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What is the nature of tacit knowing experienced by General Practice (GP) Supervisors as they teach GP Registrars in clinical practice?

by

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"We can know more than we can tell".

(Polanyi 1966, p.4)

“Much of human experience is below-view, unattended to as we operate in the world, but integral to our performance as social creatures. We hold the experiential agility to be at once creative and efficient, to assimilate the novel and the familiar: in essence to develop expertise. Over human history we have mythologized experts, such as the artisan, the witchdoctor and the physician by culturally locating their knowledge as hidden and unspeakable, in other words, as ‘tacit’ “.

(Zappavigna 2014, p.2)

"The world of perception, or in other words the world which is revealed to us by our senses and in everyday life, seems at first sight to be the one we know best of all. For we need neither to measure nor to calculate in order to gain access to this world and it would seem that we can fathom it simply by opening our eyes and getting on with our lives. Yet this is a delusion. In these lectures, I hope to show that the world of perception is, to a great extent, unknown territory as long as we remain in the practical or utilitarian attitude. I shall suggest that much time and effort, as well as culture, have been needed in order to lay this world bare and that one of the great achievements of modern art and philosophy (that is the art and philosophy of the last fifty to seventy years) has been to allow us to rediscover the world in which we live, yet which we are always prone to forget".

(Merlau-Ponty 1948/2008, p.31-32)

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Summary

This research set out to understand the tacit knowing that GP Supervisors experience whilst teaching GP Registrars. Its ontological nature makes it challenging to capture and express in language. To explore it further Hermeneutic Phenomenology was employed, specifically using Van Manen's and Giles' approach.

A phenomenological question was asked of nine GP Supervisors to share their experiences with GP Registrars, when they knew what was happening but were not able to fully explain their knowing. The interviews were transcribed and formed into forty-seven crafted stories. These were individually described and interpreted. A novel form of language was developed for the themes, using word couplets with hyphens and containing gerunds. These enabled multiple interpretations to be revealed from the stories. Three ontological themes emerged.

The first theme is 're-presenting'. Supervisors teach from who they are and adopt different ways of being themselves in order to help their Registrars learn from encounters with patients. 'Re-presenting' means responding to different clinical situations and learning interactions and adopting reconfigured dispositions to wisely guide their Registrars.

'With-holding' is the second theme. It reveals several meanings. Supervisors withhold from offering too much instruction and from taking over Registrars' consultations. 'With-holding' invokes meanings of helping Registrars to grasp important meanings whilst supporting them as they learn.

The third theme is 'path-marking'. The skilful ways in which Supervisors 're-present' and 'with-hold' themselves, enable them to recognise significant encounters where their Registrars need to learn important new ways of becoming a GP. 'Path-marking' involves, identifying significant places in their Registrars' learning pathways and then helping them to transform these encounters into meanings that can be grasped and skills which can be carried into the future.

To conclude, exploring GP Supervisors' tacit knowing with Hermeneutic Phenomenology uncovered a rich appreciation of what actually happens in the skilful interactions between Supervisors and Registrars. The relational nature of this knowing was not found to be hidden as it was expressed with narrative, crafted stories and ontological themes. But it is not able to be

fully extracted from its circumstances. Because of this, its nature can be deemed to be tacit, not in the literal sense of being ineffable, but in the meaning that it is embedded into everyday actions, which can render it to regarded as taken for granted. There is an additional perspective that can also deem this knowing to be tacit. This is because it is enacted through human dispositions which cannot be made into fully explicit propositions of knowledge. If epistemological formulations are demanded, this knowing could be deemed to be ineffable.

What has been learnt from this research is an appreciation that the expertise of Supervisors is constituted by their relationships with their Registrars and is characterised by adaptable dispositions undertaken to wisely guide them. Hermeneutic Phenomenology offers an approach to extend the exploration of this knowing.

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There have been a number of starting places and different pathways that this research has ventured from and towards the completion of this thesis. Family members, friends, and colleagues from my personal, clinical, educational and research worlds have all assisted. However, I bear full responsibility for the outcomes achieved.

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The Supervisors who undertook the interviews*

From the outset I would like to share my deep gratitude to the nine Victorian GP Supervisors who generously shared their time and valuable reflections. I hope I have honoured the meanings that matter to them. It is their stories that form the data that I have endeavoured to interpret and share with a wider audience. (Their names have not been listed to protect confidentiality).

Registrars*

The Supervisors' accounts give life to the real-world encounters that they have had with their GP Registrars. I am grateful to these unknown colleagues who along with all other Registrars engage in the life-world learning of GP Training. Their commitment to learning and becoming the GPs of the future is what really drives this project.

Patients

Also unknown to the reader but not to the Registrars and Supervisors are our patients who entrust us with their care. The Australian community through their acceptance of practice based training, allow us to engage in our important work, which is directed toward the goal of improving their health.

** In order to maintain anonymity of both supervisors and registrars, and preserve uniformity, the female forms of the personal and possessive pronouns have been employed in the stories and interpretations.*

My Supervisors; Dr Julie Ash, Professor David Giles and Professor Lambert Schuwirth

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Finally, I would like to thank the two external examiners Drs Andrea Gilkison and Rola Ajjawi for their very helpful suggestions. Incorporating these greatly helped in presenting the research findings.

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."

Hubert van Doorn

Addendum - Research Training Program (RTP) Tuition Fee Offset

I also acknowledge the financial support of the Australian Government's Research Training Program Tuition Fee Offset.

Chapter 1 - The question

"When unarticulated, taken-for-granted practices and meanings fade from our social ecology and the social fabric of our lives, …. we lose what they enable us to see, create, and represent".

(Benner 1994, p.xv)

What is the nature of tacit knowing experienced by General Practice (GP) Supervisors as they teach GP Registrars in clinical practice?

How the question came to be.

My life as a doctor, which includes being a GP Supervisor and a Medical Educator constitutes much of who I am. Understanding the nature of my work has been and continues to be an essential undertaking.

I have been unable to settle on simplistic accounts of the complex nature of my experience. Consequently, I have always felt the need to grasp different forms of meaning involved in being a doctor. I wonder about better ways to be a GP. I wander into areas such as anthropology, art appreciation, architecture, family systems thinking, educational theory, wicked problems, complexity theory, evolutionary psychology, cognitive science and philosophy. Souvenirs from these travels seem to be constituted within me.

In my work as a GP and as a GP Supervisor, I have felt the presence of forms of knowing that are shared, but ineffable. They seem to work without a lot of intentional cognitive effort. Their ineffability became more obvious when I struggled to share the explicit reasoning behind clinical decisions, when consulting alongside GP Registrars.

They seem to happen in many moments during a working day. I am aware of them being in interactions with GP Registrars and patients. They feel meaningful, but I am only partly aware of their form. I cannot think about them as discrete acts within my work nor disconnect them from who I am. I suspect that this knowing is wrapped up in implicit understandings of being a GP Supervisor.

I have been wondering about them for some time and have formed the realisation that they matter to me. So, I have arrived at a time in my career when I can no longer take for granted, their taken for granted presence!

I work and act with and within the presence of this tacit knowing. To re-phrase Polanyi's famous quote in my own experience, I somehow know that; I can know more than I can tell.

These ideas raised the question; how could research be undertaken that might be able to uncover essential meanings of the unsaid knowing that is working here?

So why research tacit knowing?

The thoughts shared above lead to further curiosity and questions.

Do my Supervisor colleagues have experiences like me?

These experiences matter to me, but do they matter to other Supervisors?

If so, how could we explore and comprehend them?

Is there a way with words to share their stories and ideas with others?

Will clarifying the nature of tacit knowing influence how we support, supervise and teach our Registrars?

So why undertake this research?

A general answer can be found in Patricia Benner's quote (above), which struck a chord with me by affirming that there are:

*"unarticulated, taken-for-granted practices and meanings" …*and *…."they enable us to see, create, and represent."*

This set up the challenge to find ways to understand their enabling nature within me and my work, and perhaps be able to reveal this in the work of other colleagues.

But how?

Michael Polanyi's work was an early influence. He is regarded as the progenitor of the term tacit knowledge. Comprehending his philosophy was an important step and an overview has been prepared and shared in Appendix 1.

A brief, introductory summary is: Tacit knowledge works in many ways and in people when they share meanings, that are not easily stated or explained. Specific examples include understanding the gist of an issue, recognising faces or displaying expertise, like riding a bicycle. A deeper appreciation of tacit knowing is that it is much more than non-explicit knowledge and is better understood more holistically and expressed in skilful ways of living that are difficult to clearly articulate and define.

The section on exactitude in the overview (p.130) has been partly replicated here. Polanyi's initial career was medicine followed by Physical Chemistry and then he became a philosopher, but not via a traditional academic pathway. So, it is somewhat paradoxical for a natural scientist to document the following concerns.

"An unbridled lucidity can destroy our understanding of complex matters" (Polanyi 1966, p.18).

Polanyi details a further warning in his work. His concern relates to striving for exactitude. His point is that an excessive focus on details will not result in the establishment of overall meaning.

"…the belief that, since particulars are more tangible, their knowledge offers a true conception of things is fundamentally mistaken" (Polanyi 1966, p.19).

I interpreted Polanyi's view, seeing that there were risks in attempting to define specific elements of tacit knowledge. Reading Merlau-Ponty (a short precis of the relevance of his ideas is found in Endnote[i]) promulgated a similar response. His quote has been selected into the beginning of this thesis as it shares the idea of mistaking utilitarian entities as being sufficient ways to perceive the meanings of our experience.

Merlau Ponty and Polanyi's concern resonated with me. I had also become aware of the late Hubert Dreyfus's philosophical work (see Endnote[ix]) and his research on expertise. In his essay, *Overcoming the myth of the mental* he discusses what happens in interviews with experts, when

asked to share how they undertook their work. The revelation is that they were unable to do so in a way that was commensurate with their expertise.

> *Thus, when an expert is forced to give the reasons that led to his action, his account will necessarily be a retroactive rationalization that shows at best that the expert can retrieve from memory the general principles and tactical rules he once followed as a competent performer* (Dreyfus 2014, p.113).

Harry Collins's work was also formative. Collins is a professor of Social Sciences at Cardiff University, Wales. His book, *Tacit and Explicit Knowledge* (2010) supports the general notion that tacit knowledge is multi-dimensional and needs to be understood within its different undertakings and settings. His work offers a taxonomy of; relational, somatic, and collective knowledge (p. 2-3). It did not make sense to consider adopting this framework as a way to explore the phenomenon that interested me. However, it did point to the human nature of tacit knowledge and needing to understand it experientially, within its situatedness. Michele Zappavigna's quote (above) also highlighted the challenge of demythologizing tacit knowing. So, I began to realise that embarking on research with a methodology seeking explanatory accounts of tacit knowledge was problematic. The unresolved question at this time was how to find and share the meanings from the tacit experiences arising in the situated, lived nature of my work, and potentially those of my colleagues.

In November 2017 I met Professor David Giles who advised me that Hermeneutic Phenomenology had methods that could achieve the desired outcome. He generously offered to supervise my work. In so doing I learnt that the way forward was in taking an ontological perspective. This involved the need to explore tacit knowing existentially, through lived experience rather than attempting to explain tacit knowledge with the language of epistemology. The latter I learnt from David could be more broadly characterised as ontic, which means that something could be understood as factual without human interpretation. Professor Giles' offer to supervise this research with a hermeneutic phenomenology approach, created the way forward to undertake this work and hopefully responding to some of the questions raised above. This transition involved learning how to undertake phenomenological research and find different ways with words to address the research question. This approach is outlined and discussed in Chapter 3.

What is tacit knowing?

The assumption of this research is that a particular phenomenon, operating in the lives of GP Supervisors, is what could be understood as tacit knowing. Its existence can be regarded as being ubiquitous in the day-to-day practices as well as the 'taken for granted' and shared knowledge and skill of practitioners of all disciplines. It is generally understood as an implicit feature of expertise. Common words that can be collected to describe this phenomenon include intuition, gut feelings, instinct and art. Later in the thesis, in Chapter 4, there will be a more detailed exploration and it will be shown that a universally accepted definition of tacit knowing has not been achieved.[1]

A starting point however can be with the literal understanding of the term tacit. This means that something can be known but not fully stated. There are extended interpretations which open up additional meanings such as non-explicit, hidden, implicit, inherent, enactive, perceptive and 'taken for granted' forms of knowing. This research was undertaken with an open-mindedness about tacit knowing. The importance of this approach has been to avoid preconfiguring its nature and allowing this to be revealed through the narratives of the Supervisors who were interviewed.

The paralysis of reconciling 'hard' science and 'soft' practice

Donald Schon (1983) tackled this issue head on in the preface to *The Reflective Practitioner.*

> *When people use terms such as 'art' and 'intuition', they usually intend to terminate discussion rather than to open up enquiry. It as though the practitioner says to his academic colleague, 'While I do not accept* <u>*your*</u> *view of knowledge, I cannot describe my own'. Sometimes indeed the practitioner appears to say, 'My kind of knowledge is indescribable' or even, 'I will not attempt to describe it lest I paralyse myself'.* (p.vii-viii)

Schon further highlighted the *"dichotomy between the 'hard' knowledge of science and scholarship and the 'soft' knowledge of artistry and unvarnished opinion"* and identified the need for more research (p.viii).

[1] See Livingston and Cutrofello 2015 p. 45 as well as Yu 2013 and Turner 2014 p. 53 in this thesis.

We are in need of inquiry into the epistemology of practice. What is the kind of knowing in which competent practitioners engage? How is professional knowing like and unlike the kinds of knowledge presented in academic textbooks, scientific papers, and learned journals? (p.viii)

The proposal

Today, in the academic context of clinical education within General Practice Training, the premise is that tacit knowing is involved in the experiences of being a GP Supervisor and needs to be explored.

Schon posits the need for research in the framework of epistemology, which means researching knowledge. However, the two questions he poses are about knowing, the kind of knowing professionals employ. Knowing is a human undertaking and this research will explore tacit knowing using hermeneutic phenomenology, rather than an epistemological approach.

More research is needed here because our current literature appears to fall short in providing a satisfactory comprehension of the nature of tacit knowing that GP Supervisors employ.[2]

[2] This statement is supported in Chapter 2 and its findings.

Chapter 2 - Reviewing the literature on tacit knowing

"In dealing with things in the world, we human beings are actors, perceivers, thinkers, speakers, etc. There is no mystery that we can switch freely from one role to the other, from one mode of being to another. We may talk about anything in the world, but still there are things that we can hardly fully articulate in words. In our embodied being-in-the-world, we act and perceive intentionally and intelligently, guided by various kinds of knowledge, propositional and non-propositional, explicit and tacit".

(Yu 2015, p.307)

History and rationale for the approach taken

This research commenced in 2016 with a pilot project undertaken as a component of the introductory course units for the Master of Clinical Education via the Prideaux Centre at Flinders University. The interest began with the perceived need to explore the tacit dimensions that constitute the processes of clinical reasoning undertaken by General/Family doctors in their practice of medicine. A traditional literature review was initiated with a *PubMed* search using a variety of *Mesh* and text word searches. A limited range of useful articles both in number and in the scope of inquiry were initially found. Of value, at that stage, was the work of authors studying specific tacit features of clinical knowledge, such as clues, gut feelings, intuition and pattern recognition within the context of clinical medicine. Engel (2008) and Stolper et al. (2010) were two examples at the time.

Some of the literature on clinical reasoning also highlighted the concept of dual processing. Kahneman's work (2011) on type 1 and 2 thinking seemed to be the dominant way of explaining the broad difference between *thinking fast*, with intuitive and rapid recognition processes as compared with the more effortful *thinking slow*, with logical cognitive steps. The latter is commonly referred to as analytical and the former non-analytical.

The articles at this stage did not reveal much more than passing references to the idea of a tacit dimension. Additionally, no evidence of any significant scholastic debate between the authors, exploring the actual nature of the non-analytical process emerged. The intellectual short-cut of aligning tacit knowledge as an antonym of explicit knowledge was actively avoided. It didn't seem right to define something as <u>not</u> being something else. A prevailing image regularly appeared in web-based searches of tacit knowledge. This is of an iceberg. Explicit knowledge is the top of the iceberg and the tacit stuff is below the water line and out of view. This notion

reinforces the sentiment in Zappavigna's quote, shared at the front of the thesis, of tacit knowledge being a hidden phenomenon.

This perceived hiddenness fuelled the curiosity to explore more widely.

The limitations of traditional medical databases led to the literature being sourced from a diverse range of locations over a period of three years. This was undertaken following the rationale of a scoping review (Arksey & O'Malley 2005). A scoping review adopts a breadth approach to a topic. It is a wide-ranging investigation that is designed to find all the available literature and to identify potential gaps. The selection is different to that of a systematic literature review, as the focus is often on a broad and often complex issue, rather than one specific research question. Unlike systematic reviews the parameters for inclusion of literature do not include objective measures of validity. Arksey and O'Malley (2005) highlight that a scoping study seeks to "*prioritize certain aspects of the literature*" (p.28) but "*does not offer any clear means of synthesizing findings*" (p.31). They also comment on the weight of the evidence collected and the generalizability of the findings.

> *Moreover, unlike a systematic review the scoping study does not seek to 'synthesize' evidence or to aggregate findings from different studies. Whilst a scoping study will need some analytical framework or thematic construction in order to present a narrative account of existing literature, there is no attempt made to present a view regarding the 'weight' of the evidence in relation to particular interventions or policies. This is because the scoping study does not seek to assess quality of evidence and consequently cannot determine whether particular studies provide robust or generalizable findings* (p.27).

Philosophical, psychological, sociological, anthropological, linguistic, educational, complexity and evolutionary science texts and papers were sought out as areas of review. The added rationale for such a wide review is that General Practice is built upon multiple dimensions. The selection was guided by a search for references to tacit knowledge and tacit knowing or similar notions shared in different ways within these disciplines. Polanyi's work, as mentioned above, was an important starting point. (see Appendix 1)

Early advice was sought from the medical, educational and humanities librarians at Flinders University. References, index headings and citations from texts and papers were tracked over a twelve-month period. These came from a range of relevant books and articles with a view to selecting sources relevant to the project. The key search words were tacit, tacit knowing, tacit knowledge and Polanyi. Academic supervisors from the Prideaux Centre at Flinders University

provided references in addition to their invaluable research advice. The *Stanford Encyclopedia of Philosophy*, an academically reliable database proved to be a useful reference for authoritative philosophical knowledge. A search of *PhilPapers* also revealed several relevant papers. The process facilitated the emergence of new ideas and authors. Additional leads in the search for literature came from directly interrogating Google Scholar and the full Flinders University Library. An informal manuscript review process was undertaken (with draft copies of a regularly updated research proposal) with several academic colleagues in Australia. This writing and the liaison were helpful and further references were discovered and followed up. During this process a more informal journal was begun so that new sources of ideas could be documented and reflected upon.

Specific journals connecting ideas of clinical practice, medical education, theoretical medicine, ethics, philosophy, and evaluation were hand searched. A more useful but limited range of articles highlighted both the potential for the research but also the gaps in the published accounts relevant to supervision in General Practice. Papers from two scholars, Kinsella (2006, 2007 & 2010) and Henry (2006, 2010 & 2011) are cited to share a selection of the literature reviewed, that had broad but not specific relevance to the research question.

Kinsella's 2006 paper was influential as it offered an initial introduction to hermeneutics, especially as an overview of the work of Gadamer. This provided the guide for the scoping review. Her article highlighted that a central concept in Gadamer's work is the fusion of horizons (p.3). It means that humans are constantly assessing and re-assessing their perspectives or horizons and integrating the new with the old in a constantly unfolding process. This seemed to match with how the scoping review evolved.

In late 2017 the research was re-oriented to exploring the nature of tacit knowing involved in GP supervision with an ontological perspective and hermeneutic phenomenological methodology. Further input was sought from academic Clinical Education Researchers and Family Physicians in Vancouver and Toronto, Canada and Amsterdam, the Netherlands

An iterative approach of following citations and references continued. While there were many intriguing philosophical sources to read and comprehend, and some broadly relevant literature on clinical practice, none that specifically researched tacit knowing involved in the work of GP Supervisors came to light.

How the findings will inform the thesis

The paucity of references directly related to the research question raised the question as to how to share these findings without feeling the need to converge on a synthesised outcome. The solution adopted was as follows.

Firstly, by laying out how and why the hermeneutic phenomenology research approach would work, as detailed in Chapter 3.

Secondly, in line with the hermeneutic requirement to set out pre-understandings, the most relevant range of sources have been explored and interpreted and shared in Chapter 4.

Additional interpretations of the literature reviewed are presented and referenced in Chapter 5 and the detailed Endnotes and Appendices 1-3.

To summarise, the findings are incorporated into the thesis in the following sections.

- Chapter 3, The research approach
- Chapter 4, Pre-Understandings
- Chapter 5, Finding new ways with words
- Endnotes i-xi
- Appendix 1 - Michael Polanyi's tacit knowledge and knowing – an overview
- Appendix 2 - What else is in this bundle of beliefs?
- Appendix 3 - Additional references employing verbs

This approach has also been hermeneutic in the sense that the settings, history, and dialogue involved in the review have been acknowledged as being influential, as outlined by Kinsella.

Kinsella's synopsis of Gadamerian hermeneutics as mentioned, has helped to guide the search for literature and has evolved into providing a role akin to Arksey and O'Malley's *"thematic construction"*, helping to interpret the sources and their relevance to the research question. Gadamer's magnum opus *Truth and Method* (Gadamer 2013) has a central place in the evolution of hermeneutics in the twentieth century. It is a very challenging work of philosophy and many interested readers like myself, resort to academic interpreters, such as Kinsella. My short-hand

comprehension of Gadamer is as follows; meaning comes from sensitive engagement in, and careful interpretation of being-in -the world experiences, shared through dialogue and text. It does not come from a method which is a product of the mind following cognitive rules.

Wiercinski's interpretations of Gadamer have also been useful. Two particular quotes have helped me to grasp key ideas.

"Understanding is not a mysterious communion of minds; it is an event (Ereignis) (Wiercinski, 2009, p.8).

"Understanding is a participation in meaning. As an historical event it is embedded in language" (Wiercinski, 2009, p.9).

My simple interpretation is; Life is constituted by participation in experiences, it is meaningful because it is eventful.

Gadamer's stance on avoiding method makes it difficult to learn what he really meant. This is because he doesn't spell out a research methodology. His concerns echo those from Polanyi and Merlau-Ponty mentioned in Chapter 1. A useful extract from Kinsella's paper shares some helpful wording that further captures what Gadamer means. *"According to Gadamer* (referring to Truth and Method), *the task of hermeneutics is not to develop a procedure of understanding, but rather to clarify the interpretive conditions in which understanding takes place"* (p.3). In this project Kinsella's synopsis has helped identify these conditions.

<u>*Characteristics of a Hermeneutic Approach*</u> *(*Kinsella p.1)
Seeks understanding
Situated location of interpretation
The role of language and history
Inquiry as conversation
Comfortable with ambiguity

Finding an ontological home for this research

To start with a recap, the first two years of this project involved searching the clinical education literature for papers on tacit knowing in the clinical supervision of GP Registrars. The lack of literature, coupled with a decision not to settle on researching limited aspects of tacit knowing, lead to finding an ontological home for the research, with Professor David Giles' help, using hermeneutic phenomenology as the methodology. For the research I adopted a Gadamerian approach which requires a different research mindset. It took time to fully appreciate what it means and how to work with this method, because he says there shouldn't be one! Kinsella and Wiercinski's papers have been shared as they distil what Gadamer proposes but does not lay out in a digestible way to a wide audience. Gadamer's 'Truth and Method' posits that to reveal the nature of what is happening in lived experience, an openness of mind is needed, because our biases block access to full understandings.

This leads to the importance of searching for and identifying pre-understandings. Mine are extensively listed in Chapter 4. The scholastic discipline is to acknowledge those beliefs that could directly or indirectly influence the research. If the phenomena can be aligned with some of the pre-understandings, as the research findings unfold, then they can have a rightful place in the results. There is no imperative for a match up, this is antithetical to the whole approach. This can be seen to be at odds with the expectation that research usually follows a more defined methodology, that starts with some theoretical positioning. However, having shared these caveats, it is also important to re-state that the research has followed the required scholastic rigour of a research structure, which is that of Giles (2015 & 2019) outlined in Chapter 3.

Situating the thesis in the medical education literature

Following the writing up of the thesis and creating the themes, it was time to re-visit the literature to seek parallels that may have been initially overlooked. Papers from the following researchers, Artino (2011), Billett (2001, 2013, 2016), Bleakley (1999, 2006, 2020), Brown (2018, 2020), Dall'Alba (2007, 2009, 2015, 2020), Dornon (2019), Durning (2010, 2011) and

Pront (2016) were reviewed.[3] (As this literature is offered as an aggregated summary of key themes, it is listed in the footnote 3 below.)

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[3] References

Billett, S. 2001 Knowing in practice: re-conceptualising vocational expertise. *Learning and Instruction* 11 431-452.

Billett, S & Choy, S. 2013 Learning through work: emerging perspectives and new challenges. *Journal of Workplace Learning*. Vol. 25 No.4 264-273.

Billett, S. 2016 Learning through health care work: premises, contributions and practices. *Medical Education* 50: 124-131.

Bleakley, A. 1999 From reflective practice to holistic reflexivity. *Studies in Higher Education* 24:3 315-330.

Bleakley, A. 2006 Broadening conceptions of learning in medical education: the message from teamworking. *Medical Education* 40: 150-157.

Bleakley, A. 2020 *Educating Doctors' Senses Through the Medical Humanities.* "How do I look ?" Routledge.

Brown, J, Nestel, D, Clement, T & Goldszmidt, M. 2018 The supervisory encounter and the senior GP trainee: managing for, through and with. *Medical Education* 52:pp. 192-205.

Brown, J, Reid, H, Dornan, T & Nestel, D. 2020 Becoming a clinician: Trainee identity formation within the general practice supervisory relationship. *Medical Education* 54: pp.993-1005.

Dornan, T. 2019 Experience Based Learning (ExBL): Clinical teaching for the twenty-first century. *Medical Teacher* 41:10 1098-1105.

Durning, S, Artino, A, Pangaro, L, van der Vleuten, C & Schuwirth, L. 2010 Redefining *Context* in the Clinical Encounter: Implications for Research and Training in Medical Education. *Academic Medicine* Vol.85 No 5. 894-901.

