpanzee minds: suspiciously human? *Trends in Cognitive Sciences*, Vol. 7(4); Pp: 157-60
- Povinelli, D. J. and Simon, B. B. (1998) Young children’s reactions to briefly versus extremely delayed images of the self: Emergence of the autobiographical stance, *Developmental Psychology*, Vol. 34(1); Pp: 188-94
- Povinelli, D. J., Landau, K. R. and Perilloux, H. K. (1996) Self-recognition in young children using delayed versus live feedback: Evidence of a developmental asynchrony, *Child Development*, Vol. 67(4); Pp: 1540-54
- Prinz, J. J. (2006) The emotional basis of moral judgments, *Philosophical Explorations*, Vol. 9(1); Pp: 29–43
- Prior, H. Schwarz, A. and Gunturkun, O. (2008) Mirror-Induced Behavior in the Magpie (*Pica pica*): Evidence of Self-Recognition, *PLoS Biology*, Vol. 6(8); Pp: 1642-50
- Pylyshyn, Z. W. (1972) The Role of Competence Theories in Cognitive Psychology, *Journal of Psycholinguistic Research*, Vol. 2(1); Pp: 21-50
- Quartz, S. R. (2003) Innateness and the Brain, *Biology and Philosophy*, Vol. 18(1); Pp: 13-40
- Quartz, S. R. and Sejnowski, T. J. (1997) The Neural Basis of Cognitive Development: A Constructivist Manifesto, *Behavioral and Brain Sciences*, Vol. 20(4); Pp: 537-96
- Quine, W. V. O. (1960) *Word and Object*. Cambridge, MA: MIT Press
- Rachels, J. (2015) *The Elements of Moral Philosophy (Eighth Edition)*, McGraw-Hill: New York
- Raichle, M. E, MacLeod, A. M., Snyder, A. Z., Powers, W. J., Gusnard, D. A. and Shulman, G. L. (2001) A default mode of brain function, *Proceedings of the National Academy of Science*, Vol. 98(2); Pp: 676–682
- Rajaram, S. (2011) Collaboration both hurts and helps memory: A cognitive perspective, *Current Directions in Psychological Science*, Vol. 20(2); Pp: 76-81
- Rajaram, S. and Periera-Pasarin, L. P. (2010) Collaborative Memory: Cognitive Research and Theory, *Perspectives on Psychological Science*, Vol. 5(6); Pp: 649-63
- Ramus, F., Hauser, M. D., Miller, C., Morris, D. and Mehler, J. (2000) Language discrimination by human newborns and by cotton-top tamarin monkeys, *Science*, Vol. 288(5464); Pp: 349–51

- Rankin, K. P., Baldwin, E., Pace-Savitsky, C., Kramer, J. H. and Miller, B. L. (2005) Self awareness and personality change in dementia, *Journal of Neurology, Neurosurgery & Psychiatry*, Vol. 76(5); Pp: 632-639
- Raskin, J. D. (Forthcoming) Constructivism, Ethics, and Knowing What's Right: A Reply to McNamee, Burr, McWilliams, Osbeck, and Held, *Journal of Constructivist Psychology*, DOI: 10.1080/10720537.2017.1383956 (last accessed 19/05/2019)
- Reed, P. Carson, J. and Gibb, Z. (2017) Transcending the Tragedy Discourse of Dementia: An Ethical Imperative for Promoting Selfhood, Meaningful Relationships, and Well-Being, *AMA Journal of Ethics*, Vol. 19(7); Pp: 693-703
- Reese, E. and Farrant, K. (2003) Social Origins of Reminiscing, In Fivush, R. and Haden, C. A. (Eds) *Autobiographical Memory and the Construction of a Narrative Self: Developmental and Cultural Perspectives*. Lawrence Erlbaum Associates, Inc.: Mahwah, NJ; Pp: 29-48
- Reese, E., Haden, C. A. and Fivush, R. (1993) Mother–child conversations about the past: Relationships of style and memory over time, *Cognitive Development*, Vol. 8(4); Pp: 403–30
- Reisberg, B., Ferris, S. H., de Leon, M. J. and Crook, T. (1982) The Global Deterioration Scale for assessment of primary degenerative dementia, *American Journal of Psychiatry*, Vol. 139(9); Pp: 1136–9
- Reiss, D. and Marino, L. (2001) Mirror self-recognition in the bottlenose dolphin: a case of cognitive convergence, *Proceedings of the National Academy of Sciences*, Vol. 98(10); Pp: 5937-42
- Renoult, L., Davidson, P.S.R., Palombo, D.J., Moscovitch, M. and Levine, B. (2012) Personal semantics: At the crossroads of semantic and episodic memory, *Trends in Cognitive Sciences*, Vol. 16(11); Pp: 550-558
- Reuter-Lorenz, P. A. and Park, D. C. (2014) How does it STAC up? Revisiting the scaffolding theory of aging and cognition, *Neuropsychology review*, Vol. 24(3); Pp: 355–70
- Ricoeur, P. (1985) “History as Narrative and Practice”, interview with Paul Ricoeur by Peter Kemp, *Philosophy Today*, Vol. 29(3); Pp: 213-22
- Rivero, O., Selten, F. M., Sich, S., Popp, S., Bacmeister, L., Amendola, E., Negwer, M. J., Schubert, D., Proft, F., Kiser, D., Schmitt, A. G., Gross, C., Kolk, S.M., Strelakova, T., Hove, D. van den, Resink, T. J., Nadif Kasri, N. and Lesch, K. P. (2015) Cadherin-13, a risk gene for ADHD and comorbid disorders, impacts GABAergic function in hippocampus and cognition, *Translational Psychiatry*, Vol. 5(10); Pp: e655 doi:10.1038/tp.2015.15
- Rivero, O., Sich, S., Popp, S., Schmitt, A., Franke, B. and Lesch, K. P. (2013) Impact of the ADHD-susceptibility gene CDH13 on development and function of brain networks, *European Neuropsychopharmacology*, Vol. 23(6); Pp: 492-507
- Rochat, P. (2011) What is it Like to be a Newborn. In Gallagher, S. (Ed) *The Oxford Handbook of the Self*. Oxford University Press; Pp: 57-79