Durning, S & Artino, A. 2011 Situativity theory: A perspective on how participants and the environment can interact: AMEE Guide no.52. *Medical Teacher* 33:3 188-199.

Dall'Alba G & Barnacle, R. 2007 An ontological turn for higher education. *Studies in Higher Education*. 32 (6) 679-691.

Dall'Alba G. 2009 Phenomenology and Education: An introduction. *Educational Philosophy and Theory.* 41:1 7-9.

Dall'Alba G. 2009 Learning Professional Ways of Being: Ambiguities of becoming. *Educational Philosophy and Theory.* 41:1 34-45.

Dall'Alba, G & Barnacle, R. 2015 Exploring Knowing/Being Through Discordant Professional Practice. *Educational Philosophy and Theory.* 47: 13-14 1452-1464.

Dall'Alba, G & Sandberg, J. 2020 Bodily grounds of learning: embodying professional practice in biotechnology. *Studies in Higher Education*. DOI: 10.1080/03075079.1711047.

Pront, L, Gillham, D & Schuwirth, L. 2016 Competencies to enable learning-focussed clinical supervision: a thematic analysis of the literature. Medical Education 50: 485-495.

Two main themes, which are both aggregated perspectives from the papers, resonate with this research and are worthy of comment. The first one is that work is impacted by its context, complexity and situativity. The second promotes the idea that clinical education involves guiding learners through a human process of becoming and onto identity formation.

Firstly, several of the papers mention that the work of clinicians and clinical educators takes place in complex settings. The situated nature of clinical teaching and learning happens by providing care in context. The goal is caring for real patients, in workplaces, working with clinical and educational teams and accessing variable knowledge, technological, social, material and cultural resources. Teaching in the 'here and now' involves supporting learners to develop flexible skills that are responsive to different situations. As will be shown in Chapter 5, this idea is compatible with the ontological theme 're-presenting', that portrays the adaptable ways that supervisors engage with their registrars in order to guide and support them.
Navigating complexity requires tacit knowing. This is characterised by recognising fuzziness and respecting ever changing boundaries between acceptable communication and actions in complex environments. Tacit knowing plays an important role here as explicit rules for situational awareness do not seem to be sufficient.

Secondly, some of the papers describe contemporary historical shifts in notions of clinical education. The transformation is from a transactional process of acquiring knowledge and competencies, to a stronger interactional focus on learning how to know, through important experiences of actually being in the role of a practitioner. Although the literature focusses more on the clinician, the analogy with becoming a teacher or supervisor is credible. Pront et al. (2016, p.485) highlight from a thematic literature review of clinical supervision, four main competencies which promote learning. *"Domains understood to promote student learning are co-dependant and include 'to partner', 'to nurture', 'to engage' and 'to facilitate meaning'"*. Teaching in this sense is guiding and encouraging, promoting the learner's autonomy and offering support. This is what is meant by 'becoming' in contrast to training. The momentum generated by this approach is directed toward the learner forming their own identity. These are congruent with the orientation and findings of this thesis and reflected in the themes documented in Chapter 5 that show supervisors 'withholding', 'with-holding' and 'path-marking' with their registrars.

Only one source had a direct reference to tacit knowledge. This is in Bleakley (2020, p.23) where he references work by Polanyi and mentions tacit knowledge in several places. A quote relevant to this thesis is shared, because it addresses the challenge of experts needing to have ways of sharing their tacit expertise with novices.

> *Experts cannot readily access knowledge and strategies that are tacit in order to explore these with novices. Mechanisms of introspection and reflection themselves have to be learned by experts in order to mine tacit knowledge and make it explicit.*

This thesis offers three ontological themes which could be seen to fulfil the challenge proposed by Bleakley and have general support in the literature mentioned

On first inspection this research may seem philosophical, but it does have practical value. Its origins are from the real world, the voices of nine supervisors who work as clinical teachers of GP Registrars. Their stories share their considerable experience, which is reflected in how they undertake their clinical and educational repertoires with GP Registrars. The tacit nature of being a GP Supervisor is enacted within the holistic undertakings of wisely guiding novice colleagues toward becoming a GP and supporting them to develop their own identity. The research has crafted three ontological themes which are shared in Chapters 5 and 6. These are described and interpreted aspects of expertise, developed in complex, real life contexts. They are portrayed as dispositional ways of being a GP and a GP Supervisor. These themes are also compatible with the ideas put forward in the additional literature that has been reviewed.

Table 1 Identified themes in the additional literature

Identified themes
Work/experience-based learning
Real patient/socio-cultural learning
The impact and role of context and complexity
Knowing in practice/ reflectivity and reflexivity
Situativity/Situational awareness/Situated cognition and expertise
Ecological psychology/embodied learning
Being/becoming and identity

Chapter 3 – The research approach

"For doctors and patients there are also a million decisions that make themselves – whether to consult the doctor, whether to consider a particular diagnosis, whether to think of prescribing a particular medication, whether to mention a particular worry. No amount of advice or guidance will change the shifting and elusive nature of thoughts and intentions".

(Heath 2013, p.22)

Outline of the research

The setting of the research is in Victoria, Australia in General/Family Practice, specifically in the everyday clinical education circumstances and interactions between experienced GP Supervisors and GP Registrars (vocational trainees) in their practices.

The Australian system of GP training is currently delivered through RTOs (Regional Training Organisations) in the States and Territories. Two colleges, RACGP (Royal Australian College of General Practitioners) and ACRRM (Australian College of Rural and Remote Medicine) set the training and assessment standards. Supervisors are expected to provide supervision, feedback, dedicated teaching and end of term assessments. The duration of training in a GP setting varies from a minimum of six months up to two years. For this research the 8 out of the nine participants worked in private practices, the other Supervisor's practice being a community health centre. The distribution was metropolitan - 3, rural - 5 and one practice - semi-rural/coastal. All of the GP Registrars in both colleges have to complete a minimum of two post graduate hospital years prior to commencing in General Practice.

The research participants were recruited following a procedure approved by the Flinders University Ethics Committee (SBREC).[4] Nine individual GP Supervisors participated and shared experiences of situations in which they interacted with patients and Registrars.

These were the events, actions and interactions when they encountered and recognized the awareness of the taken-for-granted phenomenon of tacit knowing. For the research their in-depth narratives were collected, and the subsequent scripts were analysed using a hermeneutic

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[4] The Directors of Training at the two Victorian RTO's (Regional Training Organisations) allowed the approved promotional flyer to be distributed within their organisations. Participants then made contact and expressed their interest in being involved. There was no direct recruitment.

phenomenology approach. This elicited the unique meanings that evolved both directly and indirectly from the spoken and subsequent written words. These meanings were formed into three ontological themes.

Why Hermeneutic Phenomenology?

This project began with a personally experienced phenomenon of knowing but being unable to find words to explain the nature of the knowing. The history of how it developed is shared in Chapter one. It made sense to employ Phenomenology in this research because tacit knowing is a human phenomenon.

However, this does raise a question; Could other qualitative research methods such as Thematic Analysis, Grounded Theory, Case study research or Ethnographic approaches have been appropriate? All of them study real-life settings and involve collecting qualitative data that undergoes a form of analysis. They search for patterns which can be codified and thematized. Patterns of meaning lead to codes and themes being formed and result in conclusions.[5] So why hermeneutic phenomenology?
Hermeneutic Phenomenology also undertakes these tasks, its orientation is less conceptually and theoretically driven. The sought-after meanings are not decontextualized analyses nor logical explanations. The nature of Phenomenology is ontological, which means it involves being

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[5] The literature listed below was reviewed to assist in arriving at this conclusion.

Braun, V & Clarke, V 2008 Using thematic analysis in psychology. *Qualitative Research in Psychology,* 3:2, pp. 77-101.

Braun, V & Clarke, V 2019 Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*. 11:4 pp. 589-597.

Kiger, M & Varpio, L 2020 Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher* 42:8 pp. 846-854.

Watling, C & Lingard, L 2012 Grounded theory in medical education research: AMEE Guide No. 70. *Medical Teacher* 34:10 pp. 850-861.

Cheek, C, Hays, R, Smith, J & Allen, P 2018 Improving case study research in medical education: A systematised review. *Medical Education* 52:5 pp. 480-487.

Fabregues, S & Fetters, M 2019. Fundamentals of case study research in family medicine and community health. *Family Medicine and Community Health, BMJ Journals* 7:2 pp. 1-4.

Reeves, S, Peller, J, Goldman, J & Kitto, S. Ethnography in qualitative educational research: AMEE Guide No. 80. *Medical Teacher* 35:8 pp. 1365-1379

immersed in first person, real-life events. It is not conceptual in the sense of making spectator informed observations. The meanings are sourced from their connection to stories of how the researcher and interviewees sense, perceive, think, and interact with the phenomenon occurring in their lived experience. It pays careful attention to the particulars of the events involved. These situations are then described and analysed, in the sense that the hermeneutic analysis is an unfolding and iterative process of interpreting and writing up their ontological meanings.

These are the features of Hermeneutic Phenomenology that set it apart as being the best fit for expressing the meanings of the unverbalizable phenomenon of the tacit knowing employed by GP Supervisors.

Some important features of hermeneutic phenomenology.

Three important features of Hermeneutic Phenomenology that have been influential in this thesis are shared below. Further notions are shared in the section on Phenomenology of Practice in this chapter and Appendix 12.

How not what

Phenomenology is the study of phenomena. This means what it says that objects and events that manifest themselves in original lived experiences are studied to be understood. Zahavi[6] introduces the concept of phenomenology by stating *"…phenomenology is primarily interested in the how rather than in the what of objects"* (2019 p.9).

He goes on to state that phenomenology is not interested in the composition of an object *"… but with the way in which the object shows or displays itself, i.e. in how it appears"*. Put in other words, this involves a willingness and discipline being to look at phenomena at face value, in its context and without pre-conceptions.

The origin of meanings

Van Manen offers that it is a method or grasping the meanings of phenomena that go unnoticed or are not readily understood, like tacit knowing *"In the encounter with things and events of the*

[6] Zahavi's book is an excellent primer on Phenomenology. For a brief overview of Phenomenology see Seamon in References. Kaufer and Chemero's text provides an academic overview with a focus on historical and contemporary themes. Van Manen can be regarded as required reading.

world, phenomenology directs its gaze toward the regions where meanings and understandings originate"(Van Manen 2014, p.26).

Laying open

The term Hermeneutic warrants some clarification. This refers to a method of interpretation utilised to achieve understanding. Giles (2015, p.59-60) offers the following definition.

> *… the expression hermeneutic phenomenology captures two central understandings …. Firstly, it is 'phenomenological' in the sense that the inquiry explores a particular phenomenon, ….; secondly, the inquiry is 'hermeneutic', in the sense that the inquiry seeks to lay open prior and variable understandings of things, disclosing the essence of phenomena in the process.*

This feature of openness is put to work to reveal possibilities rather than seek probabilities. In order to achieve outcomes of understanding, the focus is on questioning as much as answering and exploration not explanation.

Phenomenology in health practice research

Phenomenology is not just a philosophical undertaking. Its methods have been used in education and health research. Greenhalgh highlights the differences in medicine between humanistic approaches to logico-scientific ones (2007, p.47). The seeking of human understandings works alongside the processes of appraising evidence and engaging in clinical reasoning. She emphasises the processes which come under the general heading of qualitative methodology, watching, listening and reading. These undertakings do not compete with but complement essential evidence-based quantitative methods. Phenomenology is a research method that explores lived experiences through listening to stories, recording, reading and interpreting them. It is ideally suited to exploring the nature of human encounters between patients, doctors and their vocational trainees.

Phenomenological research has been conducted in nursing. The identified progenitor is Patricia Benner (1984). An established body of phenomenological work within nursing now exists. (Benner 1994, Chan 2010, Smythe 2010, Moules et al. 2015, Rodriguez & Smith 2018). Venturato (2015, p.497) highlights the suitability of a hermeneutic approach within the discipline of family nursing. *"There is an intuitive fit with hermeneutics and family nursing, in that family nursing is complex, nuanced, and highly interpretive, as is the research method of hermeneutics."* There is an alignment here with the discipline of General/Family Practice, as

they are both undertaken in the same complex, person-oriented, primary care settings which are not readily amenable to reductive explanations.

At the time of completion, this research seems to be the only one of its kind in the literature on tacit knowing situated in General Practice Training.

The phenomenology of practice

Guiding notions from three contemporary phenomenology researchers have been helpful in overcoming what initially seemed like an unachievable undertaking. These are Max van Manen, Patricia Benner and David Giles. All three have had careers which began in their practices. These are Education (van Manen and Giles) and Nursing (Benner). Arising from these, they have developed, articulated and published contemporary ways of undertaking phenomenological research in the real-life settings of professional practice. Many of their notions can be used to illustrate this, and therefore, a selection of these are listed in Appendix 12.

The research rigour embedded in their approaches is to maintain the discipline to continually return to the accounts of the shared lived experiences. Their guiding notions, shared from phenomenological studies of their professional practices, are not prescribed methods of analysis. This is why they are shared as guiding notions. This is an intentional way of depicting their method. Van Manen in his journal article, The Phenomenology of Practice, writes the following; *….."a phenomenology of practice aims to open up possibilities for creating formative relations between being and acting, between who we are and how we act, between thoughtfulness and tact"*(2007, p.13). This quote is particularly relevant to understanding the practice-based nature of the skills involved in complex settings like General Practice, that require highly developed situational awareness and responses. Their work has been influential is providing guidance and setting a high standard for researching professional practice.

The Phenomenological Question

Some views from van Manen and Gadamer on phenomenological questioning are worth sharing here because they show the importance of maintaining an iterative and open approach in forming questions in order to reveal meanings from the events being shared and not formed by ideas conceptualised to be about them.

> *Phenomenology is more a method of questioning than answering, realizing that insights come to us in that mode of musing, reflective questioning, and being obsessed with sources and meanings of lived meaning* (van Manen 2014, p.27).

Gadamer has the following to say about phenomenological questioning.

"The essence of the question is to open up possibilities and keep them open" (1975, p.310).

With van Manen and Gadamer's perspectives in mind, interview questions were offered to participants to open up and explore their lived experiences of being in interactions with GP Registrars, in which tacit knowing was working. This research arose from the researcher's own experience, which formed the stem of the question.

I had several experiences in my clinic when I interacted with GP Registrars and I knew what was happening and needed to be done in a consultation but couldn't fully explain this.

> Have you had experiences like this?
>
> Can you tell me about it?
>
> What was it like?
>
> Do you have any other stories like this?
>
> Is there anything else you would like to share?

The research approach adopted.

My interview approach, the formation of crafted stories and the descriptive, interpretive, reflective and writing phases have followed that set out by Giles. (Giles 2015 & 2019) Two examples of crafted stories with their descriptions and interpretations are shared in Appendix 5. A full list of all the 47 stories is in Appendix 4. The process of forming these involved reading each transcript and selecting parts that reflected a particular idea. Each one was captioned with a title directly quoted from the recorded narratives. No fixed number was pre-selected as being ideal for each interview. The determination of how many eventuated came from the nature of the notions being shared. For example, the interview with GP Supervisor 4 there were nine and GP Supervisor 6, only two were crafted. The Supervisors checked the transcripts and crafted stories, not to interpret them but to vouch for their accuracy. Giles approach was followed in then

writing a brief description of each and then reading, re-reading and writing up interpretations. It is the combination of the stories, their descriptions and interpretations that became the data of the research, which was then further interpreted into ontological themes.

Giles' approach has similarities to that of van Manen (1995, 1997, 2002, 2007, 2014, 2015, 2016). His method for obtaining life-world descriptions from the research participants is Protocol Writing (van Manen 1997, p.63-66). The process followed is shared in Table 2. Chapter 5 further develops the details of how the themes were developed in conjunction with my supervisors.

Table 2 Sequence of steps undertaken for this research

Research Development	Designing the research with an ontological question (knowing not knowledge)
	Settling on a phenomenological question that explores lived human experience
	Engaging with scholars within the Prideaux Centre and more widely to discuss the research. (See Chapter 2.)
	Maintaining regular reading of a wide range of philosophers
	Laying out extensive pre-assumptions to avoid premature closure
Data Collection and Analysis	Conducting nine research interviews. Of the nine four were face to face and five via *zoom.* All the interviews were digitally recorded and professionally transcribed. Both the face to face and zoom interviews worked well, enabling the required level of engagement and capability to listen deeply to the participants responses
	Reading and re-reading the full transcript of each interview
	Crafting stories from the transcripts – final tally 47 stories. A full list of the crafted stories is in Appendix 4. Two examples with descriptions and interpretations following Giles' approach are shared in the Appendix 5.
	Having each participant review the original transcripts and the crafted stories and sign off on their accuracy.
	Writing a description and interpretation for each story
	Presenting for the Confirmation of Candidature in Nov. 2019 and receiving feedback from Prof. J Orrell and a group of academics, with confirmation received.
	Meetings with Prof. David Giles and Dr Julie Ash on 4.12.119 & 14.1.20 to review and discuss a selection of the stories, descriptions and interpretations and identify

	emergent themes See sections below: Finding new ways with words : Gerunds and hyphens, Understanding phronesis as dispositional ways of being. How the themes were developed.
	Reviewing these and selecting 3 themes on 19th January 2020
	Further discussions in 2020 with the research supervisory team and refinement and referencing of the themes and thesis preparation.
Thesis Examination	Final thesis review presentation 27th July 2020.
	Thesis submission 31st August 2020
	External examination by two examiners
	Amendments discussed and made with input from my supervisors
	Re-submission to Principal Supervisor, College of Medicine and Public Health Co-ordinator and Dean of Graduate Research

Chapter 4 - Pre-understandings.

"We come to know our patients by living with them over time, listening to them, and sharing their confidences".

(McWhinney 2008, p.5)

Prologue: Sharing pre-understandings

Identifying pre-understandings is a preliminary step, prior to embarking upon phenomenological research. Known and taken for granted frames of reference, beliefs and prejudices occupy all human undertakings. Midgley (2004, p.3). captures this idea in the following quote:

> *The way in which we imagine the world determines what we think important in it, what we select for our attention among the welter of facts that constantly flood in upon us. Only after we have made that selection can we start to form our official, literal thoughts and descriptions. That is why we need to become aware of these symbols.*

Identifying and acknowledging these in phenomenological research is an important step, as van Manen (1997, p.47) states.

> *If we simply try to forget or ignore what we already 'know', we may find that the presuppositions persistently creep back into our reflections. It is better to make explicit our understandings, beliefs, biases, assumptions, presuppositions, and theories.*

A phenomenological approach does not begin with an intention to theorize privileged concepts, that seek to be later defended or proven by the research. The method does allow, in fact it encourages, the tabling of pre-understandings from the outset. These can be used to lay open the implicit and explicit perspectives taken. Acknowledging these historically and hermeneutically can guide but not impose pre-formed propositions for the research.

For this research, what this means is undertaking a process of being mindful in two ways. The duality is, engaging directly with the originality and authenticity of the stories, whilst being mindful that they could be understood with some of the identified pre-assumptions. In this sense the assumptions may be seen to appear in places as offering potential ways to guide and then shape interpretations of what is happening in the stories, rather than directing definitive explanations.

What follows in this chapter is the listing of a range of pre-assumptions uncovered in reviewing the available literature. In addition to their listing, the entries include detailed interpretations and the responses to them that potentially impact upon the research. These are further supported by Endnotes and Appendices.

Pre-understanding: Care is complex – so the clinical education is complex

Becoming is more than training

I have included the following entries (under this sub-heading) in the list of pre-assumptions in order to emphasise the holistic and complex nature of the undertakings of General/Family Practice. They show that being a GP is much more than employing traditional medical knowledge and skills. The follow-on idea from this position is that both the nature of the clinical work of GP Supervisors and also the supervision, teaching and mentoring that is undertaken with GP Registrars is also holistic and complex.

The interest of this research is in the tacit knowing involved in practice based clinical education. It is open to the broad range of possible notions offered by the nine Supervisors who undertook the interviews. Adopting a multi-dimensional perspective means the interest is not limited to finding only discrete entities of unspoken declarative knowledge or skill.

I need to make an additional comment, which is a pre-assumption, to reinforce the view offered above. This relates to the meaning of GP training. The word that needs clarification is 'training'. The orientation of this research is ontological, meaning that the interest is in being. Training in its literal and often in its educational settings, can often be understood as the development of specific occupational knowledge and competencies. The orientation of this work is much more about how GP Supervisors, who provide the comprehensive whole person care of their patients, can assist their Registrars to become GPs in the fullest sense of the roles as outlined below.

Caring in Primary Care

Clinical medical knowledge based upon scientific methods and empirical research is one of the foundations of modern medicine. Practice based upon valid evidence results in safe, effective, and trustworthy patient care. This knowledge is generalisable and can be documented and shared

widely. Clinical reasoning is an essential skill used to put this knowledge to work. None of this is in question here.

There is also another form of knowing which is expressed in the extended scope of providing care. It is situated and expressed within the context of caring for patients. Its utility is in dealing with the real-life issues of illness, whilst promoting and enhancing wellness. It is commonly understood and valued experientially and is better understood as a practical form of knowing, or more simply put, know-how.

Doctors use a combination of generalisable knowledge and know-how, but there is more involved in providing care in General Practice. Caring demands a patient-centred approach (Stewart et al. 1995). Having an understanding of this concept and its practice is an essential pre-understanding for this research. This involves a commitment to exploring the meanings inherent in the circumstances of interest and the deliberate sharing of feelings, thoughts, and actions with patients. This takes place within the protection of confidentiality. The processes of facilitating well-being against a backdrop of sickness and the risk of death are complex. It requires the active incorporation of patients' ideas, concerns and expectations of care within clinical encounters (Tate 2005).

The aim of this approach is to achieve the best health outcomes for patients through shared understanding and responsibility for decision making. This model of care, based upon forming and maintaining partnerships with patients, is the defining feature of General Practice. The "essence" of this care is further elaborated as a commitment to a generalist role by McWhinney (2008, p.5).

> *The essence of our discipline is an unconditional commitment to patients who have put their trust in us. We will see them for any problem they may bring to us. Without this generalist role, we cease to exist as a discipline. Our commitment is open-ended: we are still available to patients even if they are referred to specialists.*

Inside the consulting room

The embodied nature of patient care adds another dimension to these commitments and the affective, cognitive, and behavioural domains introduced above. Consultations are made up of feelings, ideas and actions constructed via bodily interactions. These are constituted by the

personal and professional acts of walking, talking, listening, responding, examining, undertaking practical procedures and much more. A lot happens in a consulting room to make sense of the uncertainty and incompleteness that pervades the provision of care. Somehow this can and does result in making the most of all the available opportunities to facilitate helping and healing.

Beginning with the sense of sound, there are voices using words and phrases, laughs, groans, coughs, sobs and sighs to name some. These are punctuated by pauses and silences. Silence frames the beginning and the conclusion of each consultation. It is a deliberate and necessary component of what happens during a medical encounter. It also lives within what happens, that cannot be translated into words. A large proportion of the communication is non-verbal and is commonly known as body language. It is important to highlight that body language, despite being silent, does create a form of interpersonal communication. It is not a static, inert backdrop to the spoken elements of a consultation.

The happenings in a consultation are also mediated through other senses. These are sights, smells, stillness, movements, and touch. This sensory information is woven into a patient's story and their medical history. It helps co-construct the perceptual and conceptual descriptions of the identified problems and possible solutions to the difficulties that patients bring into a consultation. Patient care results in a very complex system and its complete dimensions cannot be fully described outside the face to face context of the medical encounter (Henry 2010, p.293).

Beyond the consulting room

Beyond the consulting room, there are still more parameters that make up the practice of providing care, promoting health, and fostering well-being.

Within a teaching practice there is much more happening. GPs work in teams with a wide range of colleagues. This research is particularly interested in the educational interactions that take place between a Supervisor and a Registrar.

The times and spaces that these occur vary from the closed-door environment of consulting rooms to corridors, tea rooms, designated treatment areas, outside emergencies or casual community encounters, home, nursing home and hospital visits. The interactions vary according to their planned or unplanned and structured or unstructured forms.

At a more conceptual level, issues such as resource availability, ethics, political influence, and economic factors come to mind. Cultural and legal frameworks directly impact on what happens and what can be achieved. Medical care happens in both personal as well as collective settings. Population issues directly impact on the prevalence and incidence of health matters and how they are managed. Concepts of probability and predictability are used to understand and predict local, regional and larger population health presentations. In Australia, these are known and described as the Domains of General Practice by the Royal Australian College of General Practitioners (RACGP).

- Communication skills and the patient-doctor relationship
- Applied professional knowledge and skills
- Population health and the context of general practice.
- Professional and ethical role.
- Organisational and legal dimensions

Working at all these levels, with individuals, their families and their communities is what makes general/family medicine a uniquely important discipline.

Patient and Person-centred care

All this means that a large range of multi-dimensional knowledge, skills and attitudes are needed to provide *"person centred, continuing, comprehensive and coordinated whole person health care to individuals and families in their community"*(RACGP 2019, p.8).

There is a distinction between patient and person-centred care which demands some reflection. In classical medical language, it is a patient who has a problem (or multiple problems) and presents for health care. Traditionally, it is the medical history that allows a patient and a doctor to work together and form diagnoses and management plans. A history limited to explicit medical issues and using medical language alone, cannot fulfil the holistic constituents of the RACGP definition.

Patients and doctors are both persons. Specific biographical features such as gender, age, language, ethnicity, education, health status, finances, family, occupation etc. make everybody unique. These are part of a holistic appreciation which also includes religion, beliefs, values, and

multiple other meanings that matter to all of us. Being person-centred means GPs can provide opportunities for their patients to safely give expression to a range of unsettling human emotions such as worry, fear, guilt, shame, loss, disappointment, sadness and anger. In response the skilful commitments that GP provide, can help to offset suffering.

The holistic and generalist nature of care has been described spatially, meaning where and how it happens in the particular settings in which GPs and patients/persons find themselves and build their relationships. Equally important is an understanding of time. Time is needed to develop the mutual trust which spans the personal and family life cycles of each other's lives. The implication of this is that understandings about persons and their whole lives and the undertakings of helping and healing are nested within the whole complex process of providing comprehensive and continuing Primary Care (Starfield 2011).

Explicit and tacit dimensions

The descriptions above have been shared to highlight that GP Supervisors commit themselves to adopt complex ways of being, enacted through their knowing and working as clinicians and clinical educators in real life encounters. The obligations of providing clinical care and educational guidance are constituted by a broad range of personal and professional attributes, knowledge, and know-how. Many of these are explicit as they are understood and able to be explained with words in differing bodily, sensory, perceptual, conceptual, enacted, temporal and spatial contexts. But there is another dimension to this holistic work that is not readily semantically expressed, which is known as tacit. The nature and potential of this tacit knowing is the interest of this research.

Pre-understanding: Learning how to know

An important assumption in this research is the perspective that human knowing is existential. Validated knowledge is essential, but learning is not limited to a transaction of facts. It does not happen solely through an intellectual process of pre-configured factual objects being passively represented to human subjects. The meaning of existential is that knowing is a holistic undertaking and is formed relationally, by affective, cognitive, embodied and enactive engagements. (Endnote[i] expands upon and further references this idea by sharing insights from

4E Cognition) These interact and transform each other through the intra and interpersonal as well as the social processes of learning and ways of being-in-the-world.

Further pre-understandings are that human knowing is constituted historically, perceptually, imaginatively and interpretively. The processes involved are complex and invariably involve human dialogue and learning through living. The nature of the learning that is proposed here begins with a knowledge base but is not limited to an accumulation of only mind-based, reducible problem-solving procedures or entities of comprehension. It is much more about learning how to know. The main pre-understanding that distils these ideas can be summarised as follows. Human beings achieve understandings through interpretations which form into meanings that matter. This happens skilfully, by learning how to know through experience.[7]

Pre-understanding: Stories and statistics

An important paradigm supports the practice of medicine. This has been previously mentioned. It is the integration of humanistic and scientific concerns into the responsibilities and executed skills of being a doctor. This interdependence is variously named, often as a couplet. Some examples include; stories and statistics, pathic and gnostic (Endnote[ii]), art and science, life and mind or the integration of the illness experience and the disease. Important academic work has been undertaken to understand this relationship, with Montgomery and Greenhalgh being prominent contributors (Montgomery 2006, Greenhalgh 1999, 2002, Greenhalgh & Wieringa 2011).

Patients, who are persons, in a primary care setting offer their personal stories of health and ill-health to their doctors. A traditional clinical reasoning approach, as outlined by Bowen (2007), offers a sequential path of transforming patient accounts through dialogue into data. This is then crafted into problems defined with medical terminology. Then, following deductive, inductive, and abductive processes, they are further processed into diagnoses and then onto their

[7] The sources for this statement are diverse. Phenomenology and Pragmatism have been influential along with 20th Century educational theory, especially from Dewey. Bacon's text on Pragmatism {see Bacon 2012 in References} was a useful foundation. The ideas condensed here are further explored in the discussions on Knowledge and Knowing, later in this section. A reference list and endnotes are documented. 4E cognition, see Endnote[i] has also been a formative influence. Additional referencing is found in Appendices 1, 2 & 3

management. This method is essential to the validity, reliability and reproducibility that constitutes the applied science of medical practice.

The phenomenological exploration involved in this research will adopt an inclusive and pluralist approach, to openly explore both humanistic and scientific undertakings, when tacit knowing is at work. The interdependency rather than the incommensurability of the art and science of Primary Care is a crucial assumption of this research, which will work to understand the wholeness of the experiences being explored.

Pre-understanding: It is not just intuition

The Problems of Contemporary Philosophy is a book by Livingston and Cutrofello. The heading of the first chapter is *"Phenomenology and Epistemology, How do we know what we know?* The concept of intuition is explored with another question; *What do we intuitively know?* This question is addressed by reviewing centuries of philosophical thought. Ideas from Aristotle, through to Descartes, Kant, Husserl, Heidegger and onto other twentieth century figures are compared, resulting in multiple interpretations. They offer the following as a summarising statement; *"Determining the nature and scope of our intuitive knowledge is a longstanding problem in philosophy"* (Livingston and Cutrofello 2015, p.6).

The intent behind sharing this reference is because intuition is often employed as a direct synonym for tacit knowing and there are some pitfalls here. Firstly, this is to avoid determining that the concept of intuition has a uniform philosophical meaning, because it doesn't. Secondly, Phenomenology attempts to start with a theory-neutral approach. This means for this research, that the collection of terms which are often used to describe tacit knowing such as intuition, gut feelings, instinct and art cannot be allowed to pre-define it.

A warning from Caputo, to avoid starting an inquiry with pre-formed concepts, highlights the danger of a representational approach.

> *The wisdom of hermeneutics is to have the good sense not to think that reality is a 'case' of an abstraction, that the perceptual is a lesser species than the conceptual, that the real is a fall from the ideal, or that 'practice' is an imperfect version of the theoretical" (*Caputo 2015, p.x*).*

Pre- understanding: Phronesis

The entry point for this discussion on phronesis is with Gadamer, whose work has previously been mentioned as having an influence on this research. The Stanford Encyclopedia of Philosophy is a respected scholastic resource. In covering the life and work of Hans Georg Gadamer the author (Malpas 2018) has written a section on Dialogue and Phronesis. In this he is able to share the important connection between Gadamer's life-long interest in classical Greek philosophy, especially Plato and Aristotle, his promulgation of the central role of dialogue in forming human understanding and the notion of phronesis.

Phronesis is a term and a key idea attributed to Aristotle and Malpas shares that he writes about this in Book VI of *Nichomachean Ethics*. In order to get a sense of what phronesis means it needs to be contrasted to episteme and techne. These are the two other main terms he used to categorize forms of knowledge. Episteme, which is used to describe declarative and abstract knowledge is known as epistemology. Similarly, techne, the pragmatic knowledge and skill related to engaging in craftsmanship is known as technology. So where and how does phronesis fit with its two siblings?

What is phronesis? A modern shorthand is that it is practical wisdom. It has a general meaning of being the wise expertise that can be appreciated by human actions, especially those of professional practitioners. The temptation (as discussed above in the section on intuition and later on in the discussion about naming) is to settle on using the term phronesis, as a direct synonym for the form of practical wisdom, which is ineffable, tacit knowledge. But this is not the intent here. The aim is to concurrently raise relevant questions and lay out pre-assumptions that may influence but not prejudice this research. This brings us back to Gadamer. In his essay Autobiographical Reflections (2007, p.12) describes his first seminar as a student of Heidegger when he learned about phronesis.

> *The thing that was most important for me, however, I learned from Heidegger. And this came in the first seminar in which I participated in 1923, when Heidegger was still in Freiburg. It was a seminar on the sixth book of the Nichomachean Ethics. At that time phronesis- the virtue of 'practical reason', that allo eidos gnoseos, that is, that 'other form of cognition'- was for me truly a magical word.*

Herein lies the challenge. This *"other form of cognition"*, phronesis, does indeed seem magical and consequently unsayable, especially if its nature can't be reduced into the language of epistemology and technology.

Fast forward into the 21st Century and we find there are scholars who have re-invigorated an interest in phronesis, in the field of professional knowledge and expertise. Kinsella and Pitman have in collaboration with academic colleagues written on this topic (Kinsella & Pitman 2012, p.2). In their introductory chapter their summary, which follows, is useful.

> *Phronesis, on the other hand, is an intellectual virtue that implies ethics. It involves deliberation that is based on values, concerned with practical judgement and informed by reflection. It is pragmatic, variable, context-dependant, and oriented toward action.*

The intent here is not to directly align and define tacit knowing with phronesis. Rather it is to suggest that there are similarities here and that the nature of tacit knowing may be understood as having several of the characteristics suggested above. Additionally, the sphere within which, values, practical judgement, reflection, and action take place is in lived experience and that these are enacted through human relationships. It then follows that the way to explore, comprehend and write about these is within an ontological and phenomenological paradigm using narrative as the data for interpretation.

Pre-understanding: Is it possible to share meanings without any assumptions?

> *Suppose we were able to share meanings freely without a compulsive urge to impose our view or conform to those of others and without distortion and self-deception. Would this not constitute a real revolution in culture?* (Edwards 1991, p.185).

The above frequently cited quote, which has been widely misattributed to have come from David Bohm, was actually written by his co-author and also the photographer Mark Edwards, in their joint work called *Changing Consciousness* (Bohm & Edwards 1991). It has been selected as it introduces the idea that pre-assumptions in human communication, commonly shape but may also hinder the open sharing of meanings.

David Bohm in his book *On Dialogue* contrasts the difference between discussion and dialogue and the importance of being aware of situations in which opinion and prejudice play a role in human communication. (Bohm 1996). In Bohm's view, discussion invokes the defence of

different points of view. Dialogue is different to discussion in how it takes place and shapes its outcomes. Bohm captures this idea as follows "*Dialogue is really aimed at going into the whole thought process and changing the way the thought process occurs collectively*" (p.10). To do this he lays out the following steps to be able to engage in proper dialogue; suspending judgement, collectively exploring a range of different perspectives, being aware of the consequences of the exchange and bringing this together to share meanings (p.22-32).

Bohm's ideas about dialogue share some commonality with Hermeneutic Phenomenology. In particular the importance of identifying pre-assumptions. However, exploring this has revealed that there may be a potential trap. Whilst it is important to be aware of pre-assumptions and to avoid pretending that they are not, or should not be there, it is equally important that they do not need to be fully mandated beforehand. A pre-assumption may also need to include the explicit proposition that it is not absolutely necessary to have all of them fully laid out in advance. Is it possible at times to embark upon engaging empathically with other people, without having or needing any assumptions? If they appear, perhaps then they can be apprehended and interpreted along the way?

The work of phenomenology is to help us encounter and then appreciate things as they are, not to be trapped into thinking what they should be. Turner also raises concern here by referencing Jerome Bruner.

> *Jerome Bruner commented that 'when things are as they should be, the narratives of Folk Psychology are unnecessary' (Bruner 1990:40). The same point applies to the term "assumptions". They repair communication and facilitate understanding. They are a crutch that gets one to the point of empathic understanding.*
>
> *Bruner's point turns the problem of assumptions on its head: The baseline is not the individual knower with a problem of grounding experience, which he or she discovers can only be done on the basis of assumptions and communicated only when there are shared assumptions. For Bruner the problem is communicating and understanding others.*

He goes on to say that we can connect with each other without having to have *"conditions of understanding"* and *"conscious or introspectable reasoning of the sort analogized as the making of assumptions"* (Turner 2014, p.170).

These ideas reflect the advice offered by Van Manen, who suggests that a phenomenological enquiry, whilst it can start with an awareness of what is already known, this does not equate into

a mandate to be completely mapped out. Hermeneutic Phenomenology involves perceptive, contemplative and interpretive processes and must have an openness to what is being revealed. He promotes the idea that this needs to take place in a state of questioning and wonder (van Manen 2014, p. 376).

Returning to Mark Edward's question, it leads to another one. Can we participate in our own personal revolutions when we directly share meanings with each other? This is where the role of language comes in and will now be further explored in the risks and benefits of naming.

Pre-understanding: Naming and knowing

This section is about naming and its relationship with knowing. The pre-assumption is that they are not synonymous. Names can both open up or constrain the meanings of phenomena.

> *And in his strange story Tlon, Uqbar, Orbis Tertius, Jorge Luis Borges suggests that nouns are about space and verbs about time which implies that a single word will never do. Yet in medicine, much of the time, we try to make sense of the world with single words, albeit long ones. However, if we accept Borges, we must arrive at the conclusion that medical diagnoses are only about space and not about time, which is interesting, particularly as we try to link diagnosis to prognosis in a dangerously fatalistic way. Words used in diagnosis, as a kind of biomedical revelation are fixed in time; words used in narrative, as a revelation of the human condition, stretch across time* (Heath 2011, p. 585).

The above quote from Iona Heath, comes from the published version of her 2011 Harveian Oration, when she was president of the Royal College of General Practitioners. Her insight is that narrative is the medium of human meaning. Her view relating to the nature of nouns, which lend themselves to being used as names, is also highlighted by McWhinney and Freeman (2008, p.11) with a warning,*" We must not confuse things with the names we call them by"*.

Richard Feynman's widely circulated quote further reinforces the concern (Feynman 1986, p.14).

> *You can know the name of a bird in all the languages of the world, but when you're finished, you'll know absolutely nothing whatever about the bird…So let's look at the bird and see what it's doing—that's what counts. I learned very early the difference between knowing the name of something and knowing something.*

The quotes from Heath, McWhinney and Feynman offer more than an intriguing idea. They point to the risks in nominalisation if it is employed simplistically. These seem to arise from its potential for fixity, misappropriation, and un-reflective acceptance. Gadamer shared similar

concerns. Moules and her colleagues (Moules 2015, p.40) introduce a direct quote from Gadamer prefaced by the following. *"Movement is a vital characteristic for Gadamer, which leads to a caution against too great an insistence upon conceptual or terminological fixity. Even in philosophy:"* (now quoting Gadamer- as follows)

> *The words that carry its concepts…are not firm markers and signals through which something can be univocally designated, as in the systems of symbols in mathematics and logic and their applications…They originate in the communicative movement of human interpretation of the world, a movement that takes place in language* (Gadamer 2007, p.66).

Moules continues this theme by exploring Gadamer's idea that understanding works through the structure of conversation. Gadamer's view of conversation is more akin that of dialogue as previously mentioned by referencing David Bohm. Another direct quote from Moules (2015, p.41) and her colleagues is *"One of the characteristics of genuine conversation is that both participants find themselves subordinated to the flow of the conversation itself, so that it is the subject matter that leads"*.

The importance here is in movement. The idea is mentioned in the quotes as being essential in the undertakings of interpretation, conversation, and language. Movement is a general description under which the more specific act of leading can be understood. The leading in the work of hermeneutics, as offered here, is not by an a priori theory, it is not by the researcher or even by the subjects involved in the research. *It is the subject matter that leads*. Hermeneutic phenomenology requires the discipline of responding to things as they <u>are</u>, not as we would wish to represent them. This is what is meant by allowing the phenomenon of interest to lead the process to reveal itself. However, being unable to clearly identify and communicate about the objects, circumstances and events of our lives is also unacceptable. The solution here is that ideas can also be expressed with verbs in addition to nouns. In contrast to nouns, verbs evoke movement and help us navigate the time zones of our experience. This is consistent with a phenomenological approach. Verbs can assist us in exploring <u>how</u> we engage in acts of <u>knowing</u>, whereas nouns are more likely to explain <u>what</u> facts of <u>knowledge</u> we have obtained. The roles are complementary but different.

A vocabulary based upon verbs, identified in the search for literature was documented and is offered from diverse scholarly sources in Appendix 3. Their selection was based on their potential relevance in understanding and interpreting the GP Supervisors stories. A final quote from the eminent academic philosopher John Caputo, starkly captures the difference between

settling on generalized categories of things in contrast to searching for their meaning and mattering. *"So, in hermeneutics, we say things do not have an essence, which would spell death to them, but an ongoing, living history"* (Caputo 2018, p.100).

Pre-understanding: The unspoken

There is a paradox about the unspoken. This is the counter intuitive notion that understanding can be shared through what is not said. Watzlawick, Weakland and Fisch (1974 & 2011) discuss this in their well cited book on change. The key premise here begins with the following extract *"a large part of communication takes place tacitly through the absence of communication"………. …." Meaning is actually communicated through that which is not communicated. Or, compare what Lao-Tzu has to say on the value of empty space"* (p.42)*:*

Their reference for this is an early Chinese philosopher Lao-Tzu. It is re-stated here.

> *Thirty spokes share the wheel's hub; it is the centre hole that makes it useful. Shape clay into a vessel; it is the space within that makes it useful. Cut doors and windows for a room; it is the holes that make it useful. Therefore, profit comes from what is there; usefulness from what is not there* (Lao-Tzu 1972).

In all human dialogue there are spaces between spoken words. Perceiving and appreciating these involves more than recognising there is a pause in the auditory interchange. The reference by Watzlawick, Weakland and Fisch and the quote from Lao-Tzu posit that these are not vacuous. Sensate, sentient and somatic communication is still underway despite the linguistic silence.

This section is included here to highlight that academic work such as this, can acknowledge but not offer a holistic portrayal of the presence of silence. In particular, the dialogue in this project between the researcher and the participants was constituted by such silences. Early in the interview process it became clear that vigilance to being aware of them was needed. These cannot be fully appreciated by a reading of the transcripts and subsequent crafted stories, descriptions and interpretations. However, the impact and potential meaning of silences, pauses, and hesitations can be noticed and noted. This research is exploring the nature of tacit knowing and the starting point is it's taken for granted nature which seems to make it unheard, invisible as well as ineffable. So, there is a link to be made here between the unspoken, the unseen and the unforeseen.

Tom Butler-Bowden's distillation of fifty classic works of philosophy begins with an idea which is relevant here. He references *The Black Swan* by Nassim Nicholas Taleb and offers the following; *"it is what we do not know that matters, because it is always the unforeseen that changes our world, both personal and public"* (Butler-Brown 2017, p.1).

Pre-understanding: Knowledge and knowing: Tacit and (not or) explicit

What happens clinically and educationally in the daily life of a GP Supervisor?

Much is known and is explicit, so that it can be shared as knowledge. The phenomenon to be researched is different. It is a form of knowing that is thought to be ineffable. A starting point could be to describe this as being sensed, felt, perceived, understood or acted upon by GP Supervisors, without the need for explicit linguistic communication. It is characterised with the adjective tacit. The person who is recognised as promoting the concept and use of the term tacit is Michael Polanyi. (Polanyi 1958, 1959 & 1966) (see Appendix 2 for an overview of his work)

Donald Schon reinforced the view that our ability to know, which he describes as "*knowledge-able"* is inherent in what we are able to do in our lives.

> *When we go about the spontaneous, intuitive performance of the actions of everyday life, we show ourselves to be knowledge-able in a special way. Often we cannot say what it is that we know. When we try to describe it we find ourselves at a loss, or we produce descriptions that are obviously inappropriate. Our knowing is ordinarily tacit, implicit in our patterns of action and in our feel for the stuff with which we are dealing. It seems right to say that our knowing is in our action* (Schon 1983, p.49).

But knowledge is usually understood in a common-sense way as an entity of cognition. The orthodox concept is that ideas are intentionally formulated by an intellectual process into factual information, which is then transmitted linguistically between people and places. This linear, linguistic means to informational ends activity, is often conceptualised as a conduit metaphor (Reddy 1979, p.284-310). However, in reality this straightforward notion is anything but. Much that is known by people in every-day life is more complex and cannot be fully contained and controlled. Human knowing doesn't result from a linear input-output transmission of inert facts. This is especially true if it is tacit. If the conduit of language is absent because the form of knowing can't be linguistically shared, we run into the problem that this research is attempting to address. How could it be possible to understand and share this non-explicit form of knowing? A scholastic definition of tacit knowledge does not appear to have been achieved in agreed upon

philosophical terms (Yu 2013, p.273). Turner (2014, p.1) summarises this at the very beginning of his book and then moves on to propose a way forward.

> *The tacit, as I will treat it here, encompasses a poorly bounded domain that appears repeatedly in the history of philosophy and social and political thought, under different names with different emphases and different associations*.

He goes on to list the various terms a range of philosophers and sociologists have used. (Listing; Aristotle, McDowell, Searle, Hume, Bourdieu, Weber, Polanyi, Dilthey and Wittgenstein) He then references Polanyi and Wittgenstein in re-stating their positions that knowledge and language is based on tacit knowledge and conventions.

> *Chains of justification do indeed end in something like unspoken mutual understandings. The problem is to make sense of what these understandings are, or what they themselves rest on, and what produces them* (p.1).
>
> *If the problem is to make sense of what these understandings are, or what they rest themselves on, there are some obvious constraints on the solution. These are social facts. They vary from society to society and setting to setting. They underlie the differences between political orders and the possibility of constructing political orders. In this theoretical context, 'understandings' is an awkward analogy: There is nothing like a contract or agreement. Nor does the term 'understandings' capture the whole of the relevant domain. Understanding shades into skills, skills of interacting with others* (p.1-2).

Turner's view of how to find *"understandings"* of the *"poorly bounded domain"* of matters felt to be tacit, is to turn to an exploration of the skills involved when people interact with each other, to *"capture the whole of the relevant domain"*. He also highlights the dangers of seeking and accepting non-explanatory shortcuts of the tacit, presented in metaphors, analogies and descriptions.

The risks Turner warns of provide support for the direction this research has taken. This is to engage in a phenomenological process of describing and interpreting lived experiences. Specifically, these are the events and acts that take place within clinical education interactions between GP Supervisors and GP Registrars. By taking a real-life perspective, multiple dimensions of knowledge and knowing may be explored. However, the main interest is not to achieve an epistemological definition of tacit <u>knowledge</u>, but to learn more about the skilful nature of tacit <u>knowing</u> in these encounters.

The twentieth century heralded new ideas about education. Lev Vygotsky, (Vygotsky 2012) Jerome Bruner, (Bruner 1966,1990,1996) John Dewey, (Dewey 1910,1929,1929,1938) Carl Rogers, (1969) Donald Schon, (Schon 1983) Jack Mezirow (Mezirow 1991) and David Kolb (Kolb 2014) to name some amongst others, recast the concepts of knowledge, learning and education. Their ideas, which now form the foundation of modern education, highlight the centrality of human experience, how it is transformed into meaning and the active participation and ownership of learners in being able to reflect, in the acts of learning.

Historically, prior to these innovative ideas, the delivery of public education in North America and Western Europe in the latter part of the 19th century was based upon a Prussian military model (Ridley 2015, p. 175-176). Under the Prussian model schools were designed to emulate the uniform order of military processes. Education planned and delivered by the state became a regimented, nation building endeavour. Uniformity and discipline framed the delivery of repetitive factual knowledge to an obedient audience. The military imperative of following orders didn't need much change to become a requirement of docility in the classroom to unquestionably accept the teachers' instructions.

Conceptually, a paradigm shift from a dominant focus on the content of knowledge to the context of knowing, characterises the transition. This involves a move away from understanding learning as instructional transactions of information, towards educational interactions of meaning.

The change in the processes of learning are from assembling fixed facts of knowledge to engaging in continuing acts of knowing. The latter constituting the practices involved in learning how to learn. (This transformation is also evident in medical education as shared in Chapter 2, in the section called 'Situating the thesis in the medical education literature')

Delaney (2005, p.231) offers a precis of Dewey's view as follows.

> *The fundamental aim of education for him is not to convey information but to develop critical methods of thought. Education is future oriented and the future is uncertain; hence, it is paramount to develop those habits of mind that enable us adequately to assess new situations and to formulate strategies for dealing with the problematic dimensions of them.*

Sterelny (2014, p.11) highlights that human beings have co-evolved and adapted with their environments by collectively developing the skills of cooperation, coordination, and communication. These work together to perceive, comprehend and utilize opportunities and

manage the threats of available and imagined experience. This evolutionary perspective of learning is congruent with Dewey's philosophy.

Dewey also highlighted that not all experience can result in learning. He emphasised the importance of the continuity of past, present and future experience, in the ongoing development of learning habits. A particular warning was that some experience can be harmful, especially if it closes off openness to future engagement. *"Any experience is miseducative that has the effect of arresting or distorting the growth of further experience"* (Dewey 1938, kindle location 166).

Zappavigna, (2014, p.2) by referring to Polanyi, also develops this epistemic transition with another perspective on the difference between knowledge and knowing.

> *While Polanyi may have introduced tacit knowledge into scholarly discourse, tacit knowing was his preferred term for the act of 'tacit integration' that his theory developed to explain the experience of knowing something. This conceptual position, casting knowing as a process rather than an object, (knowledge) is in accord with the movement in disciplines such as semiotics and linguistics away from a constituency-based view of meaning, towards a view of meaning as 'in the making' as we construe our experience of the world*

These references highlight that the difference between knowledge and knowing is not just semantic. It contrasts the difference between a static view of knowledge as an entity based on facts and a process view of knowing as an activity formed with human meaning. Philosophically the former is regarded as ontic and the latter, ontological. The shift from knowledge to knowing is enacted by utilizing verbs and not nouns. This can be interpreted within Michael Polanyi's famous maxim from The Tacit Dimension (1966, p.4).

"We can know more than we can tell".

This eight-word phrase invites multiple meanings. The quote's focus is not on knowledge as an entity, described with a noun. It contains two verbs, *"know"* and *"tell"*. This is offered as an observation, as their presence can be interpreted as signifying Polanyi's emphasis on knowing as something people do.

By beginning with the first-person plural *"we"*, he introduces plurality and implies that the setting for his idea is social. The word *"can"* denotes possibility, rather than a fixed description. The verb *"know"* is not elaborated and invites broader synonyms, such as understand. Polanyi's coupling of "*can"* and "*know"* implies the possibility of learning. The use of the simple term *"tell"* can also be interpreted as being open ended.Polanyi does not define that telling must be

with specific words. The coupling of *"can"* and *"tell"* has the implication that non-linguistic expression may be achievable. This phrase deftly provides a succinct way of describing tacit knowing, which has an open experiential form. Polanyi has not offered a definition of tacit knowledge. The ideas expressed here by Dewey, Sterelny, Zappavigna and Polanyi represent a small sample of perspectives that reinforce a key concept; that human knowledge is derived from experience and constituted with the actions of knowing within people.

So how do we understand knowing?

The key notions about human knowing that are offered here are it is dynamic, not fixed and existential, not abstract. Knowing involves learning through questioning which seeks opportunities, possibilities, sometimes answers and then onto more questioning. It is best understood continuously, as a living phenomenon, both intra and interpersonally. The first-person singular perspective is, that this happens within a person, within the mind and body of the knower, who is learning how to know in order to achieve understandings. The first-person plural viewpoint is a cultural and social process through which knowing helps to guide continuous inter-subjective and environmental interactions. The important position to adopt here is that the knower participates dialogically in collective settings, in contrast to the more intellectual notion of being a dissociated spectator of them.

The knowing includes forming and importantly, sharing meanings, about what is already known and what needs to be newly known, to deal with the familiar and the unforeseen problems of living. The historicity of knowing in this concept is dynamic, both retaining some, but not all, previously held ideas and re-shaping them for current and onto future needs. However, being able to know something also involves using knowledge in a more traditional cognitive form such as information. Retrieving what is already known from memory and forming new knowledge, which can then be stored in memory for future use, are essential tasks.