- Rogers, C. R. (1957) The Necessary and Sufficient Conditions of Therapeutic Personality Change, *Journal of Consulting Psychology*, Vol. 21(2); Pp: 95-103
- Rooney, K. E., Molony, S. L., Kolanowski, A. and Van Haitsma, K. (2018) Person-Centered Assessment and Care Planning, *The Gerontologist*, Vol. 58(suppl1); Pp: S32-S47
- Rosselli, M., Ardila, A., Matute, E. and Velez-Urbe, I. (2014) Language Development across the Life Span: A Neuropsychological/Neuroimaging Perspective, *Neuroscience Journal*, Vol. 2014; Pp: 1-21
- Ruffman, T., Perner, J. and Parkin, L. (1999) How parenting style affects false belief understanding, *Social Development*, Vol. 8(3); Pp: 395–411
- Ryan, J., Fransquet, P., Wrigglesworth, J. and Lacaze, P. (2018) Phenotypic Heterogeneity in Dementia: A Challenge for Epidemiology and Biomarker Studies, *Frontiers in Public Health*, Vol. 6(181); Pp: 1-6
- Ryan, T., Nolan, M., Reid, D. and Enderby, P. (2008) Using the Senses Framework to achieve relationship-centred dementia care services, *Dementia*, Vol. 7(1); Pp: 71-93
- Sachs, G. A. (2009) Dying of Dementia, *New England Journal of Medicine*, Vol. 361(16); Pp: 1595-6
- Sai, F. Z. (2004) The role of the mother's voice in developing mother's face preference: Evidence for intermodal perception at birth, *Infant and Child Development*, Vol. 14(1); Pp: 29-50
- Saint-Georges, C., Chetouani, M., Cassel, R., Apicella, F., Mahdhaoui, A., Muratori, F., Laznik, M. and Cohen, D. (2013) Motherese in Interaction: At the Cross-Road of Emotion and Cognition? (A Systematic Review), *PLoS One*, Vol. 8(10) e78103; Pp: 1-17
- Salat, D. H., Buckner, R. L., Snyder, A. Z., Greve, D. N., Desikan, R. S., Busa, E., Morris, J. C., Dale, A. M. and Fischl, B. (2004) Thinning of the cerebral cortex in aging, *Cerebral Cortex*, Vol. 14(7); Pp: 721-30
- Salisbury, J. E. (2014) Do Animals Go to Heaven? Medieval Philosophers Contemplate Heavenly Human Exceptionalism, *Athens Journal of Humanities & Arts*, Vol. 1(1); Pp: 79-85
- Salthouse, T. A. (1982) *Adult cognition: An experimental psychology of human aging*. New York, NY: Springer-Verlag
- Salthouse, T. A. (1996) The processing-speed theory of adult age differences in cognition, *Psychological Review*, Vol. 103(3); Pp: 403-28
- Salthouse, T. A., Fristoe, N. M., Lineweaver, T. T. and Coon, V. E. (1995) Aging of attention: does the ability to divide decline? *Memory & Cognition*, Vol. 23(1); Pp: 59–71
- Salthouse, T. A., Mitchell, D. R., Skovronek, E. and Babcock, R. L. (1989) Effects of adult age and working memory on reasoning and spatial abilities, *Journal of experimental psychology Learning, memory, and cognition*, Vol. 15(3); Pp: 507–16
- Samet, Jerry and Zaitchik, Deborah, "Innateness and Contemporary Theories of Cognition", The Stanford Encyclopedia of Philosophy (Spring 2017 Edition), Edward N. Zalta (ed.), URL =