So, this leads to an important proposition; that the facts of knowledge and the acts of knowing can be understood as co-existing and co-constituting each other. An ontological commitment, which this research adopts, has an inclusive ability, to include both. The deliberate choice of a phenomenological research approach creates an inclusive method to comprehend lived experience by the sharing of real-world stories. Describing experiences and interpreting narratives opens the possibility of forming deeper understandings about the actual nature of knowledge and knowing, both explicit and tacit, without needing to posit rigid contradictory

frameworks for them. It is the tacit forms of knowing that are of special interest here. These are not accessed within the confines of knowledge characterized by direct linguistic expression. Therefore, it is hoped that the phenomenological approach will overcome their elusive status and reveal more of their essential meaning arising from life-world experiences.

Pre-understanding: Knowledge and knowing: Subjective and (not or) Objective

The distinction between knowing and knowledge, raises the question of how to reconcile the notions of objectivity and subjectivity in this research, which involves human undertakings. What follows is a proposition that adopting an ontological approach can dissolve the unhelpful subjective/objective dichotomy and lead to a greater understanding of the tacit knowing that GP Supervisors employ in their supervisory and educational interactions with their GP Registrars.

Hilary Putnam (1926-2016) and Mary Midgley (1919- 2016) were well known philosophers working in the latter part of the twentieth century, in the USA and England respectively. Their philosophical work is a good place to start looking into this issue. Putnam's *The Collapse of the Fact/Value Dichotomy* (Putnam 2002) rigorously appraises the unacceptability of the separateness and the damaging consequences that flow from an 'either-or' conceptual setup of this nature. The collapse as he presents it, is welcome, as it creates opportunities for more useful ways of making sense of our engagements in the world. In an earlier paper he cuts down the idea of a dominant intra-mental viewpoint in a disarmingly American vernacular way.

"Cut the pie any way you like, "meanings" just ain't in the head !" (Putnam 1979, p.227).

Midgley's *Science and Poetry* (Midgley 2001, p.142) brilliantly criticizes the monopolistic version of natural science that assumes atomism and materialism can provide answers for all of life's issues. She argues that imposing a wholly reductionist view of the world is nonsensical. Her legendary way with words is worth sharing with a direct quote.

> *Toothache is as real as teeth or electrons and debt is as real as the house that was bought with it. Everyday causality runs constantly and unhesitatingly across these borderlines all the time. The one world contains, without anomaly, all these kinds of entity – electrons and elections, apples and colours, toothaches and money and dreams, because it can be legitimately be analysed in all these different ways. The various explanations that we need therefore involve, quite democratically, all the various kinds of thought that are needed to deal with them.*

But it does seem, despite the work of many past and contemporary philosophers, (Endnote[viii]) that life-world problems and the personal and social perspectives taken to solve them are often set up and remain in binary opposition. They are often reified into tenaciously held, hierarchical frames of reference such as objective/subjective, fact/value, theory/practice, abstract/concrete and evidence/experience to name a few.

Hubert Dreyfus and Charles Taylor (Endnote ix) point back to Descartes and posit that much of contemporary epistemology is still pervaded by a Cartesian inner-thought and outer-reality divide (Dreyfus & Taylor 2015, p.4). So, this still seems to be a relevant philosophical problem. It is one that cannot be avoided in this discussion because these binary frameworks could influence how the findings of this research might be appreciated and interpreted. Having shared an introduction to the rationale for including this in the proposal, the subjective/objective issue will be further examined.

Knowing executed by persons and groups of persons is constituted by both tacit and explicit, as well as objective and subjective dimensions. It is easy to take a conceptual shortcut to align explicit with objective and tacit with subjective knowledge. This is understandable, but a mistake. People may hold and share explicit knowledge and proselytise about it as being a fact. This may be constituted by beliefs that are mostly subjectively held. Conversely, some tacitly held knowledge, that can't be shared with words, can be appraised as being objective. Support for this idea comes from understanding children. Alison Gopnik is a contemporary American child psychologist (Gopnik 2009, p.34-39). Her work provides evidence that toddlers can demonstrate, but only partly express in words, causal connections of their experiences that reflect recognized objective scientific theories.

The intent here is not to create new dichotomies nor to initiate an analysis of the similarities and differences between, tacit, explicit, subjective, and objective forms of knowledge. Rather, it is to highlight the risk of adopting prejudiced assumptions about their nature, and to avoid setting or falling into binary, 'either-or' epistemological traps. The practical purpose is to support the contention that an ontological approach can avoid these risks and initiate discovery of all these gnostic dimensions, by exploring what actually happens in lived experience.

The following discussion explains why an ontological view of knowing, used in this research to explore tacit knowing, does not exclude the exploration of all the dimensions of knowledge and knowing, as experienced in life-world settings. The dynamic and relational nature of the events, experiences and skills used in achieving understandings and learning how to know, can capture all of these. This concept of learning results in grasping broader meanings, than employing a doctrine of pursuing autonomous, abstract knowledge as a goal.

In medicine, the idea of dividing patient care into oppositional systems such as body and mind, or content and process (often simply stated as science and art) is not only unhelpful, it is unrealistic and harmful. The validity of medical knowledge is not achieved without interpretation, judgement and decision making arising from human involvement. (Engebretson 2015) The evidence base of medicine provides an essential foundation of knowledge upon which practitioners rely. In practice, knowledge that is clinically useful must be executed in human interactions between practitioners and patients.

An accepted heuristic based upon ideas originally conceived by Sackett and his colleagues (Sackett et al 1996) is the EBM Triad (EBM - Evidence Based Medicine). The three components are; best available evidence, clinical experience and patient values. The two adjectives that qualify the word evidence, 'best' and 'available' are important here. 'Best' emphasises the importance of the fit with the actual situation, and the word "available' means that some evidence may not yet be available, or even possible to obtain. The inclusion of experience in the Triad highlights the involvement of practitioners needing to reflect upon and utilise their experiential knowing. Finally, of equal importance is the explicit engagement of the patient and their values in the whole health and healing process. Each component of the Triad is essential. Clinical encounters employing this as a guide allow knowledge and knowing to be interpreted and integrated into consultations. This is in contrast to a less relationally based approach, such as simply applying evidence to human circumstances.

The importance of scientific research, critical appraisal, quantitative and qualitative interpretation and the well-established guidelines for appraising these essential processes is not at all in question here. The main point being made is that the latter are nested within the practice of medicine, its human undertakings and contexts. They cannot in themselves be deemed to be the sole arbiters of validity. It is not useful to only conceive and judge human knowledge as a static impersonal entity. Its value in lived experience sits within its history, the interest it generates and

how it works. Its validity is intimately related to its facts and values, coupled to its acceptability and utility.

These ideas also have a home in the work on the evolution of communication undertaken by Michael Tomasello with great apes and children. (Tomasello is a contemporary psychologist and linguist working at the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany) His research adds to ideas previously introduced, from Sterelny's work. They also support Dewey's Darwinian perspective that learning has a primary function of configuring our undertakings for future worldly engagement. A key feature of cognition, from Tomasello's evolutionary standpoint, arises from its adaptive function in meeting challenges to thriving and surviving. This is why he proposes that it is difficult to fully comprehend the nature of human knowing, when it is removed from its evolutionary history as well as the social contexts and environmental contingencies within which it actually works. The clever way in which he discusses this comes from combining a summary of his views on the evolutionary origin of cognition with a useful quote from Wittgenstein.

> *In any case, no matter the precise number of steps, our account presupposes that to understand uniquely human thinking we must situate it in its evolutionary context. Wittgenstein (1955, no.132) says about language that 'the confusions which occupy us arise when language is like an engine idling, not when it is doing its work.' It seems to us that many of the perplexities of human thinking pointed out by philosophers arise precisely when we attempt to understand it in the abstract, outside of its functioning in solving adaptive problems. It is natural to do this in the contemporary world because so much contemporary thinking is, in some sense, idling.*
> *But uniquely human thinking was almost certainly selected evolutionarily for its role in organizing and regulating adaptive actions, and so to understand it fully we must identify the relevant problem* (Tomasello 2014, p.151).

This position can be further supported by reflecting about science, especially how the work of scientists is undertaken. Science is a discipline that seeks to convey objective truths about the world. Its method however is not independent of its own history or people. A selection of six academic references, that offer perspectives about science and support this notion are now shared.

Jerome Ravetz is a contemporary philosopher of science based at Oxford University and in 1996 (Ravetz 1996, p.75)) offered an idea, which was novel for its time, that the work of Scientists could be regarded as craft.

> *Yet without an appreciation of the craft character of scientific work there is no possibility of resolving the paradox of the radical difference between the subjective, intensely personal activity of creative science and the objective, impersonal knowledge which results from it.*

Peter Godfrey-Smith another contemporary philosopher of science, captures a key concept about the collective nature of science in the following quote, *"Almost every move that a scientist makes depends on elaborate networks of cooperation and trust* " (Godfrey-Smith 2003, p.12). Furthermore, scientists reveal their achievements through the ongoing use of questioning and interpretive methods that continually prove and refute their propositions. At times the collective assumptions and taken for granted frames of references of science are abruptly revised and replaced. This usually happens when novel findings or ideas cannot be subsumed into the prevailing theories. The resultant discordance can then trigger a dramatic and widespread reappraisal, which at times is revolutionary. This now accepted phenomenon is known as a paradigm shift and was first proposed by Kuhn (Kuhn 1962). It adds to the validity of accepting that there are historical and social constituents within the undertakings of science.

Mitchell who is a complexity scientist at the Santa Fe Institute in the U.S.A. (Mitchell 2009, p.295) highlights the role of human scepticism and debate in the interplay between facts and theory.

> *The more established the theory or principles, the more sceptical you have to be of any contradicting facts, and conversely the more convincing the contradicting facts are, the more sceptical you need to be of your supposed principles. This is the nature of science – an endless cycle of proud proposing and disdainful doubting.*

Herein lies the problem we are exploring. The pivot for an orthodox distinction between objective and subjective knowledge is human attachment. Objectivity is aligned with detachment and subjectivity with attachment. Bias is the academic tool used to measure the range.

The traditional determinations of orthodox evidence are usually based upon the noumenal distinctions of natural science. Because they can be understood independently of context, they cannot directly attribute the contribution of history, the phenomenal nature of the matters of research or the craft of the scientist. Factual answers are regarded as the essential building blocks of knowledge in natural science. They offer essential and very helpful information relevant to

human life matters, but they cannot axiomatically solve all of our worldly questions on their own.

Human science involves researching matters of interest to us, as human beings. This attachment/detachment dialectic becomes especially problematic when we want to research ourselves. In understanding lived experience, a purely anonymous and objective approach is both impossible and illogical as Varela, Thompson and Rosch point out (1991, p.13). (Endnote[i])

"To deny the truth of our own experience in the scientific study of ourselves is not only unsatisfactory; it is to render the scientific study of ourselves without a subject matter".

Heinz von Forster who was a prominent 20th Century scientist/philosopher regarded as a pioneer of cybernetics held a similar and more cynical view.

"Objectivity is a subject's delusion that observing can be done without him. Involving objectivity is abrogating responsibility – hence its popularity" (von Foerster 2004, p.3).

Some more exploration is needed here to untangle this dilemma. A hallmark of the human species is to be able to imagine and reflect upon counterfactual representations of the world (Gopnik 2006, p.21-23). To be able to do this, humans start by reconfiguring their relationship with their direct worldly engagement and responses to situations. The reconfigured reflections that result from this process can create perspectives that may be understood as objective. The traditional notion of objectivity is configured with the idea of having a point of view which invokes some degree of detachment. But the idea of complete detachment in Human science is illusory as human knowledge has a function that is not isolated from the subjective settings within somebody, between people and somewhere.

Thomas Nagel (Nagel 1986, p.4) deals with this head on, in his seminal book "*The View from Nowhere*". His proposition is that a form of detachment, he describes as stepping back, is used to seek objective truths, but highlights that it takes place within a life-world setting. He posits that the process to achieve objectivity involves the achievement of understanding. This seemingly paradoxical notion works both personally and collectively. The following quote highlights a three-step dynamic of, stepping back, re-conceiving and then replacing *"ourselves"* back into the world.

> *Objectivity is a method of understanding. It is beliefs and attitudes that are objective in the primary sense. Only derivatively do we call objective the truths that can be arrived at in this way. To acquire a more objective understanding of some aspect of life or the world, we step back from our initial view of it and form a new conception which has that view and its relation to the world as its object. In other words, we place ourselves in the world that is to be understood*

Nagel's clever idea is not abstract, it is based somewhere, in *"some aspect of life or the world"*. The quote describes it as an interpretive process involving people. It begins with a *"step back from"* and not a discarding of an *"initial view"*. The *"initial view"* is re-conceived and then re-placed back into the world. Nagel is not proposing that objectivity arises from a particular point of view. Neither the *"initial view"* nor the *"new conception"* are the objects of interest, in themselves. It is their *"relation to the world"* that becomes the object. He achieves this by recasting objectivity as *"a method of understanding"*. His method is subjective and collective "*we place ourselves in the world that is to be understood"*. The view from "*Nowhere"* is, when placed in a worldly setting, a view from somewhere and in some people.

Returning to think about science as a way to illustrate this further; it is not conducted in un-situated, ahistorical or uninhabited contexts. In the laboratories of the world there will always be observers of observations and interpreters of interpretations. *"Nowhere"* is nowhere to be found in the actual work of scientists.

This position is ontological and is congruent with a process view of learning and knowing. It challenges idealised notions of neutrality and anonymity and adopts a pragmatic view of objectivity as being relational, and in Nagel's own words *"a method of understanding"*.
It avoids being dogmatic, as it is characterised by a life-world accomplishment enacted through imagination, revision, interpretation and choice to achieve understanding. It is not a dehumanized view from nobody or *"Nowhere"*. Nagel (1986, p.6) has another succinct way of expressing this and also introduces the idea of limits in the ways we make sense of the world; *"But since we are who we are, we can't get outside of ourselves completely. Whatever we do, we remain subparts of the world with limited access to the real nature of the rest of it and of ourselves"*.

This discussion may now feel that it is heading toward a conclusion supporting Relativism over Objectivism. This is not the case. As previously mentioned, the intent is to acknowledge but avoid the pitfall of such a dichotomy. The pragmatic view being formed here is that, within

limits, a lot of the steps that constitute orthodox objective appraisal can be taken and used pragmatically in human science research, within defined contingencies and contexts of interest. The first move is to put to one side the unhelpful notion of complete observer independency and explore the components of observer interdependency.

Julian Baggini (2018, p.36) discusses Nagel and *The View from Nowhere*. He states, *"But Nagel critiques objectivity in order to save it, not to bury it. He invites us to see objectivity as not an unachievable absolute but as a direction in which to aspire"*. His interpretation of Nagel is helpful and is further developed in the following quote. *"...objectivity for Nagel is a matter of degree. Our understanding becomes more objective the less it depends on the idiosyncrasies of our specific view-points, sense organs or conceptual schema"*. The idea here is that the attainability of objectivity in Human science is more usefully understood pragmatically, in the processes of how it works, rather than as an aspiration for an autonomous and idealised form of truth. It arises from an ability to question existing assumptions, then seek and form new interpretations. The next step is evaluating these is to settle on accountable judgements that move from personal testimonies, towards agreed upon collective perspectives.

The dynamics involved are methodical, in the sense that they rest upon the vigorousness of the questioning, interpreting and judging involved. The adoption of these steps results in the opening up and the eventual rejection or acceptance and integration of alternate views, not just the imposition of uncontested opinions. These conditions can lead to considered agreements that are able to converge and create stronger propositions relating to the matters of interest. These can then be verified as being appropriate and adopted into future undertakings. The process depends upon a collective human willingness coupled to the ability to assess and decide what is questionable and reasonable, in the sense that the matters to hand are able to be accepted into agreeable decisions. It is not an overreaching search for a purified form of reason that leads "*Nowhere"*.

This proposal has now arrived at a place where it can be appraised by the same method that it is describing, namely Nagel's steps. The proposition here is that the orthodox positivist concept of Objectivity, when placed in a real world setting of interest, doesn't work. It just seems to sit there incommensurably with the subjectivity of the situation. A step back from this idealised form has been taken. In so doing it has been questioned, re-imagined, re-interpreted and judged into the more consensual and workable form that is proposed.

The arguments offered here highlight that a re-configured account of how an objective perspective can be achieved without forcing it into an anti-social undertaking. The essential feature is human ability. This emerges from the willingness to take different views and the desire to form collective understandings. It is achieved dialogically and pragmatically via the strength of the commitments leading to interdependent agreements that are reachable, believable, accountable, and useable.

These actions and the understanding that flows from them, show that the concepts of objectivity and subjectivity do not have to been considered as being so intrinsically contradictory to each other. Within this reconfigured approach, the collection, interpretation, verification and sharing of a range of GP Supervisors stories, derived from real life experiences, will disclose some authentic understandings and agreements about the nature of the tacit knowing that GP Supervisors employ.

Epilogue: Meanings that matter

The pre-understandings that I have shared above are not offered as an additional academic literature review. Nor are they an attempt to synthesise or analyse concepts to be directly fed into the research data and findings. They are my first-person perspectives. They are documented as a hermeneutic pre-requisite that the researcher’s perspectives are laid out, as explained in the prologue to this chapter. There are three main notions.

<u>General Practice is a very dynamic and complex undertaking.</u>

It is undertaken with a multiplicity of situational circumstances which prompt flexible and adaptable responses. It follows that the skills and therefore the training is complex. The sub-sections are Care is complex, Stories and statistics.

<u>Meanings take on many forms.</u>

The general notion here is that to explore the ontological nature of tacit knowing its different forms may be sensate, sentient, perceptual, conceptual, spoken and unspoken, written and acted upon. The subsections are; Learning how to know, It is not just intuition, Phronesis, Is it possible to share meanings without assumptions? Naming and knowing and The unspoken.

The paralysis of reconciling 'hard' science and 'soft' practice.

This deals with the inescapable challenge of tackling the futile binary division of objective and subjective knowledge and knowing. The subsections are; Knowledge and knowing: Tacit and (not or) explicit, Subjective and (not or) objective.

Chapter 5 – Finding new ways with words

"We think about the world in all the ways we experience it, including all the different ways we use our senses (however many of those there turn out to be). We think in sound. We think in movement. We think visually".

(Robinson 2009, p.48)

Finding new ways with words

Gerunds and hyphens

The ambition of this research is to find a way to understand the nature of tacit knowing that GP Supervisors employ. The aim is to capture the forms of knowing working in their lived experience that are perceived, thought about and acted upon, and characterised as being tacit.

A general concern of the difficulty of finding an appropriate language preoccupied the lead up to the interviews[8]. Embedded within these concerns was a belief that hastily formed naming is not knowing, and that the social, ontological, and phenomenal nature of knowing cannot be formed into noumenal terminology. However, doctors work with both knowledge and knowing, (see Chapter 4 Knowledge and knowing) each is nested within the other. So, the language sought after needed to have the agility to characterise both the entities and acts of the Supervisors' ways of knowing and the interplay between them. Despite all these ideas an employable way with words was not discovered till the meetings on the theme development took place. (How this occurred is shared below) The solution was discovered in the combined use of gerunds and hyphenated words. This emerged without any study into linguistics. The stories were the leaders and how they spoke formed into this creative and meaningful use of language.

Gerunds are words that end in '-ing', but not all words that end in '-ing' are gerunds. They are verbs that are formed into being nouns. This means that they can be regarded as having a dual connotation of being either a noun or a verb. The implication of this is that they can be 'doing' as

[8] See entries above; Chapter 1. – But How? Chapter 3 The phenomenology of practice and Chapter 4. Naming and knowing.

well as ‘depicting’ words. Their role can then depend upon their place in language and how they are used and interpreted.

Hyphens are couplers and they can also be put to work to uncouple words. They open up the interplay between the separateness and/or connectedness of each word. The meaning of the individual words can be subsumed into the whole of the couplet if they are interpreted as being coupled. Alternately, if the hyphenation invokes an uncoupled meaning, the constituent words can take on separate meanings. The interpretations that emerge are contingent upon how the words are aligned with, or in contrast to each other. The creation of dynamism here by employing the linguistic agility of gerunds and hyphens is deliberate. The ambiguity is an accepted hermeneutic method (Kinsella 2006) of making the language do the work of opening up conversations and forming different interpretations.

Understanding phronesis as dispositional ways of being

Kinsella, Pitman and their co-contributors (2012) offer contemporary interpretations of phronesis which can reveal the phenomenal nature of professional practice. In the concluding chapter they report that several contributors highlight that phronesis cannot be fully defined. *“While there appears to be no clear consensus in pinning it down, it does appear that phronesis cannot be reduced to propositions; it cannot be instrumentalised. We know it when we see it, yet to put it into words is a challenge”* (p.163).

They also offer useful wording to describe its holistic nature. *“Phronesis is frequently acknowledged as one of Aristotle’s special virtues. Aristotle describes phronesis as the virtue that enables us to judge what it is we should do in any given situation; phronesis straddles the categories of intellect and character, of cognition and affect, and is closely related to wisdom”* (p.164). They conclude that the word disposition is a term that can capture how this is done. *“Many commentators agree that phronesis is informed by dispositions. There must be a disposition to act in particular ways*” (p.164).

Phronesis was initially offered as a pre-assumption. Through the process of crafting the themes, it became more evident that GP Supervisors’ skills can be described as being dispositional. This was a helpful discovery which also fits nicely with these contemporary interpretations of phronesis.

How the themes were developed

<u>The question.</u>

What is the nature of tacit knowing experienced by General Practice (GP) Supervisors as they teach GP Registrars in clinical practice?

<u>The answer.</u>

The answer to the research question has been expressed thematically. The three ontological themes are;

Re-presenting
With-holding
Path-marking

Two face to face meetings, one on the 4th December 2019 and the other on the 14th January 2020, took place between Professor David Giles and A/Professor Julie Ash and me. These were convened to review and discuss the development of the descriptions and interpretations of the crafted stories. An iterative approach was adopted in order to find and form deeper interpretations. These worked to enable the development of the themes. Having worked through a wide range of pre-assumptions, these were acknowledged. This acknowledgement meant being able to hold them. There is a double meaning of holding here. The first is holding in the sense that I hold these as understood and interpreted beliefs. The second is an important undertaking in phenomenological research. This is holding them in a way that they are suspended and not imposed into the findings.

Rich dialogues took place in both meetings. This was undertaken by conversing not just about the content of the stories but also how they were manifest in the Supervisors lives. The leading came from the stories. This was characterised by interpreting <u>how</u> the stories spoke to us. The openness of the conversations allowed different meanings to appear and reappear. Our conversation searched for these whilst simultaneously throwing up possible forms of language to capture them. What emerged from the first meeting was an early sense that the phenomenon of tacit knowing was appearing to us from how the Supervisors skilfully enacted their different

ways of being. Out of this dialogue the using of gerunds and coupled and uncoupled words with hyphens emerged.

'Withholding' and 'with-holding' emerged as words that described how Supervisors held back, to allow Registrars to find their own ways, whilst still being available to offer ongoing support.

By the second meeting all of the 49 stories had been described and interpreted. A selection of these were discussed along with their descriptions and interpretations. The stories portrayed accounts of the multiple ways that the Supervisors guided their Registrars. The use of gerunds in combination with hyphens, with their ability to couple and uncouple different meanings, seemed to help describe and interpret this key finding.

'Path-marking' and 'Re-presenting' also emerged as contenders. Others that were considered are listed in Endnote[x]. Further individual study took place following the meeting and the final three powerful themes were chosen on the 19th January and agreed upon by my Supervisors on the 24th February. From that time till the submission of the thesis, several very helpful meetings took place with my Supervisors and the dialogue along with their feedback, helped shape the final thesis.

How can these themes help other GP Supervisors?

I began this research with the personal realisation of being able to know but being unable to explicate the nature of the knowing. The paradox of feeling this in real life events and realising it was linguistically inaccessible, resulted in the drive to pursue this research.

I have sourced the three ontological themes from the stories of my colleagues, in response to asking them if they have had experiences like mine. The reading, describing and interpreting of their stories have shown that their tacit knowing happens in skilful interactions that require situational awareness and responses. It is not completely silent, and it is not without linguistic form. Finding new ways with words has resulted in themes, which offer ways of describing and comprehending GP Supervisors' tacit knowing. The outcome of this research is that we now have a start for the linguistic means to help other Supervisors identify these forms of tacit knowing in their clinical education practice and begin to use them to improve the guidance of their GP Registrars.

Chapter 6 – The themes

“We cannot experience anything outside our experience”.

(Carel 2008, p.10)

Re-presenting

‘Re’

‘Re’ is often used as a prefix. Its origin is from Latin meaning, back or again. Despite the brevity of its two letters, it expresses an action, of returning, going back, or doing again.

Presenting

Presenting is the verb of the word present, which can have multiple meanings. Its literal meaning is of something happening in the present, meaning now, in time. Additionally, it has a spatial connotation of being physically present. So, it can have spatial and/or temporal meanings, being about somewhere and/or sometime. An additional understanding of the word present is captured in the notion of being present in a relational sense. This can be singular or plural. Starting with the plural, the idea here is about GP Supervisors being present in the meaning of being connected and engaged with their Registrars. This relationality is manifested in different ways and these are expressed in the Supervisors’ stories. In the singular sense, being present invokes the notion of Supervisors being personally reflective and reflexive to the moments, in the ‘here and now’ that unfold and are perceived to be important.

In medicine a common understanding about presenting is two-fold. The first is that patients present to their doctors with concerns. Secondly, in the process of sharing clinical information, doctors present cases about patients to each other, to assist with their diagnosis and management. Case based presentations also form a large part of Medical Education. These are mentioned as they are not what is being expressed here. The word ‘presenting’ is employed in its meaning of the multiple ways that Supervisors present themselves in their interactions with Registrars. As will be shown, the stories reveal relational, spatial and temporal meanings.

Representing

Representing is the verb of representation, which involves explaining things in symbolic language. This is how data, facts and information are talked about and communicated. Through the process of conducting this research a phenomenon has emerged. In the stories GP Supervisors do not appear to share their ideas with clearly defined representations. They were more likely to share holistic understandings with stories. What happened in the interviews reflects a similar observation about how they engage with their Registrars. Their teaching is not about conveying factual representations of clinical conditions.

Re-presenting

Here we have the word ‘presenting’ deliberately hyphenated with the prefix, ‘re’. The job for the hyphen is to have two functions. Firstly, to show that ‘re-presenting’ is not ‘representing’. Secondly, to open up the possibility of different meanings of presenting, which could be relational, spatial or temporal, or combinations of all of them. In the context of this research, GP Supervisors show, through their clinical and educational interactions with Registrars, that they adopt different ways to be present. In other words, to be themselves. ‘Re-presenting’ appeared and was further developed as a way to capture the skilful agility the Supervisors displayed and revealed in accounts of the coming and going in their stories. It has been chosen as a theme to show how flexibly and adaptively Supervisors work, to wisely guide their Registrars. The idea also emanates from the complexity of General Practice (p.25-29) which requires GPs to have a broad range of expert repertoires undertaken in complex and dynamic situations.

This ‘re-presenting’ has been described and interpreted in the stories in several ways.

- Recognising and reflecting upon issues appearing with Registrars
- Reflecting upon what usually happens in their practices,
- Reflecting on personal concerns and experiences
- Recollecting previous clinical experiences
- Recollecting earlier educational experiences of their own or with Registrars
- Realising what it might be like to be in the patient’s shoes.
- Realising what it might be like to be in the Registrar’s shoes.
- Balancing simultaneous demands of patients, Registrars and the practice as a whole

- ‘Withholding’ and ‘With-holding’
- ‘Path-marking’

Re-presenting further explored

‘Re-presenting’ is a linguistic form which has been crafted to describe how Supervisors skilfully reconfigure themselves to be different, so that they can help their Registrars.

To understand their Registrars, they need to be ‘present’ in the more relational sense of being present, and therefore being able to connect with them. Their stories show that they work hard to understand them as people. At other times the Supervisors share accounts of when they need to re-present aspects of themselves, in order to reconfigure the different roles, they have with their Registrars. In the singular sense of being present, there are stories that reveal Supervisors sharing personal reflections, that portray needing to be ‘in the moment’ and not distracted. This is a real challenge when there is so much multi-tasking demanded of them.

The Supervisors’ stories also reveal that they engage skilfully in their work in multiple places; in consulting rooms with patients, in the corridor or outside on nursing home visits, to name some of them. So there are spatially different settings that influence the ways that they support, supervise and teach their Registrars.

‘Re-presenting’ was identified and interpreted in the stories in varying temporal forms. Supervisors re-situate themselves, to be connected with the complexity of the present, meaning the immediate situations when Registrars need help. At other times they need to transport themselves historically. This means that they need to ‘re-present’ into past encounters or other times and places that may throw light on the current predicaments. Recollections of their own experiences as students or registrars are insightfully shared in some stories. The future also comes in when certain situations are recognised and highlighted as having important learning opportunities for the Registrars’ future practice. This is further developed in the theme ‘path-marking’.

The use of a hyphen in ‘re-presenting’ has been offered to invite engagement in multiple interpretations of its spatial, temporal and relational meanings. As mentioned above, it also underscores the adaptable skills needed to respond to the complex situations involved in providing care in General Practice. Within this care there is a further meaning. This is the importance of being fully present with patients when in consultations with them. Many of the

Supervisors narratives mention this in different ways and it is also expressed in the themes 'with-holding' and 'path-marking'.

To conclude, the theme 're-presenting', has been created to provide access to the richly layered and intertwined ways of being, that Supervisors adopt in their relationships with their Registrars.

Examples of 're-presenting' in the stories

Four examples from the crafted stories showing different ways of 're-presenting' are shared. Their titles begin with a gerund and have been created by a selection of key words from the crafted story. The stories are not fully replicated, but the sections deemed relevant to the theme 're-presenting' are quoted. The full list of stories is in Appendix 4. The GP Supervisors are named numerically from the first Supervisor, GPS1, to the final one, GPS9.

- Putting oneself in the shoes of the Registrar
- Remembering getting the white coat
- Wanting to learn from the Registrar
- Managing as a Supervisor involves compromising

……………………………………………………………………………………………………..

Putting oneself in the shoes of the Registrar

GPS7

Story 2.

How was I to know?

In these stories, GPS7 shows that she is trying to understand what the blocks are in a consultation being undertaken by her Registrar. In order to do so she adopts a strategy of trying to understand what the Registrar is worried about and helping the Registrar to articulate and solve the problem. GPS7 're-presents' herself to inhabit the world of the Registrar.

> *So, my Registrar was worried about this patient, but she couldn't articulate why she was worried. I couldn't work it out either until I had to drill it down a bit more and then reflect back on what she'd said. ……………….*
>
> *But she still had something in the back of her mind that was just bothering her and she couldn't put it into words and neither could I.*
>
> *So, then I had to try and ask her, not questions like, what were the patient's symptoms ……. and that kind of thing.*

But more questions like, what is it that's bothering you, what is it that you know you're … what's your … is it gestalt, what it is your … that's making you feel uncomfortable about this patient? and she still couldn't really articulate it and if she couldn't, how was I to know?

How does GPS7 undertake the task of helping her Registrar to work out why she is worried and then be able to talk about it? The strategy isn't direct asking or telling. She does use *what* questions which are a group of skilful questions directed to the Registrar (GPR) with the task of seeking to trigger some reflection. The intent can be seen as suggesting different ways to open up access for the Registrar to search for and articulate what is troubling her. So, they are not 'what' questions in the sense of seeking answers to depictable problems. GPS7 says that if the GPR couldn't articulate her worry, then neither could she.

In this approach we see GPS7 trying to bring forth some account, from the GPR, of why she was worried and then for the GPR to be able to express it. There is no use of objective representations of known or unknown facts. Nor is this intentionally guided problem solving about the clinical matters.

Story 4.

Maybe the patient didn't ever feel that he had the opportunity to express the loss

In a follow up story about the same patient, number 4, this Supervisor shares the following experience.

I was trying to put myself in her shoes at that point and trying to formulate everything that I knew about this man with the addition of the information that she'd given from the consults ……. Just so that I could get a sense of exactly how she saw the patient so I could help her navigate a way to get where she needed to go. Does that make sense?

In these stories we see teaching as a seeking to understand. The understanding is fuller appreciation of the Registrar as a person. This is a Supervisor 're-presenting' herself in the relational sense of trying to connect with, to be present with, her Registrar and occupy the space of uncertainty that the Registrar inhabits. The Registrar's problem has become hers. *How was I to know?*

Remembering getting the white coat and when I was a Registrar

GPS6

Story 1.

<u>How do you reach a point with yourself where you are comfortable that you've done enough?</u>

In the meaning of 're-presenting' GPS6 revisits her Medical Student and Registrar days and also the influence of her own GP Supervisor to help her Registrar.

This story starts with an account of a Registrar's consultation with an elderly man and his wife, which also involved GPS6 being called in. The patient's situation was both concerning and confusing. What needed to be done was not able to be clearly or fully managed.

> *But I think certainly the biggest area where I clearly knew and my Registrar didn't, was very much around, okay as a professional how do you reach a point with yourself where you are comfortable that you've done enough and you don't let that seep over or cloud you in other ways.*
>
> *It's a doctor/patient relationship and often we prioritise the patients and forget that the doctor is the other side of the equation here. So, there's all sorts of variables on either side of that equation and as a Supervisor I feel that I have to help the Registrars to understand both sides of that equation, not just the patient side.*
>
> *Not just how the two interact, there's that element of identity. When you first start out in Medical School, I remember getting the white coat and the first time you had to go to an anatomy class and work with cadavers. Those were signs that okay, yep, I'm changing, I'm becoming something different. I think in General Practice there's more … in some ways, I think there's more of those developmental milestones for, want of a better expression.*
>
> *But I don't think they're necessarily that clear and I think that this type of scenario of patients, who you're really worried about making decisions, that you don't agree with and you feel helpless and you can't actually do much about that, I think that's actually one of those critical learning opportunities for Registrars. But they don't necessarily know that at the time. So probably the other part of knowing I think I would highlight is the rich learning potential within this particular scenario.*
>
> *Once I was in the room it started to remind me of a couple of similar scenarios that I've encountered for myself as a clinician and particularly one back when I was a Registrar. It was my Supervisor supporting me in a similar sense of an elderly couple with concerns for both partners and needing to come to that acceptance that okay, there's actually a lot going on here and there's a lot that you can't do anything about. Other than there's limits to what you can do and coming to grips with that.*
>
> *So I think that probably those past experiences primed me in some ways or made me more aware of this as being a possibility for this particular consultation and interaction.*

The 're-presenting' in this story is temporal. It starts with GPS6 travelling back in time to her formative influences and bringing them into the present encounter, in order to understand her Registrar's predicament. It is about having been there in the past, to be there now, with the Registrar. The process is not one of just matching experiential similarities. It is remembering the achievement, of coming to accept limits and working out how to share this with the Registrar. The learning is an acceptance of a sense of being '*comfortable that you've done enough'*. This then allows time travelling into the future. The learning is not shared as an historical fact but as a process of becoming a GP. The new skill is being able to adopt this acceptance into future repertoires.

This process of becoming, through historical 're-presenting', fits with the analogy of learning taking time and being a journey or pathway. This process is further shared with stories depicting the third theme, 'path-marking'.

GPS 6 describes what it was like for her to be in the role of Medical Student and Registrar. The interesting way that she shares this is not so much recollecting knowledge, but through the story of her past experience; *"my Supervisor supporting me in a similar sense"*. This is congruent with the notion about support, to be explored by the theme, 'with-holding'. Her idea is of being *"primed …in some ways"* in the past and now being able to draw on these experiences. Similar to the preceding stories, there is an openness of sharing here, which is both personal and professional that helps to uncover ontological meanings through relational, spatial and temporal 're-presenting'.

Wanting to learn from the Registrar

GPS2

Story 6.

> *I'm telling them that they should have fresher and more recent clinical knowledge than me and that I want to learn some of that from them*

In this crafted story GPS2 says her Registrars *have fresher and more recent clinical knowledge* and they need them to teach her. She shares that the reason she is *still a Supervisor* is because she learns from them.

> *I tell the Registrars all the time, look you should have much more clinical knowledge than me. I've got experience and that helps a lot, but I'm relying on you in some ways to teach me ... In fact that's the reason I'm still a Supervisor, is because I feel that I learn, you know.*

GPS2 could have shared this with more objective representational language. This could be written about employing educational theory. Ideas such as lifelong learning and developing a symbiotic learning culture are two that come to mind. But GPS2 doesn't share it conceptually. She shares her ideas behaviourally, needing her Registrars to teach her. Additionally, she offers her first-person perspectives affectively. She feels that she learns from her Registrars and she wants to learn from them. This is also a personal revelation; GPS 2 is showing more of herself. She shares an aspect of herself which is her need to be supported by her Registrars.

Interpreted in this way she is sharing a commitment to 're-present' herself relationally, firstly, as someone who needs to be a learner, and secondly in her relationship with her Registrars needing them to be her teacher. The 're-presenting' is a reversal of the usual Supervisor-Supervisee relationship.

Managing as a Supervisor involves compromising

GPS4

Story 8.

> *Then not only does the phone go but I actually disappear.*

One of the features of phenomenological research is to reveal issues that are taken for granted. In this story there are three of these. They are the personal impact on the Supervisor involved in practice based clinical supervision and also how it might affect the Supervisor's own patients and the whole practice. This admission of feeling the stress of both seeing her own patients and supervising Registrars at the same time, is a well-known experience of Supervisors. Its emergence here is welcome as it throws light on the context in which Supervisors work, which is very demanding.

> *It's so complex, there are so many things you have to manage as a Supervisor in there. You know you're stressed ... I'm stressed myself. I've got other things to do, I've got my own patient waiting for me to come back, I was already running late and I had a plane to catch at the end of that day. Sometimes it all just seems a bit too much.*

It's clearly an imposition on my patient and a compromise for their care. So they're in full swing, the consultation is at a point that's not complete and suddenly the phone goes. Then not only does the phone go but I actually disappear. I don't disappear for a moment I disappear for a whole consultation. My patient's left sitting there and then I come back, have to re-take it up and feeling stressed from my previous consultation, so there's no doubt that in my mind that their care gets compromised and to me supervising is a matter of compromise.

But I think it's within the compromise that there is a better outcome. I think that our patients as a whole, our clinic get managed better for the fact that we have Registrars and I think I'm a better doctor for having Registrars. But in the moment there's a sense, well what could have been doesn't fully come to fruition.

GPS4's presence is needed in different places and times which results in making compromises. There is more here than the idea of appearing and disappearing. Ontologically GPS4 can be seen 're-presenting' in a number of relational, spatial and temporal ways. This includes being present with her Registrar, which means being absent from her own patients, being reflective of her own stress, as well as the overall impacts on the clinic. All of these display meanings of 're-presenting' as showing multiple ways of reconfiguring how to be a Supervisor as the multi-tasking demands of being a Supervisor are played out. GPS4 generously shares these insights by revealing aspects of her work setting and consequently herself. These would often go unsaid. In so doing, their revelation enriches our understandings of the broader context within which she works, and having to juggle being in different places, times and relationships.

With-holding

<u>With</u>

GP Supervisors are in important clinical and educational relationships with their Registrars during their practice attachments. The stories and their interpretations from the research reveal that this 'withness' has several forms

'We' is a default way the GPSs work with their GPRs
'We' is a way all the doctors in a practice work with each other
'With' is a default way the GPSs engage with their patients and Registrars.

When a GPR needs help and the GPS is called upon, the GPS joins <u>with</u> the GPR and <u>with</u> the patient within the consultation room.

Holding

A literal meaning is the human action of holding, meaning grasping. Grasping is also a synonym for understanding. Holding can have meanings beyond bodily acts and can invoke notions related to supporting.

Withholding

A message comes from several stories. This is where the autonomy of the GPR is strongly promoted. Supervisors withhold themselves from taking over from their Registrars. The dialogue they shared shows them to be doing this in two ways.

Firstly, they tend to withhold from directly telling their GPRs what needs to be known and done. There are occasions in the stories where this is not so, and these will be discussed, but in general the picture that emerges is that GPS's do not like to teach by telling or direct instruction. Secondly, they withhold from taking over their GPRs consultations when they are called in for advice. Several of the Supervisors' stories share that they actively promote the patients to continue their care with the Registrars.

In both situations the 'withholding' is not to hold back something of value, but something that may be of harm. The harm would be to the Registrar's ability to find and navigate their own paths to capability. Importantly the autonomy here does not mean being left alone, as the Supervisors show in their stories that they maintain their support with their Registrars. This invokes the meaning of 'with-holding.'

With-holding

In a hyphenated couplet, 'with-holding' is offered with two meanings. The first being 'grasping', meaning achieving understanding. The ontological idea is that being a Supervisor means supporting a Registrar to become a GP. This happens whilst 'withholding' from taking over or telling, Supervisors still support their Registrars whilst they are finding their own paths to

capability. ‘With-holding’ in this sense means supporting and enabling as well as ensuring safe practice for them and their patients.

Withholding and With-holding

‘With-holding’ and ‘withholding’ are ontological themes adopted to share insights into the ways Supervisors simultaneously encourage the self-directedness of their Registrars whilst also encouraging learning and providing ongoing support.

Withholding further explored

In the research interviews, many of the Supervisors directly said, that when they are called in to assist with Registrars’ consultations, they actively resist taking over. This is one meaning of the term ‘withholding’. The other is that their accounts showed that they tend not to directly tell or instruct in their supporting, supervising and teaching interactions. (Although there are times and places where they deem this to be necessary) Their educational approach is wisely guiding and more likely to be enacted through ‘path-marking’, which is expressed in the third theme.

The purposeful nature of ‘withholding’, is directed towards maintaining the autonomy of Registrars and ensuring they assume the primary responsibility for their clinical care and their learning.

Examples of ‘withholding’ in the stories

The following extracts from four Supervisors have a commonality and the messages are clear. Supervisors do not teach by telling and they also recognise and respect the autonomy of the Registrar in consultations when they are called in for advice. Additionally, the simultaneous nature of both ‘withholding’ and ‘with-holding’ is explored in the 3rd and 4th stories. The titles start with a gerund which reflects this interplay of ideas and have been made by choosing a few of the relevant words from each story.

- Refraining from bailing out
- Avoiding butting in
- Facilitating the Registrar to get to their own end point
- Trying telepathically

Refraining from bailing out

GPS1

Story 4.

> *The tone of the consult is often something that is a very subtle understanding of what is going on*

This is a story about GPS1 sitting in and observing her Registrars and sharing perceptions about body language and communication.

> *… if you're in the room with the Registrar and watching their interaction and you're sitting in the observer seat, say for instance this seat here which is to your right, you can read the body language of both parties and if it's engaging you can see that it's…*
>
> *Eye contact, they're getting closer, there's no defensive sort of posture, the voice is calm, it's explaining. Whereas the opposite is their eye contact is starting to dart around a bit, the posture's becoming closed*
>
> *Maybe even moving apart, arms folded perhaps. The Registrar might be starting to fidget and look towards the screen more. The patients classically just turn their vision straight to you. As the observer and want you to bail out the situation.*
>
> *Which is hard because you can't. Well you can but you don't want to unless you have to.*

This story has been selected because it describes consultations with Registrars and patients in which GPS1 can perceive body language that indicates good engagement and the opposite, difficulty in rapport building. The effect in the latter is that the patients turn their attention to the Supervisor. The feeling here is that it is difficult, and GPS1 actively refrains from directly telling this Registrar to modify her body language and from intervening in the consultation.

Avoiding butting in

GPS2

Story 3.

> *Well I'd put myself in the situation exactly from the point of view if I was the patient*

This is another story about a Supervisor sitting in observing a Registrar in a teaching visit as an external teaching visit.

… the patient asked a few times "so what do you think's going on", and she wouldn't commit herself to saying what she thought was going on.

I didn't butt in, but after the consultation I asked her about this. "So what do you think was going on" and she said …….

This story from GPS2 has a similar recollection about an awkward interaction. The word used here is *"didn't butt in"*. This is a clear example of 'withholding' in the sense of actively avoiding the temptation to intervene. After the consultation finished the Supervisor did not directly tell the Registrar what should have happened. The teaching is with a question, inviting her to reflect on what took place.

Facilitating the Registrar to get to their own end point

GPS4

Story 1.

<u>I hope that I give them a feeling that they just have a stab at it</u>

Here we hear from GPS4 about her philosophy of how support is provided when called in on a consultation.

Fundamentally I see my role in what I call an ad hoc supervisor encounter. That's when I'm called in to facilitate the Registrar to get to their own end point and that I be a resource. So that's how I aspire to be.

This story has been shared because it changes the meaning of 'withholding' to offer not what isn't done, but to state the intent is to *"facilitate the Registrar"* and adopt the role of being a resource. Facilitating and resourcing are the active roles that can be understood as supporting, whilst holding back from taking over. Implicit in these undertakings is that direct instruction is avoided. Here we can see a synchronicity of 'withholding' and 'with-holding' which will also be explored in GPS 8's story.

Trying telepathically

GPS8

Story 1.

I was telepathically trying to get the Registrar to call the Supervisor

This story from GPS8 portrays that she has adopted a way to provide supervision based upon how she was supervised. She says this has become the philosophy of the clinic. Additionally, an example of how this played out when she was directly observing a Registrar's consultation is shared.

> *This comes back to the way I was taught from the very moment I came into this clinic by my Supervisor, and we still call each other in as needed, so if I would call her in, she would come in and even if I got the diagnosis wrong, she would say something like: "Yeah, that's a good thought, but have you thought of this ?" and I go, yeah, it's a good idea, so her whole dictum was not to make me look like a fool or to belittle me in any way.*
>
> *That's been our philosophy.*
>
> *So my role in that … I saw my role there as not to say to the Registrar look, just give her some (of the requested medication).*
>
> *That would have easily diffused the situation but wouldn't have been the appropriate thing to do because it would have made the Registrar look silly and also I'm not sure that that was the appropriate course of action, because I wasn't the doctor, I was just observing. So I felt the most appropriate course of action was to involve the doctor that knew this patient well.*
>
> *I was telepathically trying to get the Registrar to call the Supervisor (the usual GP), but I didn't actually say that, so I just thought I will defuse the tension by just asking the patient a question that's not related to her pain management.*

The account from GPS8 can also be interpreted as offering more than a holding back. The reference of telepathy is consistent with the dual idea of 'withholding', meaning there is no direct telling or interfering during the consultation. But GPS8 can also be seen to be 're-presenting' herself telepathically into the consultation to somehow get the Registrar to realise she needed to call the patient's usual GP. Additionally, we see that the skilful way in which she manages the situation was not by interrupting and telling the Registrar but by initiating a dialogue with the patient. This is a good example of wisely guiding, which is the proposed meaning of 'with-holding'. GPS8's actions can be interpreted as being synchronously 'withholding' and 'with-holding.

With-holding further explored

'With-holding' has been employed as a theme as it allows a creative play on, and with its own wording. This shapes the exploration of two ideas.

Holding is a bodily act that is synonymous with grasping. Grasping also means coming to grips with something. Learning in everyday language is expressed by phrases like ‘Oh, now I get it ‘. So, the significance here is engendering the idea of holding as the ‘grasping’ and ‘getting’ or achieving of important understandings. The Supervisors through their stories shared accounts when they helped their Registrars learn to ‘grasp’, what they felt were essential ways to be a GP. This is similar to the notion of ‘path-marking’ which is yet to be shared. In these three stories the grasping took time, which leads into them being paired with the second meaning of ‘with-holding.’

Supervisors have a range of ways of providing ongoing support whilst waiting for Registrars to learn. It takes time to fully grasp what it means to be a General Practitioner. The Supervisors share how they realize some key learning takes time and how they make the time for this to happen. It’s not a matter of just telling.

‘With-holding’ may be better appreciated by reversing the word order. ‘Holding-with’ implies suspending any direct interference to allow the Registrars to come to their own insights. During this time the Supervisor are still wisely signifying, guiding and generally supporting them to find their own ways.

<u>Examples of ‘with-holding’ in the stories</u>

Extracts from three crafted stories from different Supervisors have been selected to explore both of these with theme of ‘with-holding’. Their captions are also made up from key words in each story, using the same introductory stem, with the initial word being a gerund. - Helping Registrars. Then there is a description of the main learning point needing to be ‘grasped’, followed by an ending sharing how the ‘with’ is undertaken, with - support, conversation and working together.

Helping Registrars;

- recognise by dealing with the patient’s agenda, that they would be better clinicians – with support.
- recognise that it is a critical skill to keep adjusting decisions – with conversation.
- feel comfortable with patients living with terrible numbers - with working together.

Helping Registrars recognise by dealing with the patient’s agenda that they would be better clinicians - with support.

GPS5

Story 1.

<u>What she didn't do was shut up and listen</u>

This story from GPS5 is about un-learning and re-learning. Registrars, when they first come to General Practice can bring with them ways of working that are modelled in hospitals. These tend to be problem rather that person oriented. The first meaning of with-holding here is about supporting a Registrar to 'grasp' the importance of focussing on the patient, who is a person, and their agenda.

> *A good experience I had was a Registrar who had a lot of theoretical knowledge. She saw a patient with some complex comorbidities, but with a specific issue and she had no focus in the consultation. She treated it in a systematic way based on her education, and she created her own hierarchical list, which of those issues deserved the most attention and she dealt with all of the patient's comorbidities in sequence. She didn't even really manage the primary agenda and it reflects how she had no real understanding of context.*
>
> *She called me in to see the patient and she was quite pleased with her consultation. But neither myself or the patient were at all really impressed and pleased. I think that it took some work over a period of time with that Registrar to help her to understand how the patient should be the focus and that their agenda should be dealt with. ………………….*
>
> *It wasn't an easy consultation to deal with because this particular learner had lots of theoretical knowledge. She responded to some of my probes with more information and then started talking specifically about more detail about potential management and so on. Also using abbreviations which were not appropriate for the patient.*
>
> *There was a lot to this and it was quite a difficult interaction to manage without completely taking over. In fact she felt quite challenged by the whole fact that I hadn't agreed with how she approached the consultation.*
>
> *But it took a number of weeks with quite a bit of intense review, supervision and support for her/him to come to recognise that she would be a much better clinician exploring the elements that we were talking about.*

The second use of 'with-holding' is about the Supervisor patiently taking the time to support this Registrar. The support has definite components, review, supervision and support. The meaning of 'with-holding' is more than just waiting for time to teach. GPS5 This Registrar needs to learn how to be different. Here the supervisor suggests, the change that is required is *"to come to recognise that she would be a much better clinician"* by focussing on the patient and dealing with their agenda. The 'with-holding' is wisely guiding this GPR toward their own recognition of how to become a better GP. Interestingly, GPS5 describes this as a *"good experience"*.

Helping Registrars recognise that it is a critical skill to keep adjusting decisions – with conversation.

GPS6

Story 2.

<u>*What does it feel like when you are actually doing it?*</u>

This story is about the reflections arising within GP6 which are prompted by a GPR feeling the need to make a decision in the here and now. The teaching takes place *"in a conversation"* which was *"a discussion with the Registrar"*. The 'with-holding' in its first sense of 'grasping', is helping the Registrar to learn three things. Some decisions don't have to be made on the spot. What you decide changes with the passage of time and can be adjusted as situations change. Additionally, to realise that this is not just a problem to be solved, but a skill to be developed.

I'm not entirely sure with how this fits in, but I guess what's coming to mind is the idea that our thresholds for referral and our investigation patterns, they actually change over time and they change in response to new knowledge and skills that you acquire. They change in response to getting reinforcement that you've done something well or been burnt when there's something that you feel you should've actually picked up on, that you didn't. Therefore you might go through a period where you start looking into things a little more.

I guess this came up in a conversation about a gentleman with some lower urinary tract symptoms. This was I think ……… a discussion with the Registrar before she was seeing the patient again. So basically he'd had a PSA done, I can't remember what the number was, but it was higher than the average for that age on that particular lab reference.

So the Registrar's question was around, do I need to worry about this or not? And, what am I going to actually tell this patient when I see him later on today? ……………………………….

I think ………. in some ways, I think that the knowing, it's …………. in some ways it's a simple thing. But learning isn't this linear progression. You can go backwards, you can go forwards, you can go backward ... it's okay to keep on adjusting. It's a really critical skill, so I'd consider it to be an essential skill that you're constantly adjusting your practice.

So I think she was feeling the pressure, I've got to get this right now. Well actually no, you don't, because what's right is going to be different, not only for individual patients but individual doctors. So depending upon your own level of experience and expertise, your threshold for referral or further investigation for this patient may be different to mine, but that's okay.

I come back to that whole idea between our understanding it as a theoretical thing, but then accepting it in the real world. That again I'm sure that she's heard the idea before that we're

> *constantly learning, where you constantly need to adjust your practice. But again I don't think she really knew what that looked like as a practical reality.*

The way the story is shared could be described as being contemplative. GPS6 is taking the time to contemplate what she has experienced with her interactions with this Registrar and its meaning. How she has done this by making the time to think it through, also matches the idea of time she is sharing with this Registrar.