<https://plato.stanford.edu/archives/spr2017/entries/innateness-cognition/> (last accessed 19/05/2019)

Scarf, D., Gross, J. Colombo, M. and Hayne, H. (2013) To have and to hold: episodic memory in 3- and 4-year-old children, *Developmental Psychobiology*, Vol. 55(2); Pp: 125-32

Schacter, D. L., Addis, D. R. and Buckner, R. L. (2007) Remembering the past to imagine the future: the prospective brain, *Nature Reviews Neuroscience*, Vol. 8(9); Pp: 657-661

Schechtman, M. (1990) Personhood and Personal Identity, *The Journal of Philosophy*, Vol. 87(2); Pp: 71-92

Schechtman, M. (1996) *The Constitution of Selves*. Cornell University Press

Schechtman, M. (2005) Experience, Agency, and Personal Identity, *Social Philosophy & Policy Foundation*, Vol. 72(2); Pg. 1-24

Schechtman, M. (2007) Stories, Lives, and Basic Survival: A Refinement and Defense of the Narrative View, *Royal Institute of Philosophy Supplement*, Vol. 60(155); Pp: 155-78

Schechtman, M. (2011) The Narrative Self, In Gallagher, S. (Ed) *The Oxford Handbook of the Self*. Oxford University Press; Pp: 402-403

Schechtman, M. (2014) *Staying Alive: Personal Identity, Practical Concerns, and the Unity of a Life*. Oxford University Press: UK

Scholl, B. J. and Leslie, A. M. (1999) Modularity, development and 'theory of mind', *Mind and Language*, Vol. 14(1); Pp: 131-53

Schwam, E. and Xu, Y. (2010) Cognition and function in Alzheimer's disease: identifying the transitions from moderate to severe disease, *Dementia and Geriatric Cognitive Disorders*, Vol. 29(4); Pp: 309-16

Schwartz, B. (1993) Why Altruism Is Impossible...and Ubiquitous, *Social Service Review*, Vol. 67(3); Pp: 314-43

Schwartz, S. J., Tanner, J. L. and Syed, M. (2016) Emerging Adulthood. In Whitbourne, S. K. (Ed) *The Encyclopedia of Adulthood and Aging, First Edition*. John Wiley & Sons, Inc.

Scott, L. S., Pascalis, O. and Nelson, C. A. (2007) A Domain-General Theory of the Development of Perceptual Discrimination, *Current Directions in Psychological Science*, Vol. 16(4); Pp: 197-201

Searle, J. R. (2000) The Self as a Problem in Philosophy and Neurobiology. In T. E. Feinberg and J. P. Keenan (Eds) *The Lost Self: Pathologies of Brain and Identity*. Oxford: Oxford University Press

Senju, A. and Csibra, G. (2008) Gaze following in human infants depends on communicative signals, *Current Biology*, Vol. 18(9); Pp: 668-71

Seth, A. K. (2013) Interoceptive inference, emotion, and the embodied self. *Trends in Cognitive Sciences*, Vol. 17(11); Pp: 565-73

- Seth, A. K., Suzuki, K. and Critchley, H. D. (2012) An interoceptive predictive coding model of conscious presence, *Frontiers in Psychology*, Vol. 2(395); Pp: 1-16
- Shaw, P., Greenstein, D., Lerch, J., Clasen, L., Lenroot, R., Gogtay, N., Evans, A., Rapoport, J. and Giedd, J. (2006) Intellectual ability and cortical development in children and adolescents, *Nature*, 440(7084); Pp: 676–79
- Sherrod, L. R., Torney-Purta, J. and Flanagan, C. A. (2010) *Handbook of research on civic engagement in youth*. New York: Wiley
- Showers, C. J., Abramson, L. Y. and Hogan, M. E. (1998) The dynamic self: How the content and structure of the self-concept change with mood, *Journal of Personality and Social Psychology*, Vol. 75(2); Pp: 478-93
- Sihvola, J. (2008) Aristotle on the Individuality of Self, In “Ancient Philosophy of the Self”, *The New Synthese Historical Library*, Volume 64 of the series; Pp: 125-137
- Silver, H., Goodman, C. and Bilker, W. (2009) Age in high-functioning healthy men is associated with nonlinear decline in some 'executive' functions in late middle age, *Dementia and Geriatric Cognitive Disorders*, Vol. 27(3); Pp: 292-300
- Simion, F. and Di Giorgio, E. (2015) Face perception and processing in early infancy: inborn predispositions and developmental changes, *Frontiers in Psychology*, Vol. 6(article 969); Pp: 1-11
- Simion, F., Leo, I. Turati, C. Valenza, E. and Dalla Barba, B. (2007) How face specialization emerges in the first months of life, *Progress in Brain Research*, Vol. 164; Pp: 169-85
- Singer, J. A. (2004) Narrative identity and meaning-making across the adult lifespan: An introduction, *Journal of Personality*, Vol. 72(3), 437–460
- Singer, J. A. and Bluck, S. (2001) New Perspectives on Autobiographical Memory: The Integration of Narrative Processing and Autobiographical Reasoning, *Review of General Psychology*, Vol. 5(2); Pg. 93
- Singer, P. (1990) *Animal liberation*. New York, N.Y: New York Review of Books
- Singer, P. (2009) Speciesism and Moral Status, *Metaphilosophy*, Vol. 40(3-4); Pp: 566-81
- Singer, P. (2011) *Practical Ethics*. New York: Cambridge University Press
- Sirois, S., Spratling, M., Thomas, M. S., Westermann, G., Mareschal, D. and Johnson, M. H. (2008) Précis of neuroconstructivism: How the brain constructs cognition, *Behavioural and Brain Sciences*, Vol. 31(3); Pp: 321-31
- Skaalvik, M. W., Norberg, A., Normann, K., Fjelltun, A-M. and Asplund, K. (2016) The experience of self and threats to sense of self among relatives caring for people with Alzheimer’s disease, *Dementia*, Vol. 15(4); Pp: 467-80
- Slater, L. (2006) Person-centredness: a concept analysis, *Contemporary Nurse*, Vol. 23(1); Pp: 135-44

- Small, J. A., Geldhart, K., Gutman, G. and Scott, M. A. C. (1998) The discourse of self in dementia, *Ageing and Society*, Vol. 18(3); Pp: 291-316
- Smebye, K. L. and Kirkevold, M. (2013) The influence of relationships on personhood in dementia care: a qualitative, hermeneutic study, *BMC Nursing*, Vol. 12(1); Pp: 29-41
- Smetana, J. G. (1984) Toddlers' social interactions regarding moral and conventional transgressions, *Child Development*, Vol. 55(5); Pp: 1767-76
- Smetana, J. G. and Braeges, J. (1990) The Development of Toddlers' Moral and Conventional Judgements, *Merrill-Palmer Quarterly*, Vol. 36(3); Pp: 329-46
- Smetana, J. G. (2011) *Adolescents, families, and social development: How teens construct their worlds*. West Sussex, UK: Wiley-Blackwell.
- Smetana, J. G. and Daddis, C. (2002) Domain-specific antecedents of psychological control and parental monitoring: The role of parenting beliefs and practices, *Child Development*, Vol. 73(2); Pp: 563-80
- Smetana, J. G., Robinson, J. and Rote, W. M. (2015) Socialization in Adolescence. In Grusec, J. E and Hastings, P. D (Eds) *Handbook of Socialization: Theory and Research (2nd Edition)*. The Guilford Press: New York; Pp: 60-84
- Smetana, J. G., Villalobos, M., Tasopoulos-Chan, M., Gettman, D. C. and Campione-Barr, N. (2009) Early and middle adolescents' disclosure to parents about activities in different domains, *Journal of Adolescence*, Vol. 32(3); Pp: 693-713
- Smith, Joel, "Self-Consciousness", *The Stanford Encyclopedia of Philosophy* (Fall 2017 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2017/entries/self-consciousness/> (last accessed: 4/4/2018)
- Smith, L. (2005) *Critical Readings on Piaget*. Routledge: Taylor & Francis e-Library
- Sneed, J. R. and Whitbourne, S. K. (2003) Identity Processing and Self-Consciousness in Middle and Later Adulthood, *The Journals of Gerontology: Series B*, Vol. 58(6); Pp: 313-19
- Song, S., Marks, B., Howard, J. H. and Howard, D. V. (2009) Evidence for parallel explicit and implicit sequence learning systems in older adults, *Behavioural Brain Research*, Vol. 196(2); Pp: 328-32
- Spear, L. P. (2009) *The behavioral neuroscience of adolescence*. New York, NY: W. W. Norton
- Spear, L. P. (2013) Adolescent Neurodevelopment, *Journal of Adolescent Health*, Vol. 52(2); Supplement 2; Pp: S7-13
- Spears, R., Gordijn, E., Dijksterhuis, A. and Stapel, F. (2004) Reaction in action: Intergroup contrast in automatic behaviour, *Personality and Social Psychology Bulletin*, Vol. 30(5); Pp: 605-16
- Spelke, E. (1998) Nativism, Empiricism, and the origins of knowledge, *Infant Behavior & Development*, Vol. 21(2); Pp: 181-200