Here we see GPS 6 contemplating this matter, which could also be interpreted as her 're-presenting'. The 're-presenting' is reflecting about her usual practice, having been triggered by the Registrar's concerns. The 'with-holding' is manifest in taking the time to reveal her own understandings and making the time for a conversation to share these with the Registrar.

Helping Registrars; feel comfortable with patients living with terrible numbers - with working together.

GPS7

Story 6.

> <u>*Your patient is a series of numbers that are results.*</u>

This story has similarities to the first one. It is about a GPR needing to 'grasp' the idea that the manipulation of clinical data cannot be fully constitutive of how to provide care. To achieve this the Registrar needs to change to a whole person approach.

> *… I didn't know what she was thinking, but now in retrospect I think part of it might be that she was trying to set herself limitations on what she should and shouldn't do and what she was and wasn't responsible for. But that might not have been articulated very well. But she … I'd say oh well you know let's just break this down, what are you talking about when you say that this patient is going to die and she'd say oh well the patient's numbers are you know, once again in the hospital penumbra, his EGFR is only 8 and you know he's in end stage renal failure and he's not on dialysis and not suitable for transplant and he probably needs an iron infusion, but not sure if I should give it to him and I don't know what to do about these drugs and so I just kind of think well he's going die and I'm just going to have to do my best with a bad situation.*
>
> *Where in fact this fellow obviously lived for another … oh he actually lived for another 18 months and then was diagnosed with another condition and died very quickly.*

Something completely unrelated to what his admission diagnoses all were. The Registrar did it again with another … I can't remember who the other patient was now, but I said look you know tell me about each of them and she'd say oh she's going to die.

I'd say well hang on what do you mean by that. Aww well they've just got all these things wrong with them and they're just going to die.

So I needed to tease that out with her because I didn't really understand why some of them were just sitting there and you know just living their twilight years in care where others she'd almost sort of written off as I can't do anything for this patient. I think it was really complicated. It was a combination of the fact that she's just recently left the hospital environment and you've got to do something for everybody and she still falls into this trap a weeny tiny bit. Your patient is a series of numbers that are results, they're not the person and the quality of life that they present to you and they're in a little bit of cognitive decline, but you know great sense of humour and all those other things that this fellow was and father to his family who lived in our town and visited regularly. None of that stuff kind of came into roost for her, it was all about the numbers and not taking into account what we know about when someone's actually imminently going to die or not you know in terms of their quality of life and all the rest of it.

So it took her, I'd say a good six to eight months of working together with me, this is before I gave the handover completely, on these patients and what you can do and what you can't do and how they still travel life with terrible numbers but do okay. It's not just a matter of tweaking drugs and doing more tests, it's about just living with what they've got. It took her ages to really kind of come … feel comfortable with that.

The second meaning of 'with-holding' is it took time and GPS 7 made the time for this Registrar to learn. It took *"eight months of working together"*. There is also some 're-presenting' as GPS7 needed to understand more about the Registrar. This is to tease out why she had adopted the approach of focussing on numbers. The supporting here is about helping a Registrar to feel, think and act differently. This is facilitating her to learn how, over time, to feel comfortable about helping patients who *"still travel life with terrible numbers"* and continue to provide them with care.

Path-marking

Path

The word path has several meanings. The most obvious one is a physical entity of a surface to travel upon. It is also used to describe a journey. In this research the metaphor of a path has been chosen to launch the latter meaning, coupled with the action of marking. (Endnote[xi] discusses Lakoff and Johnson's views (1980) on how metaphors work, not to explain in simile form, but to invite engagement in the suggested actions) The main notion to be adopted here is a learning journey in practice-based education.

Marking

Marking is the act of making a mark. Here the emphasis is on the doing, the marking and not the mark as the end result. In the stories shared, we learn that the Supervisors identify, in some of the Registrars' experiences, existential moments as being important in their Registrars' learning journeys. Without this marking they may be overlooked.

Path-marking (and not 'pass-marking')

'Pathmarks' (Wegmarken in German) is a term Heidegger used to explain that his approach was to search for ways rather than settling his ideas in works (O'Brien 2020, p.3) The path as a journey of learning is the key idea here. It is also ontological in that one has to be on the path and in the process of travelling, as well as being with others to learn. For this research it reinforces a key pre-assumption that real learning is existential and is a process of becoming.

Supervisors described situations in which they needed to mark (point out) to their Registrars the importance of certain experiences for their development as GPs. But 'path-marking' is not just telling (although there are some stories where this is the case). It is more likely to be wisely guiding at important times and places. The stories reflect that this seems more about enabling a Registrar to find their own pathway (with support) in their learning journeys. The use of a hyphen here is similar to, but also different from how it is employed in 're-presenting' and 'with-holding'. Unlike the first two themes there is no juxta positioning against an English word like representing or withholding. It is also unusual to couple two nouns. The hyphen has two

functions. It creates a space which portrays a pause, to reflect upon the moment that has been selected as mattering. It also allows the coupling of the two words 'path' and 'marking', with the implication that the selected place on the path will lead to learning. The teaching involved in 'path-marking is helping Registrars find their way from reflecting on the moment of experience and onto the journey of becoming a GP. The additional appeal of using this as a way of comprehending the learning journey is the curious homophone that arises from 'path-marking' sounding almost like, 'pass-marking'. The stories from the GP Supervisors showed much more of a practice of trying to understand and inhabit the world of their Registrars, than to sit in judgment of them and 'pass mark' them.

……………………………………………………………………………………

Path-marking further explored

Each of the Supervisors shared stories about finding themselves in a place in the Supervisor-Registrar relationship when they perceived that the Registrar needed to adopt a different way of being. Of note is the language used, which is ontological. Consistent with the development of the three main themes, each path-marking also employs gerunds.

Learning how to become a GP involves learning how to learn from experience. The steps in this pathway are being able to respond to and reflect upon clinical and educational encounters, then coupling these moments into meanings that matter and adopting them for future use. The actions of 'path-marking' shared here do appear to fulfil these steps, which are consistent with modern educational approaches (Dewey & Kolb). Examples of path-marking from a selection of the GP Supervisors who were interviewed are now shared. The format chosen is the same as that for the previous two themes. Key words have been taken from the selected stories and crafted into titles. The crafting and labelling were formed through an appreciation of which stories shared the Supervisors 'marking' moments that signified important ways to be a GP. These are from encounters with Registrars having difficulty reconciling issues with patients, fitting in with how the practices work or grappling with how to learn.

Examples of 'path-marking' in the stories

Seven crafted stories revealed 'path-marking'. Extracts from them are shared with interpretations and their titles contain some of the key words from the narrative.

- Showing yourself as a person
- Bending to see another approach
- Putting yourself in the situation from the patient's point of view
- Being completely there with the patient
- Being obliged to provide care
- Giving patients an opportunity for expression
- Giving some immediate relief to the patient

Showing yourself as a person

GPS1

Stories 1&2.

GPS1 describes that GP Registrars who are new to the practice need to be accepted by the community and that the patients have an expectation of needing to have some sense of the doctor as a person. She further shares that the way for Registrars to do this is to reveal something of themselves.

Story 2.

> *She's a normal GP that's like the rest of them*

> *I think the community down here expect the doctors to be part of the community*
> *So it takes a while for a new person to be adopted in from that perspective*
> *They need to know a little more about us*
> One Registrar fitted in and.
> *She's a normal GP that's like the rest of them*

Story1.

> *It was almost like there was a glass pane between her and the patient*

Another didn't.

> *She sort of wasn't sort of, giving any of herself away*

But you couldn't explain that to her, you couldn't ask her to show more of her personality.

Back to story 2.

I mean you can't say to a Registrar you know you've got to become part of the community. Or we could say that, but to do that is something different again.

The significance here is that Registrars working in GPS1's practice need to adopt a different way of being themselves to become part of the practice and the community. The way this needs to be accomplished is by revealing something about their personality. This is an important change and one that needs to be 'path-marked'. However, this is easier said than done and GPS1 reflects how difficult this was for a particular Registrar to learn how to be different and be adopted by the community.

Bending to see another approach

GPS1

Story 4.

The tone of the consult is often something that is a very subtle understanding of what is going on

This story is about a situation in which a Registrar declined to re-issue a prescription for a patient (a narcotic) which had previously been prescribed by another GP in the practice. GPS1 shares that the Registrar was unable to understand there was a "*back story"* and unable to bend to adopt different ways of being a GP in a whole of practice environment. The Supervisor mentions that this Registrar *was unable to understand there was a back story, that there was perhaps another tone that…or clinical indication that was being managed.* She goes on to add that the Registrar *was unable to bend and unable to see another approach.* She adds, *I think it was difficult to explain…. that there are lots of issues in a practice apart from* (the prescribing issue being discussed). *Issues around business, issues around other doctors' philosophies, issues around patient expectations.*

In the story GPS1 states that there needs to be respect for other doctors' decisions and not to *meddle with this*. She mentions that the doctors need to *use the collective wisdom of the other doctors.*

The significance arising from this story is about needing to be flexible in one's approaches to different issues. Being able to bend means being adaptable. The idea here is that skilful GPs need to be able engage flexibly and resourcefully in their work. In this story the more specific 'path-marking' is about working within a collective, whole of practice setting. In this story this Registrar appears to be working too autonomously.

Putting yourself in the situation from the patient's point of view

GPS2

Story 3.

Well I'd put myself in the situation exactly from the point of view if I was the patient

Following the direct observation of a Registrar's consultation with a man presenting with painless haematuria (blood in the urine), the importance of sharing information about the diagnosis with the patient is discussed. The way this is shared is by the action of putting oneself in the patient's situation and realizing that a patient would want to know.

> *Well I'd put myself in the situation exactly from the point of view if I was the patient and want to know what he thought, why wouldn't she tell me. I thought it was probably the key point to talk about after the consultation.*
>
> *The patient asked on a couple of occasions "What do you think's going on?" and I don't think it was sufficient to say ,"look we'll do the tests and I'll tell you more then". I didn't think that was satisfactory.*

The 'path-marking' in this story is straightforward. GPs need to share with their patients what the potential diagnoses may be, arising from their symptoms. Furthermore, it is not sufficient to hold this information back. The way GPS2 does this, isn't telling. It is offering a way for this Registrar to achieve an understanding of how the patient would feel if they weren't told what could be going on. This could also be interpreted as a way to actually express empathy by inhabiting the concerns that a patient may hold.

Being completely there with the patient

GPS3

Story 6.

<u>You need to be completely there with the patient</u>

This story is about being fully present in consultations. The full crafted story, description and interpretation is reproduced in Appendix 5.

The beginning is with an interaction with a Registrar who is worried about running late and people complaining.

The main message GPS3 offers is to be *totally focussing on what the patient is trying to get across to you* and needing *to be completely there with the patient.* And

Being <u>on</u> time isn't always the most important thing.

The 'path-marking' is unambiguous. It is a fundamental way of being a GP.

What is significant here is learning how to be <u>in</u> a consultation and be fully present in interactions with patients. This means not being elsewhere, like the worry of the waiting room. This Registrar needs to be completely there in her encounters with patients.

Being obliged to provide care

GPS3

Story 7.

<u>Front and centre of this is that person's dignity</u>

The story line here is that a Registrar visits an aged care facility and is *confronted by the high care patients* there. She tells her Supervisor *I don't want to do aged care. I don't, I can't, I can't deal with it……………………… I don't want to do this.*

For GPS3 the response is direct.

> *I actually said to her, I said, 'I think you really need to think hard about that, because you know, front and centre of this is that person's dignity. They are still a person, we're obliged to care for them, and their dignity should be front and centre of what we do, not your reaction.*

The significance of this story is anchored by the words the *centre of what we do.* This is an unambiguously ethical stance and presented as a professional obligation. GPS3 is directly confronting her Registrar. The ‘re-presenting’ is direct advice for this Registrar to ‘re-centre’ her attitude. The ‘path-marking’ is that caring for patients in an aged care facility is our role and the Registrar needs to turn up and look after these patients. It is unacceptable for the Registrar to be absent.

Giving patients an opportunity for expression

GPS7

Story 4.

> *<u>Maybe the patient didn't ever feel that he had the opportunity to express the loss</u>*

The clinical aspects of this story are about an elderly man whose wife recently and suddenly died and he had also suffered a TIA (transient ischaemic attack – a mini reversible stroke). In the consultations that took place with the Registrar, it emerged that he had not been given the opportunity to express his loss. This led the Registrar to be worrying about something else beyond what could have been more readily understood if she had achieved a fuller appreciation of his life situation.

> *I was thinking well, maybe the patient didn't ever feel that he had the opportunity to express the loss in what could have been given the right opportunity.*
>
> *… she's saying the words but maybe not saying them in a manner that is inviting for the kind of response she might need.*

The ‘path-marking’ here is the significance of developing the skill of receiving all the information about a person and their life, not just the clinical details. The skill needed is to develop ways of being a GP, to give patients the opportunity to fully communicate what is happening in their lives. This Registrar needs to learn how to communicate more fully and invite an opportunity for a patient to express their concerns.

Giving some immediate relief to the patient

GPS9

Story 1.

Can you come and have a look at a foot?

This story is about a consultation in which a Registrar is assessing a patient with a foot injury. GPS9 is called in for advice and suggests a procedure to relieve the pain in the affected region. This does not seem to be the Registrar's immediate concern and the Supervisor's advice is not acted upon at the time.

So we have an experienced Registrar who phoned me just this week and said; can you come and have a look at a foot?

I'd just about finished with my patient so I went in and it was a chap who'd been playing cricket and whilst wearing runners had been hit in the left foot with the cricket ball. He'd come in, the foot had become increasingly painful over the 36 hours or so since it happened. He came in to see this Registrar and he had a large subungual haematoma under his first toenail and you could see that he was developing a bit of cellulitis.

……………….

He was in a quite a lot of pain and this Registrar was wondering what to do and said; obviously, it looks infected, I'm worried that the toe may be broken, and she was sort of wondering I guess in what order she should do things. My feeling was…

………………

The thing that really struck me was this guy was in a lot of pain and I … what I was wanting to do, was just to relieve the pressure.

Maybe that was the wrong thing, because obviously if he had a fracture and he had infection, then you run the risk of osteomyelitis and that was the Registrar's concern I guess.

……………….

To me I was focussing on this chap's immediate discomfort whereas she was more, I guess, focusing on the possible complications and rightly so, you know infection, osteomyelitis, not breaching the skin in case it made it worse and so on.

So anyway.

It was at the end of my day by which time she'd gone, that I learnt she'd sent him into hospital so I haven't … I'll have a chat to her about that tomorrow and just see how the patient went and...

Something, actually just having, I mean just having had this discussion now it will probably make me think about this in my next interaction with a Registrar, so it's an interesting exercise so I think I'll get something out of that as well.

The gist of what happened is that the Supervisor's advice to perform a procedure to relieve the patient's pain was not performed at the time. The Registrar sought advice from the local hospital, and he was referred.

The story has been selected as a 'path–marking' because it is a moment in the life of the Registrar that prompts the need to be focussed on the person and their suffering, whilst concurrently managing their clinical problems. The story with its early reference of the Supervisor being called to *"have a look at a foot",* rather than a person, appears prescient of the underlying issue.

An opportunity for the both of them to debrief about this had not taken place at the time of the interview. So, it is not clear if the significance of this consultation has been taken up by the Registrar. Interestingly, GPS9 mentions that sharing this story in the interview has prompted some more thinking with the idea that it will be useful with other Registrars. So, whilst the 'path-marking' may not have happened here, the Supervisor seems to be 'path-marking' it for use with future Registrars.

Chapter 7 – Discussion

"Openness would seem to be our fundamental posture. We are of the world and in it, engaged in and engaging the environment and context".

(Ravven 2013, p.395)

The answer to the research question

This research asked the following question.

What is the nature of tacit knowing experienced by GP Supervisors as they teach GP Registrars in clinical practice?

The nature of tacit knowing, involved in practice-based support, supervision and teaching, has been found to be manifested in adaptable ways of being, that Supervisors adopt to guide their Registrars' learning. These are 're-presenting', 'with-holding' and 'path-marking'.

Supervisors showed that they adapt to different situations and interactions with their Registrars. They are able to wisely guide them by adopting different ways of being present, which is offered as the theme 're-presenting'.

'With-holding' is another ontological theme. It highlights their ways of providing support to Registrars, whilst also encouraging their autonomy.

The skilful ways in which Supervisors 're-present' and 'with-hold' themselves, enable them to recognise and signify 'here and now' encounters where their Registrars can learn important new ways of becoming a GP. This is shared with the theme 'path-marking'

Thesis of the thesis

The intent of this research is to reveal and share the nature of tacit knowing that Australian GP Supervisors employ in their work as Supervisors. The phenomenon of interest is in the context of clinical education. Nine experienced Victorian GP Supervisors were interviewed in 2019. They responded to a phenomenological question which asked them to share experiences from interactions with their Registrars in their practices when they couldn't explain their knowing. They generously shared their stories and their accounts were transcribed, crafted into stories and then described and interpreted.

Three main ontological themes emerged. These are not categories of behaviour but offered as ways to further appreciate and understand the nature of tacit knowing emerging from the Supervisors' stories.

- Re-presenting
- With-holding
- Path-marking

Re-presenting

'Re-presenting' has been used as a theme to portray the agile ways that Supervisors 're-present' themselves into different ways of being, in order to wisely guide their Registrars.

GP Supervisors did not show that they teach with traditional representations of knowledge. Their teaching arises from who they are and how they can find ways to help their Registrars learn how to learn.

With-holding

Supervisors promote the autonomy of their Registrars by withholding from too much instructing and from taking over their Registrars' consultations. This happens whilst also 'with-holding'. There are also two meanings here. Firstly, there is a notion of holding as grasping the meanings of important situations. Secondly, there is an interpretation invoked by reversing the order of words, 'holding with'. This offers the idea that Supervisors, whilst refraining from intervening, are still available and providing ongoing support.

Path-marking

'Path-marking', is about Supervisors identifying encounters that signify important learning opportunities in their Registrars' pathways to capability. The learning is about finding new meanings in their experiences and transforming them into different ways of being a GP. This is in contrast to not sitting in judgement and 'pass-marking' them.

The interconnectedness of the themes

Supervisors showed that, in being able to both 're-present' and 'with-hold' themselves, they can find and signify 'path-marking' situations that matter for their Registrars. These 'mark' a suggested transition towards new ways of being a GP.

The tacit nature of knowing

The three themes offer a hermeneutic appreciation of three skilful ways of being a GP Supervisor that do seem to be taken for granted. They signify holistic undertakings to enable their GP Registrars to learn how to become capable practitioners.

The themes are ontological, meaning that they reflect lived experience, with all the richness arising from the situations, interactions, events and relationships in which they happen. Whilst the Supervisors articulated essential aspects of their concerns, thoughts and actions, through narrative accounts, they did not explicitly self-define an encompassing overview of how they work. Their ways of being are constituted by who they are and enacted in how they guide their Registrars. These are tacit, but not because they are unsayable, but in the meaning that they are embedded into their everyday expertise and thus appear tacit in the sense of being taken for granted.

Phronesis

These themes mirror an appreciation of how Supervisors go about the complex tasks of employing, supporting, guiding, supervising and teaching their Registrars. Many pre-assumptions were put forward prior to crafting these themes. One in particular, has emerged as being found in these undertakings. This is phronesis. Kinsella and Pitmans' quote (2012, p.2) resonates with the understandings that have been revealed by the stories and themes.

> *Phronesis, on the other hand, is an intellectual virtue that implies ethics. It involves deliberation that is based on values, concerned with practical judgement and informed by reflection. It is pragmatic, variable, context-dependant, and oriented toward action.*

GP Supervisors' ways of being are best understood as skilful dispositions showing aspects of who they are and how they engage in relationships with their Registrars to wisely guide them. This seems to be what is meant by phronesis in the setting of this research. Many elements of this skilful 'know-how' constitute expertise and can be characterised and shared. But there are taken for granted features of phronesis that are not extractable, either from their context or the relationships within which they form. These can be known but not explicitly named and end up being understood through narrative. This means that they are not incomprehensible or unsayable, but their 'in-the-world' form can be deemed to be tacit, if explicitly defined propositions are expected.

Finding a way with words

The themes emerged from adopting an ontological orientation and an hermeneutic phenomenological method of interpretation. The commonality which connects them is that Supervisors are able to work by flexibly adapting and configuring agile ways to guide their Registrars. Expertise which employs this dynamic, 'being-in-the-world' form of knowing is not captured by propositional or categorical language.

This also makes sense of why the ways of being a Supervisor seem to be tacit. The language usually used to depict and explain knowledge is epistemological. This is not capable of revealing the phronetic nature of GP Supervisors' expertise. Insisting on depictable formulations of knowledge can be seen as a reason why tacit knowing has relegated to being elusively ineffable.

Finding a novel way with words in this research was an essential undertaking to enable this taken for granted knowing to be explored and comprehended. Listening to the voices of the Supervisors, hearing what they shared and how they articulated their reflections, transcribing these, interpreting them and then engaging in a scholastic dialogue allowed a form of language to appear. Employing gerunds and hyphens emerged as a significant discovery because they produce a language that can express rich appreciations of ways of being. Their use has allowed the sharing of ontological meanings that have hitherto been labelled as being tacit.

Limitations

This thesis is the result of ideas that have been evolving within me and my clinical and educational lives for the past decade. The work was undertaken whilst being busily engaged in both clinical and educational roles. The perplexity of my own tacit knowing drove this research. It has been affirming to discover, with the nine participating GP Supervisors who shared their stories, a direct relevance of the research with shared lived experiences of who we are and how and what we do. (This is further shared below is discussing the impact of the research) This is the first-person nature of phenomenology. Adopting an 'insider' approach could be seen as a limitation. But this research, by undertaking an hermeneutic phenomenology exploration, has found this necessary to explore the actualities of lived experience and to discover their meanings.

Impact, personal and professional

<u>Being and becoming are the ontological outcomes of this work.</u>

- An essential apprenticeship – being an interviewee in order to become an interviewer

A particular learning event defined the ontological turning point in this research. This took place in March 2018 when, as a novice research student, I was interviewed by Professor Giles and Dr Julie Ash about my own experiences of tacit knowing. The hermeneutic philosophical methodology of conducting an interview, having it transcribed, crafting stories, writing descriptions and interpretations, and then having conversations was a transformative experience. Engaging in this process as a student was an essential milestone in my learning. I learnt not only how to do phenomenological research but to appreciate how meanings that matter can arise directly and indirectly from dialogue and writing. Ideas that were known to me but unable to be properly articulated were revealed.

- My own experience of 're-presenting', 'with-holding' and 'path-marking

This is where the themes of the research are relevant to my own experience. Hermeneutic Phenomenology takes time. The sharing, describing, and interpreting of the interviewees' stories and developing the themes took many months. Having skilled and supportive academic supervisors was absolutely essential.

The process of making sense of my own research experience, from the perspective of a being a new learner, was similar to that offered as the theme, 'path-marking'. This involved 're-presenting'.

I needed to be a student to be able to 're-present' myself as a learner to become a researcher.

Once I got underway and conducted the interviews, crafted the stories and worked on interpretations and themes I was supported throughout by my Supervisors. In this experience I realised that this was no different to the 'with-holding' of the GP Supervisors in the research. To re-iterate, 'with-holding' and 'witholding' invoke the notions of grasping meanings and 'holding-with', which means wisely guiding and not directly telling. It also means allowing a learner to find and make their own path whilst being supported along the way.

- From knowledge to knowing

The beginning of the research was the perception that something was missing in how we communicated, what seemed to be the tacit dimension of our work as GPs. The initial focus was on the tacit knowledge involved in clinical reasoning. The pathway of the research veered away from a clinical to an educational one and from knowledge to knowing. Philosophically this move is from epistemology to ontology. I am grateful that contemporary phenomenological researchers in nursing (Benner, Smythe and Moules et al. op. cit.) and in education (van Manen and Giles op. cit.) have signposted how this could be done.

- It is who we are and what we do

My sense of what I was looking for was challenged and affirmed through dialogue with colleagues and reading philosophical literature. Not mentioned till now, is the experience of being able to identify with the shared experiences of the research interviewees. In many places their accounts matched my own. It highlighted that there is a collective sense of who we are and what we all do.

<u>Clinical work – involves 're-presenting' to be completely there with the patient</u>

The impact in my clinical work with patients has been to help me fully listen to what is shared by them. I am also much more attuned to perceiving what may be unsaid. Phenomenology has helped greatly.

I have known for some time these are both important and now I further appreciate their essential power for patients to share stories of their lives. The title of crafted story number 6 from GP Supervisor 3 (see Appendix 5) shares this beautifully.

To me this means to be a GP *"you need to be completely there with the patient"*.

It has struck me that this is ontological advice. In my work I need to be really in a consultation with my patients. This invokes the notion of being present and continually 're-presenting' myself into their worlds, whilst simultaneously undertaking the important clinical tasks of doctoring.

It has pleased and surprised me that patients, when offered the opportunity to participate in meaning making, can make sense of things that have troubled them. Through an hermeneutic phenomenology approach, I have found that they can reveal to themselves and myself, as their doctor, meanings which would not come to life by traditional questioning.

Educational work - 'feeding back' could be interpreted as 'path-marking'

In my educational world there has been learning of a similar nature. The one that comes to mind is with feedback. This research has supported me in adopting learner-centred, dialogue based and sense making methods of feeding back. 'Feeding' is a better word. Like the themes it is a gerund. It invokes a process not a product and possibly the notion of nourishing.

This research has reinforced the value of dialogue which facilitates learning conversations. These involve guiding (not telling) GP Registrars how to encounter, perceive, reflect upon, interpret and then respond to what actually happens in their consultations with patients. In this sense reflecting is a much more holistic undertaking. The engagement in making sense of the lived experience of consultations and the interpretations that result in meanings that matter, can be seen to be arising from a process of hermeneutic phenomenological engagement.

Shaping the themes resulted in realising the following: feedback understood in this way is aligned with 'path-marking'. This is a better way to learn how to learn, and achieve new understandings and skills for future use, than 'pass-marking'.