- Sperber, D. (2000) Metarepresentations in an Evolutionary Perspective. In Sperber, D. (Ed) *Metarepresentations: A Multidisciplinary Perspective*. Oxford University Press: New York; Pp: 117-134
- Sperber, D. (2000) *Metarepresentations: A Multidisciplinary Perspective*. Oxford University Press: New York
- Stanovich, K. E. (1999) *Who is rational?* Mahwah, NJ: Erlbau
- Stanovich, K. E. (2004) *The robot's rebellion: Finding meaning in the age of Darwin*. Chicago: University of Chicago Press
- Stanovich, K. E. and West, R. F. (2000) Individual differences in reasoning: Implications for the rationality debate? *Behavioral and Brain Sciences*, Vol. 23(5); Pp: 665-726
- Steinberg, L. (2008) A Social Neuroscience Perspective on Adolescent Risk-Taking, *Developmental Review*, Vol. 28(1); Pp: 78-106
- Strawson, G. (2004) Against Narrativity, *Ratio*, Vol. 17(4); Pg. 428-52
- Strikwerda-Brown, C., Grilli, D. M., Andrews-Hanna, J. and Irish, M. (forthcoming) "All is not lost" – Rethinking the nature of the self in dementia. <https://psyarxiv.com/8r3dw/> (last accessed 10/3/2019)
- Suarez, S. D. and Gallup Jr., G. G. (1981) Self-recognition in chimpanzees and orangutans, but not gorillas, *Journal of Human Evolution*, Vol. 10(2); Pp: 175-88
- Suddendorf, T. and Busby, J. (2003) Mental time travel in animals? *Trends in Cognitive Sciences*, Vol. 7(9); Pp: 391-96
- Suddendorf, T. and Corballis, M. C. (1997) Mental time travel and the evolution of the human mind, *Genetic Social and General Psychology Monographs*, Vol. 123(2); Pp: 133–67
- Suddendorf, T. and Corballis, M. C. (2007) The evolution of foresight: what is mental time travel, and is it unique to humans? *Behavioral and Brain Sciences*, Vol. 30(3); Pp: 299-13
- Surr, C. A. (2006) Preservation of self in people with dementia living in residential care: A socio-biographical approach, *Social Science and Medicine*, Vol. 62(7); Pp: 1720-30
- Swift, H. J., Vauclair, C-M., Abrams, D., Bratt, C., Marques, S. and Lima, M-L. (2014) Revisiting the Paradox of Well-being: The Importance of National Context, *The Journals of Gerontology: Series B*, Vol. 69(6); Pp: 920–29
- Tauber, Alfred, "The Biological Notion of Self and Non-self", *The Stanford Encyclopedia of Philosophy* (Summer 2015 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/sum2015/entries/biology-self/> (last accessed 20/05/2019)
- Taylor, C. (1989) *Sources of the Self*. Harvard University Press
- Taylor, G. and Gaita, R. (1981) Integrity, *Proceedings of the Aristotelian Society, Supplementary Volumes*, Vol. 55(1); Pp: 143-159

- Teper, E. L. and Hughes, J. C. (2010) Clinical and Ethical Issues in Palliative Care and Dementia – An Overview, *European Neurological Review*, Vol. 5(2); Pp: 29-33
- Tippet, L. J., Prebble, S. C. and Addis, D. R. (2018) The Persistence of the Self over Time in Mild Cognitive Impairment and Alzheimer’s Disease, *Frontiers in Psychology*, Vol. 9(94); Pp: 1-18
- Tomasello, M. (2003) Chimpanzees understand psychological states: the question is which ones and to what extent, *Trends in Cognitive Sciences*, Vol. 7(4); Pp: 153–56
- Tresolini, C. P. and The Pew-Fetzer Task Force (1994) *Health Professions Education and Relationships-centred Care: A Report of the Pew-Fetzer Task Force on Advancing Psychosocial Education*. Pew Health Professions Commission, San Francisco
- Tronick, E., Als, H., Adamson, L., Wise, S. and Brazelton, T. B. (1978) The Infant’s response to entrapment between contradictory messages in face-to-face interaction, *Journal of the American Academy of Child and Adolescent Psychiatry*, Vol. 17(1); Pp: 1-13
- Tulving, E. (1972) Episodic and semantic memory. In Tulving, E., Donaldson, W., (Ed) *Organization of memory*. Academic Press; New York: Pp: 381–403
- Tulving, E. (1985) Memory and consciousness, *Canadian Psychology/Psychologie Canadienne*, Vol. 26(1); Pp: 1-12
- Tulving, E. (1983) *Elements of episodic memory*. Oxford University Press
- Turati, C., Simion, F. Milani, I. and Umiltà, C. (2002) Newborns’ preference for faces: what is crucial? *Developmental Psychology*, Vol. 38(6); Pp: 875-82
- Turiel, E. (1983) *The Development of Social Knowledge*. Cambridge: Cambridge University Press
- Turiel, E. (2015) Moral Development, In Lerner, R. M. (Ed) *Handbook of Child Psychology and Developmental Science (7th edition), Volume 1: Theory and Method*. John Wiley & Sons: New Jersey
- Tversky, A. and Kahneman, D. (1983) Extensional versus intuitive reasoning: The conjunction fallacy in probability judgment, *Psychological Review*, Vol. 90(4); Pp: 293–315
- van Dulmen, S. A., Lukersmith, S. Muxlow, J., Mina, E. S., Nijhuis-van der Sanden, M. W. G. and van der Wees, P. J. (2015) Supporting a person-centred approach in clinical guidelines. A position paper of the Allied Health Community – Guidelines International Network (G-I-N), *Health Expectations*, Vol. 18(5); Pp: 1543-58
- Velleman, J. D. (2006) The Self as Narrator, In Velleman, J. D. (Ed) *Self to Self: Selected Essays*. Cambridge University Press; Pp: 203-23
- Viana, J. N. M. and Gilbert, F. (2018) Deep brain stimulation for people with Alzheimer’s disease: Anticipating potential effects on the tripartite self, *Dementia*, Article first published online: March 11, 2018 <https://doi.org/10.1177/1471301218761147> (last accessed 1/5/2019)
- Volkow, N. D. and Fowler, J. S. (2000) Addiction, a disease of compulsion and drive: involvement of the orbitofrontal cortex, *Cerebral Cortex*, Vol. 10(3); Pp: 318–25