Research work – learning the language of ontology and phenomenology

The research laid out extensive pre-assumptions but also avoided using pre-determined terms to characterise tacit knowing. Embarking on this research journey with lots of philosophical knowledge but no language to the express the findings was a quixotic experience. Seeking and finding an ontological way with words and learning how to do hermeneutic phenomenological

research, has been a slow but ultimately rewarding outcome. These new understandings and skills continue to shape how I encounter and interpret my lived experience and can be put to further use in future research projects.

Further research – four ideas

Tacit knowing in clinical work

As mentioned above this project began with an interest in the tacit component of clinical reasoning. The Supervisors stories did include accounts of tacit knowing in clinical encounters, but the research focussed on their interactions with Registrars. They were not asked to share experiences of tacit knowing in consultations with patients. The approach and methods used in this research could be adapted to explore this phenomenon in clinical work.

Gathering more stories

This project relied upon firsthand recollections from individuals. All of the Supervisors interviewed were experienced and had spent significant periods of time in their practices. Additionally, all of them have had or continue to have additional educational roles outside of their practices. This is not uncommon, but it may mean that they do not necessarily signify a typical sample of Supervisors. Re- doing this research with a broader sample of Australian GP colleagues or undertaking a similar study in another country could be useful.

The nature of tacit knowing experienced by other health professional educators; nursing, allied health, paramedicine and medical specialities could also be explored using this research approach. Commonalities and differences with how GPs work could be researched.

Exploring the ‘long view’ of learning

Another impact comes from the Supervisors’ stories which show that they adopt a ‘long view’ of learning. This is about Registrars learning from experience, whilst engaged in training and being enabled to take on responsibility for both clinical care and learning how to become a GP. These are important skills to develop because over time and after training is concluded and Supervisors aren’t so readily available, the real world becomes the teacher.

This raises questions, one of which would be directed towards Registrars. Taking a ‘long view’ could involve interviewing Registrars after they completed their training. An ontological

approach, using hermeneutic phenomenology could explore how Registrars perceived they were different, in comparison to the start of their GP training. This may reveal if the 're-presenting' that they undertook from engaging in 'path-marking' had a life beyond their day to day interactions with their Supervisors.

Exploring the deep history of human development and its relevance to Phenomenology and Clinical Education

The use of Hermeneutic Phenomenology in researching professional practice has a short history. Gadamer didn't publish *Truth and Method* till late in his life, in 1975. Patricia Benner is regarded as the pioneer in health practice and her work *From Novice to Expert* was published in 1984. The review of the existing literature was able to briefly explore some of the literature on the evolution of human development with a particular interest in the evolution of thinking, learning and language. Insights into this deep history identifies group cooperation, transgenerational skills acquisition and apprenticeship learning as essential to our development and survival (Sterelny 2014 and Tomasello 2014). This has some commonalities with modern educational concepts especially Dewey, whose concept that learning from experience is driven by adapting to environmental challenges and opportunities, was informed by achieving an understanding of Evolution (Bacon 2012, p.48-49).

This deep historical/evolutionary perspective merits more exploration to further reveal where there may be overlap. If this is found, the enhanced shared understanding could be employed to explore the evolutionary processes involved in the educational journey of becoming a GP.

Conclusion

GP Supervisors wisely and skilfully guide their Registrars. They do this by being able to adopt multiple ways to support, supervise and teach them. Three ontological themes; ‘re-presenting’, ‘with-holding’ and ‘path-marking’ are offered from this research to foster a deeper appreciation of how this this is achieved and to enrich an understanding of the phronesis of supervision practice. Supervisors’ undertakings are anchored in the relationships they form, to help their Registrars to learn from the important interactions they have with their patients. These interactions assist Registrars to develop the multi-faceted ways of being a GP. This means that they need, like their Supervisors, to learn flexible and adaptable ways to rise to the challenge of helping patients with a wide range of problems occurring in variable contexts.

The tacit nature of this expertise has been interpreted as taken for granted because it is embedded and enacted within the everyday nature of supervision. Conceiving supervision as being ontological has enabled this to be revealed. Discovering an ontological language now offers an ability to further share these ways of being supervisors. This sharing will help us to appreciate our own expertise more fully and provide the means to guide our new supervisor colleagues.

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Endnotes

(i)

A note on 4E Cognition

This endnote is offered to introduce the concept of 4 E Cognition to expand upon the importance of two words *embodied* and *enactive* used in Chapter 4 in the section; Meanings that matter.

The three dimensions of human undertakings; feelings, thoughts and actions are easily comprehended as ways of understanding the human condition. In medicine the advent of bio-psycho-social paradigm (Engel 1977) began a move from a biologically based approach to practising with a broader humanistic and social paradigm. The development of patient and then person-centred care from the discipline of Primary Care has been a further welcome development.

Outside of medicine and in the fields of philosophy, psychology and neuroscience another paradigm has emerged. This has various names, the simplest being 4 E Cognition. The well cited academic beginning to this movement was the publication in 1991 of; *The Embodied Mind, Cognitive Science and Human Experience,* by Varela, Thompson and Rosch (Varela, Thompson & Rosch 1991 & 2016).

The key ideas are as follows; firstly, as humans we engage in our lives holistically, with human sensibility, intelligibility and bodily activity. We are living organisms and have natural, living connections and continuities with ourselves, each other, our worldly interactions and our environment.

There are various interpretations of the main concept but all of these are unanimous in rejecting the idea of reducing human understanding to a purely cognitivist perspective and science to a strictly atomistic and reductionist one. In other words the complexities in our lives and the meanings that emerge from our encounters and engagements in the world cannot be represented by an input-output, intra-mental model of the world.

Hubert Dreyfus back in the early 70's highlighted the limits of computing in his book *What Computers can't do.* (1972) A key proposition in this work is that the information processing of computers cannot offer life-world understandings. In his essay Overcoming the Myth of the Mental (2005 in Dreyfus 2014, p.107) he shares the relevance of the following slogan from Rodney Brooks who was the Director of MIT's Computer Science and AI Lab. *'The best model of the world is the world itself'*.

Thompson (2007, p.11) offers an accessible description of some important aspects of the broader concept.

> *The central idea of the embodied approach is that cognition is the exercise of skilful know-how in situated and embodied action (Varela, Thompson, and Rosch 1991). Cognitive structures and processes emerge from recurrent sensorimotor patterns that govern perception and action in autonomous and situated agents. Cognition as skilful know-how is not reducible to prespecified problem solving, because the cognitive system poses the problems and specifies what actions need to be taken for their solution.*

A further selection of contemporary references is shared in the References section. This provides the author's own limited selection of researchers in this emerging field. (Hurley 1998, Thompson 2004, Noe 2012, Ravven 2013, Hutto & Myin 2017, Johnson 2017, Newen, de Bruin & Gallagher 2018)

The pioneering philosophical work of Maurice Merlau-Ponty (Merlau-Ponty 1945 & 62) must also be recognised here. He wrote extensively on the phenomenology of perception and was the originator of the contemporary philosophical concept that our thoughts and our worldly engagements must not only be executed with our bodies, but our bodies shape and constitute the very nature of our being. This is a long way from the Cartesian intra-mental philosophy that has, and in some places, still pervades western thought.

But what are the 4 E's? They stand for; embedded, embodied, enacted and extended.

The idea here is that we can specify some elements of how we are coupled to our world. The 4 E approach is not to be understood as fully categorical. Our being-in-the-world is multidimensional and not limited to these four designated properties. However, it provides a helpful conceptual heuristic or access point. Using this, we can start to think differently about how we find ourselves in the ways we go about our lives.

The best way to share this concept is to transform it from an abstract idea into the setting of interest to this research, clinical education in a GP setting.

Let's start with the word embedded. As GP Supervisors we live and engage in and with our clinical and educational lives in different clinics, health services, hospitals, universities and training organisations. In these we are embedded within different, community, institutional, political, social, educational and cultural settings. Our work is embedded within the traditions, habits, rules, customs, languages and modes of practice of these settings.

Moving to highlighting the words, embodied and enacted.

It could be said that we use a range of embodied and enacted skills, interacting with members of the community, patients, students, Registrars and colleagues, in complex clinical and educational tasks and relationships. Onto the idea of extended. In our lives and work we extend our feelings, beliefs, convictions, thoughts and behaviours to others and into the world within which we make our lives.

There are many ways of exploring this concept. The key idea is that we interact holistically within our diverse worlds in many dynamic and complex ways. The elements of these are mutually interactive and potentially constitutive of our lives. Ourselves are not fixed. We are continuously adopting new ways of being. The insight achieved from grasping this concept is ontological. We cannot fully form our life-world meanings by attempting to explain them with only some reducible elements extracted from the whole of our being-in-the-world.

This approach has had a personal influence upon me and how I think about and engage in my clinical and educational practice. It has also been influential in the ways that I engage with and appreciate the unfolding nature of this research.

(ii)

Gnostic and pathic

The use of the terms "gnostic" and "pathic" is adopted from the work of van Manen. (2014, p. 268) The intent behind using "gnostic" and "pathic" is to offer a more nuanced way of contrasting the cognitive undertakings involved in medicine to those more commonly referred to as empathy and sympathy. In particular the historical meaning of the term "gnostic" arising from Gnosticism is not intended or implied here.

(iii)

Nagel 2014

Jennifer Nagel in the Introduction to her primer on Knowledge, offers multiple comments positing the concept that knowledge lives within people, rather than being defined by an independent factivity.

- *"the continued existence of knowledge ………depends on the existence of someone who knows"*. p.2.
- *"there is no knowledge that dangles unattached to any subject……..knowledge always belongs to someone"*. p.3.
- *"More precisely, we should say that knowledge always belongs to some individual or group"*. p.3.

(iv)

Delaney 2005

Delaney's contribution in the Cambridge Dictionary of Philosophy on *Dewey*, contains the following entry which expands upon this notion.

"…. Dewey felt that one of the cardinal errors of philosophy from Plato to the modern period was what he called 'the spectator theory of knowledge '. Knowledge had been viewed as a kind of passive recording of facts in the world and success was seen as a matter of the correspondence of our beliefs to these antecedent facts. To the contrary, Dewey viewed knowing as a constructive conceptual activity that anticipated and guided our adjustment to future experiential interactions with our environment" (pp.229-230).

(v)

Dewey 1938

An extract from Dewey's Experience and Education, 1938 captures this concept.

" ….   education in order to accomplish its ends both for the individual learner and for society must be based upon experience--which is always the actual life-experience of some individual" (pp.980-909).

(vi)

Dewey 1938

The following quote from the same source as (iv) highlights that not all experience is educative.

"The belief that ah genuine education comes about through experience does not mean that all experiences are genuinely or equally educative". (pp.169-170)

(vii)

Zappavigna 2014

Zappavigna extends the link between living and knowing by positing that it is language that bridges living and knowing with the creation of meaning.

"….. the process of knowing is a process of transforming experience into meaning with language" (p.1).

(viii)

Endnote to subheading; Subjective and Objective

The intent of this section is to represent the authenticity of this research in a way that does not allow its validity to be compromised by the divide between Objectivism and Subjectivism.

Firstly, the position offered is built upon arguments supported with references, in the preceding section of the proposal, Knowledge and Knowing: Tacit and (not or) explicit. A foundational figure being Michael Polanyi. These are then further developed in the section, Knowledge and Knowing: Subjective and (not or) objective with selected ideas from Putnam, Dreyfus and Taylor, Gopnik, and Tomasello. (also referencing Sterelny and Dewey)

Extracts from the work of Ravetz, Godfrey-Smith, Kuhn, Mitchell, Varela, Thompson and Rosch and von Foerster are offered as preludes to the main idea put forward from Nagel. This is that an un-situated, uninhabited view of science leads to "Nowhere".

Additional referencing from Baggini leads to the final proposition that the attainability of collective human agreement, is neither purely objective nor subjective (if they are set up to be understood in a polarised way).

The position that follows is; valid interpretations and authentic judgements can be made intentionally and collectively with human deliberations that work in real life.
In the lives we lead we need to be able to configure our ideas within the "how, who, when, why and what" we actually experience. Authenticity in human undertakings arises from much more than neutral arbitrations of validity, sourced and supported by fully abstracted benchmarks.

The research has found additional support for this position in the following selected sources;

- The inseparability of ourselves from our world is the intrinsic concept within 4E cognition (see Endnote[i] above).

- Heidegger and Gadamer.

  Heidegger (2010) who built upon, but also significantly revised ideas from Husserl, developed ontology and phenomenology into a form that created a dramatic rupture with Cartesian and Kantian thought. In the context of this discussion, for him the German word Dasein or "being-in-the-world" means to be in-the-world and not an anonymous spectator of it.

  Gadamer (2013) reinforced this key idea by shoring this up with the view that we are always informed and formed by our tradition and history and cannot escape from it. He advocated that we are always assessing different perspectives and he developed this under the notion of a fusion of horizons. Adopting a neutral, ahistorical and disconnected view of ourselves was therefore impossible for Heidegger and Gadamer.

- Gilbert Ryle (1900-1976) was a prominent 20th century British philosopher whose work is often described as ordinary language philosophy. His book *The Concept of Mind* (1949) attacked the mind-body split that results from Cartesian Dualism. His well-known phrase for deriding this is *the ghost in the machine.* This analogy references the ghost as the mind disconnected from its body, the machine.

  He characterised knowledge into two different entities; know-how and know-that. (Ryle 1945) The broad difference between them is; 'knowing how' works in people and having more traditional knowledge is 'knowing that'.

- Hannah Arendt. In The Human Condition (Arendt 1958) she persuasively argues that meaning comes from engagement in worldly endeavours. She calls this Vita Activa in contrast to Vita Contemplativa. The latter involves withdrawing from the world in order to form understanding. Arendt sees this as a flawed undertaking. She also promoted the idea that narrative can share meanings without having to rely upon conceptual explanations. The following quote from a chapter about Isak Denisen in her 1968 book *Men in Dark Times* captures this eloquently; *"It is true that storytelling reveals meaning without committing the error of defining it, that it brings about consent and reconciliation with things as they really are…"* (p.105).

- Ethnographic research showing that doctors create and follow their own "Mindlines" and collectively integrate them into practice, rather than simply applying externally applied guidelines to their work (Gabbay & Le May 2004, Wieringa & Greenhalgh 2015)

- Philosophical positions reached by Bernard Lonergan and Bruno Latour as promoted by Engebretsen and Wieringa and colleagues (Engebretsen et al 2015, Wieringa et al. 2017)

- In an overview of Pragmatism, Bacon (2012) shows that working with the acceptability and utility of ideas, when assessed pragmatically, is a much more realistic human undertaking, than looking for absolute evidence. This can be supported by a century of work on Pragmatism starting with Pierce and James and further developed in the work of Dewey, Rorty, Bernstein and contemporary academics.

  Pragmatism grew out of Pierce's combination of three major ideas; the essential role of human interpretation in establishing understanding the limits of logic, with the offering of abduction as an adjunct to inductive and deductive logic, and the view that finding the utility of concepts is a more fruitful endeavour than searching for assessments of their validity abstracted from lived experience. Inherent in this is the common-sense belief that absolute proofs cannot be found for everything that happens in our lives.

  Translating these ideas to worldly affairs, the pragmatic stance is based on characterising the solidity of interpretable, justifiable and useable human undertakings. The collective acceptance of these can then lead to strong, agreed upon reasons that people can own and adopt, rather than looking for perfect evidence.

(ix)

A note on Dreyfus and Taylor

Charles Taylor (1931) is a Professor Emeritus at Magill University, Montreal Canada. Hubert Dreyfus (1929-2017) was a Professor of Philosophy at University of California, Berkeley. They shared an interest in phenomenology, which was not typical of North American philosophers in the latter part of the twentieth century. This included their views that a fully representational approach cannot make sense of the ways we lead our lives. This is reflected in their joint 2015 publication, *Retrieving Realism.*

(x)

Other themes considered prior to selection of the final three have been;

- A bundle from a research meeting on 3rd December 2019 with Supervisors DG and JA; silence, care, called upon, trust, leaping in and leaping forward, thrownness, being at home or not at home and being wilfully tacit.
- Knowing with-without naming
- 'Question-able' practitioners
- 'Unruly' practitioners
- Following to be able to lead
- Transforming not informing
- Being absent to be present
- Suspenseful supervision
- Being conversationally competent
- Looking more than listening
- Being invisibly visible
- Wandering and wondering.

(xi)

A note on the use of metaphor

Employing the idea of a path can be seen as choosing a metaphorical reference. There is a potential conceptual trap here. This is that a metaphor can be used as a shorthand statement to directly represent a living complex matter with a name. Mark Johnson and George Lakoff highlighted forty years ago in *Metaphors We Live By* (Lakoff & Johnson 1980) that metaphors are much more than *"a set of literal similarity statements"* (Johnson 2017, p.13). Their important contribution is that metaphors engender embodied and enacted inferences and thoughts. Additionally, that they can infer multiple meanings. Johnson uses the term "*polysemy"* (p.14) for this and describes them as *"experienced correlations"* rather than *"abstract conceptualization and reasoning"* (p.15). This is an important ontological notion.

The rationale for mentioning it is to highlight the utility of the metaphor in the search for different experiential meanings (note; the plural) rather than imposing it as an unifying conceptual explanation. In this work the notion of a path is a lead into that of a journey, the learning journey. In line with Lakoff and Johnsons insights, the interest here is how the GP Supervisors wisely guide their Registrars whilst journeying on the path.

Appendices

Appendix 1 - Michael Polanyi's tacit knowledge and knowing - an overview

"Thought can live only on grounds which we adopt in the service of a reality to which we submit".

Polanyi, M. The Tacit Dimension p.xix.

Prologue – the tacit nature of knowledge and knowing - some introductory ideas

Knowledge that is known, understood and enacted, but not easily articulated, works in many domains in which people endeavour to share meaning.

There are two day to day examples that readily come to mind which can begin an exploration.

The first is that which relates to recognition. The classic exemplar is being able to recognize a friend's face in a crowded cityscape. The rapid perception and assessment that is involved results in intuitive pattern recognition. The viewer has the knowledge to recognise a friend, however when asked, would struggle to adequately find words to define all the identifiable physiognomic features that induced the idea that it was the face of a friend. In this sense the knowledge was held and used by the knower, but unable to be articulated in a way that reflected an accurate portrayal of the phenomenon of rapid recognition.

The other popular notion is a form of knowledge with an embodied and enacted dimension. It is a phenomenon expressed as a skill that seems automatic. It allows practical, as well as professional tasks to be undertaken without obvious conscious deliberation. Its apparent non-conscious dimension is closely aligned with the concept of the attainment of expertise. The classic exemplars are; riding a bicycle, playing a musical instrument, cooking, performing a craft and executing technical or professional activities.

These two examples are tacit in the sense that the complete nature of their character cannot be readily articulated. Polanyi sought to understand these phenomena by exploring the idea of focal and subsidiary awareness, which is mentioned further on in this overview.(ii)

Polanyi also introduced deeper appreciations of how to understand tacit knowledge. One that is useful to offer in this preamble is that it forms the foundations, upon which, that we as humans, construct and comprehend our world views. In this sense, tacit knowledge is better understood as a process of knowing and not a product of thought. This form of knowing dwells and works within the knower. This personal interior design feature has a power which acts quietly and autonomically. Its work is to integrate perception, conception and action, which then forms intrinsic understandings about self, others and worldly objects and events.

These introductory ideas are offered to begin further exploration of the concepts of tacit knowledge introduced by Michael Polanyi.

Biography – Science, discovery and the tacit dimension

Michael Polanyi 1891- 1976 was born into a liberal Jewish family in Hungary. He began his professional life in medicine and worked as a doctor for a short time. His initial substantive academic career was as a scientist who worked in the field of physical chemistry, initially in Germany and then with the rise of Nazism he moved to Manchester UK. In 1948 he moved from his work in chemistry at Manchester University to a chair in social studies. In this role and later academic appointments he set about to draw upon the breadth of his experience and the depth of his intellect to explore the way the world works by understanding the nature of knowledge, with scientific knowledge being his initial focus.

His life spanned two World Wars and the Cold War. The relevance of this history is germane to the development of his views. He became involved in the wider economic, social and political issues that engulfed the world during his life. He witnessed firsthand that science could be politically corrupted. This arose from his visits to Stalinist Russia in the 1930's. (Jacobs & Allen 2005, Gelwick 2004)) Polanyi wrote that if science is not understood or allowed to be pursued independently, its foundations will be compromised. This is an important theme in his writings. He championed the independence of science and promoted that this is the base for the open pursuit of discovery.

"…science offers us an aspect of reality, and may therefore manifest its truth in-exhaustibly and often surprisingly in the future" (Polanyi 1966, p.69).

His views on science also shaped a strong belief in the importance of academic freedom. This aspect of his world view is mentioned as it influenced the development of his ideas relating to science and concepts of knowledge. Polanyi did not occupy a defined place in contemporary philosophical circles and schools of thought. His approach did not sit within a contemporary philosophical model or school.

The disadvantage appears to be twofold. His ideas have not achieved widespread academic status within Philosophy. In addition, they have not been subjected to the level of philosophical critique, had he been a more traditional professional philosopher. The advantage is the originality and breadth of his ideas. His work explores concepts such as knowledge, knowing, understanding, meaning, belief and discovery. These are formed by his engagement in medicine, Physical Chemistry and the historical, political and social issues of his time. Whilst not using traditional philosophical language he explores deeply into the epistemological, phenomenological and ontological domains of the human world.

Polanyi's enduring legacy is the promotion of the concept of the tacit dimension.

A common understanding of the concept of knowledge is that it can be described, spoken about and written. Polanyi's foundational idea is that knowledge rests and depends upon the presence of understandings that are known, understood but silent. This is where the descriptor tacit is used. However, there is much more to this than the idea of knowledge being ineffable.

As mentioned, Polanyi's initial academic discipline was Physical Chemistry. His views on the nature of knowledge grew from his reflection on the nature of scientific knowledge.
He maintained that science, despite its empirical basis, depends on accepted norms of understanding and beliefs (Nye 2011).

It is intriguing that a scientist would develop an epistemology that challenged the orthodox view of objective knowledge. His reasoning is based on two main viewpoints.

Firstly, his view is stated directly. In his writings, he argues that it is impossible to have a pure form of objective de-contextualised knowledge. This does seem like a counter intuitive position for a physical chemist to adopt. His status as a highly regarded scientific insider adds to the power of his arguments. He is not a Relativist and his position is decidedly not anti-science, but his ideas demand an enquiry deeper into and beyond the presumptions about the formulations and outputs of science.

Secondly, his work posits the view, it is the tacit component of knowing that generates an openness to originality and discovery.

Polanyi expressed his advocacy for freedom of thought by highlighting the need for science to maintain its tradition of "*creative dissent*". By this he means that scientists need to both, hold and challenge their own beliefs. In *The Tacit Dimension*, he directly states that tacit knowledge is needed for both the pursuit of, and the anticipation of discovery.

Tacit knowledge, knowing and power

"Tacit knowing achieves comprehension by indwelling, and that all knowledge consists of or is rooted in such acts of comprehension" (Polanyi 1966, p.55).

This quote captures two of Polanyi's key concepts; knowledge is personal and has understanding as its central characteristic. Without specifying it, he is opening a discussion on the long standing philosophical tension between, the knowledge that relates to the facts of a proposition in contrast to knowing and comprehending its value. (Putnam 2002)

"If you shift your attention from the meaning of a symbol to the symbol as an object viewed in itself, you destroy its meaning" (Polanyi 1959, p.30).

He addresses this tension by taking the focus away from an exploration of knowledge as a free-standing entity. It is into the domain of the holder of knowledge, the knower, that he turns his attention. It is in assessing the nature of knowledge within the knower that he formulates his views. The key concept is personal knowledge. (Polanyi 1958) This explores the nature of knowledge as an indwelling knowing within the subject. The subject is the person who holds the knowledge, the knower. Polanyi further explores how the knower holds and participates with all forms of knowledge and knowing.

He does not attempt to argue that knowledge, held by a person, can be regarded as objective, in the orthodox sense that it fulfils the orthodox criteria of scientific detachment. To the contrary, his position is that it is a person's participation in an *"upholding"* process that gives personal knowledge its validity.

"Man must try forever to discover knowledge that will stand up by itself, objectively, but the moment he reflects on his own knowledge he catches himself red-handed in the act of upholding his knowledge. He finds himself asserting it to be true" (Polanyi, 1959 p.11-12).

The emergent notion from this is uncoupling the validity of knowledge from its place within the traditional notion of detached objectivity.

Polanyi's intent however is not to be promoting a relativistic position. But where does that leave knowledge that we explicitly hold, is empirically based and is valued as being scientifically legitimate?

This where he provides two broad categories of knowledge. Explicit, which he also terms as formulated knowledge and tacit, unformulated knowledge. His key premise is that, within the subject, the latter shapes the process of comprehension of the former. The following direct quote summarizes this position.

"….. human knowledge is of two kinds. What is usually described as knowledge, as set out in written words or maps, or mathematical formulae, is only one kind of knowledge; while unformulated knowledge, such as we have of something we are in the act of doing, is another form of knowledge. If we call the first kind explicit knowledge, and the second, tacit knowledge, we may say that we always know tacitly that we are holding our explicit knowledge to be true" (Polanyi 1959, p.12).

This linking of the two types of knowledge by creating a bridge between them within the knower is an insightful concept. The link is not just a static, conceptual one. Its premise rests upon the notion that personal knowledge is both indwelling and is also dynamic.

It is about knowing which acts within the knower.

Polanyi's additional insight is that it is the tacitly held personal knowledge that generates and drives this process and thus has tacit power. This power is what helps the knower make sense of the world through the skilful comprehension of both formulated and unformulated knowledge. Polanyi asserts that it is also the same power that allows for new knowledge to be pursued, anticipated and discovered.

<u>The dangers of exactitude</u>

"An unbridled lucidity can destroy our understanding of complex matters" (Polanyi, 1966 p.18).

Polanyi details a further warning in his work. His concern relates to striving for exactitude. His point is that an excessive focus on details will not result in the establishment of overall meaning.

"…the belief that, since particulars are more tangible, their knowledge offers a true conception of things is fundamentally mistaken" (Polanyi 1966, p.19).

Moreover, he states it can destroy the overall understanding of knowledge and impair its evolution.

"Scrutinize closely the particulars of a comprehensive entity and their meaning is effaced, our conception of the entity destroyed" (Polanyi 1966, p.18).

To briefly summarise, Polanyi's key concepts about exactitude are as follows. The meaning and value of a proposition cannot be fully provided by examining only its explicit factual content. His additional position is that attempts to do so will corrupt comprehension and further development.