- Vollmer, F. (2005) The Narrative Self, *Journal for the Theory of Social Behaviour*, Vol. 35(2); Pp: 189-205
- von Glasersfeld, E. (1989) Facts and the Self from a Constructivist Point of View, *Poetics*, Vol. 18(4-5); Pp: 435-48
- von Glasersfeld, E. (1995) *Radical constructivism: A way of knowing and learning*. Falmer Press: London
- von Glasersfeld, E. (2001) The radical constructivist view of science. In A. Riegler (Ed.) *Foundations of Science, special issue on "The Impact of Radical Constructivism on Science"*, Vol. 6(1-3); Pp: 31-43
- von Humboldt, S. and Leal, I. (2014) Adjustment to Aging in late Adulthood: A Systematic Review, *International Journal of Gerontology*, Vol. 8(3); Pp: 108-13
- Vouloumanos, A. and Werker, J. F. (2007) Listening to language at birth: evidence for a bias for speech in neonates, *Developmental Science*, Vol. 10(2); Pp: 159-64
- Vouloumanos, A., Hauser, M. D., Werker, J. F. and Martin, A. (2010) The tuning of human neonates' preference for speech, *Child Development*, Vol 81(2); Pp: 517-27
- Walker, M. J. (2012) Neuroscience, Self-Understanding, and Narrative Truth, *AJOB Neuroscience*, Vol. 3(4); Pp: 63-74
- Wallace, R. J. (1999) Three Conceptions of Rational Agency, *Ethical Theory and Moral Practice*, Vol. 2; Pp: 217-242
- Wallace, R. Jay, "Practical Reason", The Stanford Encyclopedia of Philosophy (Spring 2018 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/spr2018/entries/practical-reason/> (last accessed 20/02/19)
- Walmsley, B. D. and McCormack, L. (2014) The dance of communication: retaining family membership despite severe non-speech dementia, *Dementia*, Vol. 13(5); Pp: 626-41
- Walraven, V., van Elsacker, L. and Verheyen, R. (1995) Reactions of a group of pygmy chimpanzees (*Pan paniscus*) to their mirror images: evidence of self-recognition, *Primates*, Vol.36; Pp: 145-150
- Warren, J. D. and Warrington, E. K. (2007) Cognitive Neuropsychology of Dementia Syndromes. In Growdon, J. H. and Rossor, M. N. (Eds) *Blue Books of Neurology: The Dementias 2*. Butterworth-Heinemann; Pp: 329-380
- Wason, P. C. (1966) "Reasoning" in Foss, B. M. (Ed) *New horizons in psychology*. Harmondsworth: Penguin
- Wasserman, David, Asch, Adrienne, Blustein, Jeffrey and Putnam, Daniel, "Cognitive Disability and Moral Status", *The Stanford Encyclopedia of Philosophy* (Fall 2017 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2017/entries/cognitive-disability/> (last accessed 26/04/2018)

- Weintraub, S., Wicklund, A. H. and Salmon, D. P. (2012) The neuropsychological profile of Alzheimer disease, *Cold Spring Harbor perspectives in medicine*, Vol. 2(4); a006171; Pp: 1-18
- Welsh, M. C. (2002) Developmental and clinical variations in executive functions. In D. L. Molfese and V. J. Molfese (Eds) *Developmental variations in learning: Applications to social, executive function, language, and reading skills* (Pp: 139-185). Mahawah, NJ: Lawrence Erlbaum Associates
- Westergaard, G. C. and Hyatt, C. W. (1994) The responses of bonobos (*Pan paniscus*) to their mirror images: Evidence of selfrecognition, *Human Evolution*, Vol. 9(4); Pp: 273–79
- Westerman, G., Mareschal, D., Johnson, M. H., Sirois, S., Spratling, M. W. and Thomas, M. S. C. (2007) Neuroconstructivism, *Developmental Science*, Vol. 10(1); Pp: 75-83
- Westerman, G., Thomas, M. S. C. and Karmiloff-Smith, A. (2010) Childhood Cognitive Development. In U. Goswami (Ed) *The Wiley-Blackwell Handbook of Childhood Cognitive Development, Second edition*. Wiley-Blackwell, Oxford: UK
- Whitbourne, S. K. (1986) *Adult Development*. Praeger: New York
- Whitbourne, S. K. (1996) *The aging individual: Physical and psychological perspectives*. New York: Springer
- White, M. and Epston, D. (1990) *Narrative means to therapeutic ends*. New York: W. W. Norton
- Williamson, C., Alcantar, O., Rothlind, J., Cahn-Weiner, D., Miller, B. L. and Rosen, H. J. (2011) Standardised measurement of self-awareness deficits in FTD and AD, *Journal of Neurology, Neurosurgery & Psychiatry*, Vol. 81(2); Pp: 140-45
- Winkler, I., Haden, G. P., Ladinig, O., Sziller, I. and Honing, H. (2008) Newborn infants detect the beat in music, *Proceedings of the National Academy of Sciences*, Vol. 106(7); Pp: 2468–71
- Wood, D., Crapnel, T., Lau, L., Bennett, A., Lotstein, D., Ferris, M. and Kuo, A. (2018) Emerging Adulthood as a Critical Stage in the Life Course. In: Halfon N., Forrest C., Lerner R., Faustman E. (Eds) *Handbook of Life Course Health Development*. Springer, Cham
- Wood, K. C., Smith, H. and Grossniklaus, D. (2001) Piaget's Stages of Cognitive Development. In M. Orey (Ed) *Emerging perspectives on learning, teaching, and technology*. <http://projects.coe.uga.edu/epltt/> (last accessed 7/4/2017)
- Woods, B., O'Philbin, L., Farrell, E. M., Spector, A. E. and Orrell, M. (2018) Reminiscence therapy for dementia, *Cochrane Database of Systematic Reviews 2018*, Issue 3. Art. No.: CD001120. DOI: 10.1002/14651858.CD001120.pub3. (last accessed 19/05/2019)
- Woods, R. T. (1989) *Alzheimer's Disease: Coping With a Living Death*. Souvenir Press: London
- Yato, Y., Kawai, M., Negayama, K., Sogon, S., Tomiwa, K. and Yamamoto, H. (2008) Infant responses to maternal still-face at 4 and 9 months, *Infant Behavior and Development*, Vol. 31(4); Pp: 570-7
- Yeung, H. H., Chen, K. H. and Werker, J. F. (2013) When does native language input affect phonetic perception? The precocious case of lexical tone, *Journal of Memory and Language*, Vol. 68(2); Pp: 123–39

- Young, K. and Saver, J. L. (2001) The Neurology of Narrative, *SubStance*, Vol. 30(1); Pp: 72-84
- Zahavi, D. (2005) *Subjectivity and Selfhood: Investigating the First-Person Perspective*. Cambridge, MA: The MIT Press
- Zahavi, D. (2009) Is the Self a Social Construct? *Inquiry*, Vol. 52(6); Pp: 551-73
- Zarpentine, C. (2017) Moral judgement, agency and affect: A response to Gerrans and Kennett, *Mind*, Vol. 126(501); Pp: 233-57
- Zelazo, P. D., Muller, U., Frye, D. and Marcovitch, S. (2003) The development of executive function in early childhood, *Monographs of the Society for Research in Child Development*, Vol. 68(3); Pp: vii-137

Organisational Reports and Websites

- Australian Institute of Health and Welfare (2012) Dementia in Australia. *Cat. no. AGE 70. Canberra: AIHW*
- “Australia’s Demographic Challenges”, Department of Communications, Information Technology and the Arts, Commonwealth of Australia 2004
- Bartlett, H., Gray, J., Byrne, G. J., Travers, C. and Lui, C-W. (2006) *Dementia Research Mapping Project: Final Report*. Ageing Research Online. Australian Government
- Beer, A., Beilby, J., Cornell, V., Faulkner, D., Karnon, J. and Thredgold, C. (2018) Consumer Directed Care: The expectations and experiences of people aged 50 years and over in Australia, Final Report, ARC Linkage Project LP130100045, www.cdengage-ment.com/publications (last accessed July 2018)
- “Caring for Older Australians”, Productivity Commission Inquiry Report, Volume 1, No. 53, 28 June 2011
- “Evaluation of the consumer-directed care initiative – Final Report” (2012) KPMG and Department of Health and Aging. <http://www.tdsa.org.au/wp-content/uploads/2016/03/KPMG-CDC-Final-Report-2012-ALL-merged.pdf> (last accessed 24/4/2018)
- “Feral Children” - <http://www.bbc.com/culture/story/20151012-feral-the-children-raised-by-wolves> (last accessed 6/10/2018)
- “Key facts and statistics 2016”, Alzheimer’s Australia; <https://fightdementia.org.au/about-dementia/statistics> (last accessed 1/5/2019)
- “Maslow’s 5-tier Hierarchy of Needs” - <https://www.simplypsychology.org/maslow.html> (last accessed 5/4/2019)
- “Memory Boxes” - <https://www.agedcareguide.com.au/talking-aged-care/memory-boxes-benefit-people-living-with-dementia> (last accessed 20/03/2019)

“Memory Boxes” - <https://www.alzheimers.net/2014-02-06/memory-boxes-for-patients/> (last accessed 20/03/2019)

“Progression of Dementia” - <https://www.dementia.org.au/about-dementia/what-is-dementia/progression-of-dementia> (last accessed 25/03/2019)

“Royal Commission into Aged Care Quality and Safety” - <https://agedcare.royalcommission.gov.au/Pages/default.aspx> (last accessed, 31/10/2018)

“Stages of Alzheimer’s” - <https://www.alz.org/alzheimers-dementia/stages> (last accessed 25/03/2019)

“What is Consumer Directed Care? – Information for Home Care Package providers” Australian Government/Department of Social Services.
https://agedcare.health.gov.au/sites/g/files/net1426/f/documents/04_2015/what_is_consumer_directed_care_0_0.pdf (last accessed 24/4/2018)

“What is Dementia - <https://www.dementia.org.au/about-dementia/what-is-dementia> (last accessed 14/03/2019)

World Health Organization and Alzheimer’s Disease International (2012) Dementia: A Public Health Priority, *World Health Organization*