Is there a structure to Polanyi's tacit dimension?

In *The Tacit Dimension* he describes four aspects; functional, phenomenological, semantic and ontological. However, his exploration of these is more of a discussion than a philosophical inquiry.

In *Personal Knowledge*, a huge range of ideas are explored, however Polanyi does not commit to a concise and explicit overview of his concepts. (i)

This overview has distilled four key ideas taken from Polanyi's work:

- Tacit knowledge is valid despite being unformulated and inexact.
- Tacit knowing within human experience creates meaning.
- Tacit power creates this meaning by the active participation of the knower.
- Tacit power anticipates and pursues further discovery.

Epilogue

The term tacit knowledge is attributed to the work of Michael Polanyi. His major publication *Personal Knowledge* published in 1958 introduced the term and the concept. He continued to develop his ideas and two further works were published for popular dissemination on the topic. These were *The Study of Man* 1959 and *The Tacit Dimension* 1966. Polanyi continued to publish on this and many other issues.

The ideas of tacit knowledge, knowing and power grew from his reflections on the nature of scientific knowledge and how it could be used and misused. In many ways, it can be seen that Polanyi created a paradigm shift relating to the nature of knowledge and knowing, out of his scientific and philosophical work which was forged by the dramatic history of his time.

His work is conceptually and intellectually rigorous but did not comply with contemporary philosophical norms or lead to a fully defined model. As such it maintained its openness and avoided the trap of being fixed into the exactitude to which he was opposed.

The uniqueness of his concept of the tacit dimension is the notion, that tacit knowing leads to an understanding of propositions that are shaped into meaning and open to discovery by the knower in life-world settings.

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Footnotes

(i)

This is problematic for achieving a traditional synthesis. Jacobs, an Australian Polanyi scholar, provides a useful overview of Polanyi's work in an exploration of knowledge within the practice of caring professions. (Jacobs 2009) He explores Polanyi's work alongside that of Gilbert Ryle and Michael Oakeshott under the conceptual framework of theories of embodied knowledge. Within this approach, he identifies three of Polanyi's main concepts. These are directly quoted from a table in the article. (Jacobs 2009)

(1) Tacit Knowledge (knowledge that is unformulated) and express (formulated) knowledge, either of which may concern facts, procedures, values.

(2) Focal (directed) awareness, and objects of which an agent's awareness is subsidiary (unspecifiable).

(3) Personal knowledge (the product of an agent's interpretation, intuition and other such skills) and impersonal knowledge (achievement and use of which is mechanical rather than skilful)

(ii)

So far, the concept of focal and subsidiary awareness has not been mentioned. This aspect of Polanyi's work is more widely understood, especially in the study of human performance. His well-known example is playing the piano. Here the musician is described as focussing on the music and any awareness of the fingers on the keyboard is subsidiary. Riding a bicycle is about engaging in moving and not the bike itself. This changes if there is a flat tire and then the focus needs to change.

The notion that people can know and act skilfully but have either no awareness or only a subsidiary awareness of their actual bodily actions is generally accepted. Specifically, in a training environment, the development of what is now known as unconscious competence, is well understood as being part of the development of expertise. This is a field of significant inquiry in the disciplines of education, psychology and philosophy.

Appendix 2 –Learning how to know: What else is in this bundle of beliefs?

Learning how to know emerged as a pre-understanding from a diverse range of academic sources. Exploring the links between knowing, living, meaning, experience, learning and language helped in its formulation. Grouping these into couplets offered a way of making the connections leading to this important notion (See Footnote 7).

Knowing and living

- Knowledge lives in people (Nagel 2014). (Endnote[iii])
- *"Hermeneutic phenomenology is a human science which studies persons"*. (Van Manen 1997 p.6.)
- Human knowing is a personal and social activity, that guides future engagement in life-world settings. (Dewey, as outlined in; Delaney C F 2005) (Endnote[iv])

Meaning and experience

- Heidegger's *being- in- the world* is a phenomenological perspective that can be employed to make sense of how ....*"an individual and the world co-constitute each other"* (Hopkins et al. 2017, p.22).
- Experiences, as understood phenomenologically *"exist only insofar as something experienced and intended in them"* (Gadamer 2013, p.60). They are not simply recollected representations of life events.

Learning and language

- Learning involves participation, it happens by doing (Dewey 1938). (Endnote[v])
- Not all experience results in learning (Dewey 1938). (Endnote[vi])
- Learning is relational. *"Through others we become ourselves"*. (Vygotsky in Reiber 1987)
- Language, by bridging living and knowing, creates meaning (Zappavigna 2013). (Endnote[vii])
- Language uses symbols to share meaning (Bruner 1990 p.11).
- All symbols need interpretation (Peirce, per Atkin 2013).

Appendix 3 – Naming and Knowing: Additional references employing verbs

The following quotes come from a diversity of academic sources. They are presented to signpost additional notions employing verbs that could emerge in the research (See page 50).

> *"This act of appearing is the gamble of being a person"* (Knott 2015, p.105).

> *"The world does not show up as presented on a viewing screen; it shows up as the situation in which we find ourselves"* (Noe, 2012 p.3).

> *"Feelings based in the body and extended to the fully cultural and biographical self connect us to the world"* (Ravven 2013, p.364).

> *"The mind does not passively receive the imprint of facts"* (Godfrey-Smith 2003, p.21).

> *"There is a name for the transformation in you that makes it possible for you first to perceive what is there before you; it is called understanding"* (Noe 2012, p.1).

> *"Both individually and collectively, in part we construct our niche; in part we adapt to our niche"* (Sterelny 2014, p.xiv).

> *"We are who we are because of what we learn and what we remember"* (Kandel 2006, p.10).

Appendix 4 - Story titles

Nine interviews were conducted with Victorian Supervisors by face to face or 'Zoom' meetings between June and October 2019. Each interview was recorded and then transcribed. The transcripts were then turned into crafted stories. Each story has a title taken as a direct quote from the participants. There are a total of 47 stories.

<u>GP Supervisor 1.</u>

It was almost like there was a glass pane between her and the patient

She's a normal GP that's like the rest of them

We are going to solve these problems together

The tone of the consult is often something that is a very subtle understanding of what is going on

She was in the boundary but playing to a different coach

<u>GP Supervisor 2.</u>

There are times when I don't have the confidence in my own abilities

I think we all practise in that way with experience, we just take shortcuts because we know that that's the way to go

Well I'd put myself in the situation exactly from the point of view if I was the patient

I'm at a late stage in my career, a lot of what I do is based on gut feelings now

I'd be sitting at home, I might be watching TV and suddenly a patient would come into my mind

I'm telling them that they should have fresher and more recent clinical knowledge than me and that I want to learn some of that from them

You know something happens, it tweaks a memory of another patient I've seen with something similar that's happened in the past and I'll tell a story

<u>GP Supervisor 3.</u>

A widow maker disease

Being very present in the consultation

There's something we're not picking up

You're never included in that circle

Because you've seen someone suffer in your family

You need to be completely there with the patient

Front and centre of this is that person's dignity

GP Supervisor 4.

I hope that I give them a feeling that they just have a stab at it

There's a lot of cards stacked against the learner

I'll sit on a stool

The problem with standing is that it gives this transitory thing

What is it that you want of me?

I just had this rising sense of frustration

But it matters to me how I impact on the Registrars sense of self and self-worth

Then not only does the phone go but I actually disappear

To be able to tip in just a little bit of teacher

GP Supervisor 5.

What she didn't do was shut up and listen

What I'll often do is ask an open question to the patient

It creates an ally for managing uncertainty

You can see them in a relatively short period of time growing in knowledge and contextual understanding

There's a like-mindedness about the others involved

GP Supervisor 6.

How do you reach a point with yourself where you are comfortable that you've done enough?

What does it feel like when you are actually doing it?

GP Supervisor 7.

You get to an endpoint

How was I to know?

It takes a long time to scratch the surface and get that out

Maybe the patient didn't ever feel that he had the opportunity to express the loss

Then that's almost like a box ticked too

Your patient is a series of numbers that are results.

So now she doesn't say it anymore

GP Supervisor 8.

I was telepathically trying to get the Registrar to call the Supervisor

We just couldn't ... we just knew

No, you can't do that

GP Supervisor 9.

Can you come and have a look at a foot?

But what's really bothering her is her painful bunions

Appendix 5 - Examples of crafted stories with descriptions and interpretations

The two stories appended have been selected from the total of 47 crafted out of the nine individual interviews with GP Supervisors

GPS1

Interview with GP Supervisor 1.

Crafted story number 1.

"It was almost like there was a glass pane between her and the patient"

The pool of patients is sort of shared with our Registrars. But we've got the advantage of knowing the cultural, social, economic backgrounds of these patients. Whereas unfortunately, the Registrars are coming in cold and don't know any of that and if a Registrar either can't read the cues that we have sort of acquired over the years they often flounder very subtly over some of the points.

I can remember having a Registrar from an overseas country, who was here for six months and she struggled and it wasn't an issue with regards to her medicine. It was more an issue with regards to the way she read the situation and it was hard to put it down into words what the issues were.

The main concerns we were having with her was just purely the social cues, the cultural cues that she was unable to really pick up on and because of that, patients didn't feel always satisfied with her conclusions and her methods and there was no one coming back to her. She was only seeing patients really only once and then they would return to see the other docs.

Whereas other Registrars would get that follow-up and by the end of their term they'd have you know lots of patients that they could call their own, but this Registrar couldn't … was never able to do that and you couldn't really explain those cultural cues to her or teach that because she um was just almost inert to that.

So that was a real struggle.

But then we've had another Registrar who was from the same country and who was able to understand all that and she became quite a favourite of the community. I think it was something that was more innate.

Returning to discuss the first Registrar.

> *So that, that was very difficult, when you'd see this Registrar in a consultation, she was almost mechanical, and she sort of wasn't sort of, giving any of herself away.*
>
> *She was very much almost robotic and from a medical, point of view she picked up all the right things and made the correct diagnosis and the management plan was always fine. But because it was, I suppose robotic, but you couldn't explain that to her, you couldn't ask her to show more of her personality.*
>
> *When she was in the tearoom, she was better, she was more relaxed, so whether it was an anxiety thing I'm not sure. Whereas the other Registrars that we've had from overseas have been able to overcome that barrier or haven't perceived that as being as much of an issue.*
>
> *I've been in the room with her and it was awkward from my perspective sitting there because of her manner. No not so much her manner, she wasn't rude.*
>
> *It was almost like there was a glass pane between her and the patient and the interaction was just missing something that you couldn't put your finger on.*

Description

In this story the Supervisor (GPS1) describes a particular Registrar not being able to read the cultural and social cues expected of GPs in the clinic. This resulted in patients not feeling satisfied with her care and she didn't build up a following during her term. The story explores this and the analogy of a *glass pane between her and the patient* is offered as a way of comprehending what may have been happening.

Interpretation

In this story GPS1 begins by describing that; *the pool of patients is sort of shared with our Registrars.* Before she discusses a particular Registrar she shares a main idea that the GPs in the clinic know the *cultural, social, economic backgrounds* of the patients and that Registrars don't have that background and if they *can't read the cues …..they often flounder.*

She goes on to discuss how a Registrar struggled because she couldn't *pick up on* and *read* the situation, and social and cultural cues. This resulted in patient dissatisfaction and lack of follow up. GPS1 also states; *it was hard to put it down into words what the issues were* and furthermore that this could not be explained or taught.

What the Registrar was not doing is not fully explored. GPS1 shares the view that it was not just because she came from an overseas country, as another Registrar from the same country did not have these difficulties. GPS1 thinks *it was something that was more innate.*

The Registrar's approach is described in generally descriptive terms as *mechanical* and *robotic*. The Supervisor felt something was missing and couldn't put her finger on it. GPS1 does briefly mention *you couldn't ask her to show more of her personality.*

The notion of a *glass pane* is offered as a way of understanding the lack of interaction

How can this be understood in the context of this research?

GPS1 does know that there was a problem with this Registrar in how she communicated and connected with the patients in the practice. GPS1 does not know this in enough detail to offer a more nuanced description of what the Registrar is or is not doing.

However, going back to the first paragraph, there is a sense that the overarching answer is situated in the first sentence. Registrars share the *pool of patients* with the other GPs and an essential skill is to *read the cues* to understand the background of the patients. Not being able to do this means a Registrar will *flounder*.

But a glass pane, unless it is opaque, should not by itself prevent the action of reading. So, there must be more to this.

GPS3

Interview with GP Supervisor 3.

Crafted story number 6.

“You need to be completely there with the patient”

> *When you’re in a consultation you need to be focused, you need to be, not distracted.*
>
> *It concerns me why the Registrars focus and are more worried about … I recently had a conversation with one of them and she was rushing and she said, “I’m always worried about running late and that people will complain”.*
>
> *So I said, “think about it for a minute, they can always leave. We have the privilege, we have other doctors in the group that that may be able to see patients if, we’re running a bit behind, but if you rush through something and you miss something, you’re going to have potentially a much bigger complaint and a bigger problem, than people who are whinging in the waiting room and putting pressure on the staff, so you know we all deal with that.”*
>
> *That was sort of a profound … to me it was important for her because I could see she was getting … and maybe it reflected that she’d been annoyed having to wait to see a doctor. She was in a technical profession in another life and she’s an older Registrar.*
>
> *Being on time isn’t always the most important thing.*
>
> *I think people by and large want to come to a doctor, they want to be heard, they want their concerns heard. It’s obviously not great if you run massively behind, but it shouldn’t be front and centre of your concerns. So it’s almost like a distractor to your practice … the reality of time management.*
>
> *Distractibility is a big danger in clinical practice, because you need to be completely there with the patient.*

Description

This story seems to be about time. But it is really about the importance of being *completely there with the patient.* More particularly it’s making sure that patients have their concerns heard. GPS3 states that this is more important than *the reality of time management*.

Interpretation

Through the concern of her Registrar worried about running late, GPS3 offers a radical re-interpretation. *The reality of time management* is a distractor to the essential undertaking of being *completely there with the patient.*

This story builds upon the ideas shared in story number two, which was about being very present in the consultation. Here we hear that it is about needing to be.

When you're in a consultation you need to be

focussed,

you need to be,

not distracted.

…. because you need to be

completely there with the patient.

An almost taken for granted word in this bundle is '*in*'.

It seems that being *in a consultation* creates a different perception of time. In a consultation the imperative is *to be completely there*. This means not anywhere else. It means not in the *waiting room* and not in activities such as *rushing* or *running*.

This creates another interpretation of being present and being there.

The simple word '*in'* is able to do some additional work here.

GPS3 is not ignorant of measured time, but it emerges that being in time is more important than being on time.

Appendix 6 - Copy of promotional flyer for recruitment

Request to get involved in a GP Supervisor Research Interview

The nature of tacit knowing experienced by GP Supervisors as they teach General Practice Registrars

Dear GP Supervisor Colleague,

Have you had the experience as a supervisor, when you are interacting with your Registrar in assessing or managing a patient and you know what is going on but struggle to explain it explicitly to the registrar?

This form of knowing is often described as tacit.

It constitutes a lot of the "taken for granted" knowledge and skill of practitioners of all disciplines. It is generally understood as a key feature of expertise. Words that are used to describe this phenomenon include; intuition, gut feelings, instinct and practical wisdom. But our current language and academic literature falls short of providing a satisfactory comprehension of its nature.

My research is seeking to explore this further with experienced GP Supervisors. The commitment involved is an hour-long interview with myself which will be recorded, transcribed and then further discussed. I work as a Medical Educator in the NT and my clinical practice is now based in Shepparton. The interviews could take in your practice in Victoria or by *Skype* or *Zoom*.

The stories and the scripts from each participant's interviews will form the data to be interpreted and written up. It would be great if you could participate, please let me know by sending me an email.

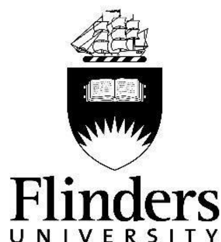
Regards

Hubert van Doorn

hubert.vandoorn@ntgpe.org

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee in South Australia (Project number 8299)

Appendix 7 - Copy of consent form



CONSENT FORM FOR PARTICIPATION IN RESEARCH

(Interview)

The nature of tacit knowing experienced by GP Supervisors as they teach General Practice Registrars

I ………………………………………………………………………………………………

being over the age of 18 years hereby consent to participate as requested in an interview for the research project with the title listed above.

1. I have read the information provided.
2. Details of procedures and any risks have been explained to my satisfaction.
3. I agree to audio recording of my information and participation.
4. I am aware that I should retain a copy of the Information Sheet and Consent Form for future reference.
5. I understand that:
   - a) I may not directly benefit from taking part in this research.
   - b) Participation is entirely voluntary, and I am free to withdraw from the project at any time; and can decline to answer particular questions.
   - c) While the information gained in this study will be confidential and published as explained, on the basis that the interview will be undertaken in my place of employment, anonymity cannot be guaranteed.
   - d) I may ask that the audio recording be stopped at any time, and that I may withdraw at any time from the session or the research without disadvantage.
6. I understand that <u>only</u> the researchers on this project will have access to my research data and raw results; unless I explicitly provide consent for it to be shared with other parties

Participant's name……………………………….…………………….........................

Participant's signature…………………………………………Date…………………...

I certify that I have explained the study to the volunteer and consider that she understands what is involved and freely consents to participation.

Researcher's name…………………………….…………………………..................

Researcher's signature……………………………………..Date…………………….

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee in South Australia (Project number 8299). For queries regarding the ethics approval of this project, or to discuss any concerns or complaints, please contact the Executive Officer of the committee via telephone on +61 8 8201 3116 or email human.researchethics@flinders.edu.au

Appendix 8 - Letter of introduction

Date

LETTER OF INTRODUCTION

Dear Dr …………,

This letter is to introduce Dr Hubert van Doorn who is a Master of Clinical Education student in the Prideaux Centre for Research in Health Professions Education at Flinders University.

He is undertaking research leading to the production of a thesis on the subject of:

The nature of tacit knowing experienced by GP Supervisors as they teach General Practice Registrars.

He would like to invite you to assist with this project by agreeing to be involved in an interview which covers aspects of this topic. No more than an hour on one occasion would be required.

Be assured that any information provided will be treated in the strictest confidence and no participants will be individually identifiable in the resulting thesis, report or other publications. You are, of course, entirely free to discontinue your participation at any time or to decline to answer particular questions.

Since he intends to make an audio recording of the interview, he will seek your consent, on the attached form, to record the interview, to use the recording or a transcription in preparing the thesis, report or other publications, on condition that your name or identity is not revealed, and to make the recording available to members of his supervisory team at Flinders.

It may be necessary to make the recording available to secretarial assistants (or a transcription service) for transcription, in which case you may be assured that such persons will be required to abide by a confidentiality agreement which outlines the requirement that your name or identity not be revealed, and that the confidentiality of the material is respected and maintained.

Any enquiries you may have concerning this project should be directed to me at the address given above or by telephone on (+61 872218807or e-mail (lambert.schuwirth@flinders.edu.au

Thank you for your attention and assistance.

Yours sincerely

Professor Lambert Schuwirth

Strategic Professor in Medical Education

College of Medicine and Public Health

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee in South Australia (Project number 8299) For queries regarding the ethics approval of this project, or to discuss any concerns or complaints, please contact the Executive Officer of the committee via telephone on +61 8 8201 3116 or email human.researchethics@flinders.edu.au

Appendix 9 - Information sheet

INFORMATION SHEET

GP Supervisors

Title: The nature of tacit knowing experienced by GP Supervisors as they teach General Practice Registrars.

Researcher

Hubert van Doorn

Student, Master of Clinical Education by Research

Prideaux Centre for Research in Health Professions Education

College of Medicine and Public Health

Flinders University

Supervisors

Professor Lambert Schuwirth

Strategic Professor in Medical Education

Prideaux Centre for Research in Health Professions Education

College of Medicine and Public Health

Flinders University

Professor David Giles

College of Education, Psychology and Social Work

Flinders University

Dr Julie Ash

Prideaux Centre for Research in Health Professions Education

College of Medicine and Public Health

Flinders University

Description of the study

This study is titled: *The nature of tacit knowing experienced by GP Supervisors as they teach General Practice Registrars.*

This project will investigate a form of knowing that occurs in practice-based teaching situations. This is when GP Supervisors know what is happening in clinical interactions with

GP Registrars and what needs to be done, however, the knowing is tacit. This means it is not able to be explicitly articulated.

GP Supervisors who volunteer will be asked to share experiences when this phenomenon of tacit knowing takes place. The research method involves collecting the accounts, then reviewing the narratives and forming them into crafted stories.

These are then further described and subsequently interpreted. Hermeneutic Phenomenology is the chosen methodology for this undertaking.

This approach is suitable to research a tacit phenomenon as it is exploratory rather than explanatory. This allows a range of ideas to appear and evolve, including those that are subliminal and taken for granted.

Purpose of the study

This project aims to find out more about the phenomenon of tacit knowing that occurs in the context of General Practice based education encounters with GP Registrars. The intent is to achieve a deeper understanding of the "taken for granted "and non-explicit elements of clinical education. Achieving and describing this enhanced comprehension will then lead to sharing them with a wider audience. This in turn will further develop notions about how to improve practice-based education by facilitating tacit knowing interactions between Supervisor and Registrar.

What will I be asked to do?

You are invited to attend a one-on-one interview with Dr Hubert van Doorn who will ask you a few questions regarding your views on the research topic. This can be face to face or by telecommunications media such as *Skype* or *Zoom.* Participation is entirely voluntary. The interview will take about an hour. The interview will be audio recorded using a digital voice recorder to help with reviewing the results. Once recorded, the interview will be transcribed (typed-up) then checked for clarity by Dr van Doorn. The transcript will be reviewed by Dr van Doorn and selected parts will be edited into crafted stories. These will be used to further interpret the phenomenon of tacit knowing. You will be offered the opportunity to confirm the content of the crafted stories prior to the interpretation phase of the research. Both the recording and the transcript will be stored as password protected computer files as per standard ethics guidelines.

What benefit will I gain from being involved in this study?

The sharing of your experiences will help address the research question. The ineffable nature of knowing that GP Supervisors develop and execute is often called the art or wisdom of practice. This isn't fully understood and needs further exploration and greater comprehension. This study is attempting this challenge and participation will benefit achieving its outcome.

Will I be identifiable by being involved in this study?

Since the interviews will take place face-to -face or via telecommunications media you will not be anonymous to the researcher. After transcription all identifying information will be removed, and in reports your comments will not be linked directly to you. All information and results obtained in this study will be stored in a secure way, with access restricted to relevant researchers.

Are there any risks or discomforts if I am involved?

The researcher anticipates few risks from your involvement in this study, however, given the nature of the project, some participants could experience emotional discomfort. If you have any concerns regarding anticipated or actual risks or discomforts, please raise them with the researcher.

How do I agree to participate?

Participation is voluntary. You can choose not answer questions, and you are free to withdraw from the interview at any time without effect or consequences. A consent form accompanies this information sheet. If you agree to participate, please read and sign the form and send it back to me by email at hubert.vandoorn@ntgpe.org or by post to the Prideaux Centre.

How will I receive feedback?

On project completion, outcomes of the project will be given to all participants via email / post / website.

Thank you for taking the time to read this information sheet, and we hope that you will accept our invitation to be involved.

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee in South Australia (Project number 8299). For queries regarding the ethics approval of this project, or to discuss any concerns or complaints, please contact the Executive Officer of the committee via telephone on +61 8 8201 3116 or email human.researchethics@flinders.edu.au

Appendix 10 - Final ethics approval

Dear Hubert John,

The Acting Chair of the Social and Behavioural Research Ethics Committee (SBREC) at Flinders University considered your response to conditional approval out of session and your project has now been granted final ethics approval. Your ethics approval notice can be found below.

APPROVAL NOTICE

Project No.:	**8299**
Project Title:	The nature of tacit knowing experience by GP Supervisors as they teach General Practice Registrars
Principal Researcher:	Dr Hubert John Van Doorn
Email:	hubert.vandoorn@ntgpe.org

Approval Date:	5 April 2019	Ethics Approval Expiry Date:	**31 July 2021**

The above proposed project has been **approved** on the basis of the information contained in the application, its attachments and the information subsequently provided with the addition of the following comment(s):

Additional information required following commencement of research:

Please send through the revised/updated Information Sheet and Consent Form – they were not attached to the conditional approval response.

Confirmation that data is required to be stored securely at Flinders University for five years from the date of publication.

RESPONSIBILITIES OF RESEARCHERS AND SUPERVISORS

1. **Participant Documentation**
   Please note that it is the responsibility of researchers and supervisors, in the case of student projects, to ensure that:

- all participant documents are checked for spelling, grammatical, numbering and formatting errors. The Committee does not accept any responsibility for the above mentioned errors.
- the Flinders University logo is included on all participant documentation (e.g., letters of Introduction, information Sheets, consent forms, debriefing information and questionnaires – with the exception of purchased research tools) and the current Flinders University letterhead is included in the header of all letters of introduction. The Flinders University international logo/letterhead should be used and documentation should contain international dialling codes for all telephone and fax numbers listed for all research to be conducted overseas.
- the SBREC contact details, listed below, are included in the footer of all letters of introduction and information sheets.

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project Number 'INSERT PROJECT No. here following approval'). For more information regarding ethics approval of the project the Executive Officer of the Committee can be contacted by telephone on 8201 3116, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au.

2. Annual Progress / Final Reports

In order to comply with the monitoring requirements of the *National Statement on Ethical Conduct in Human Research (2007-Updated 2018)* an annual progress report must be submitted each year on the 5th April (approval anniversary date) for the duration of the ethics approval using the report template available from the Managing Your Ethics Approval SBREC web page. *Please retain this notice for reference when completing annual progress or final reports.*

If the project is completed *before* ethics approval has expired please ensure a final report is submitted immediately. If ethics approval for your project expires please submit either (1) a final report; or (2) an extension of time request and an annual report.

Student Projects

The SBREC recommends that current ethics approval is maintained until a student's thesis has been submitted, reviewed and approved. This is to protect the student in the event that reviewers recommend some changes that may include the collection of additional participant data.

Your first report is due on 5th April, 2020 or on completion of the project, whichever is the earliest.

3. Modifications to Project

Modifications to the project must not proceed until approval has been obtained from the Ethics Committee. Such proposed changes / modifications include:

- change of project title;
- change to research team (e.g., additions, removals, principal researcher or supervisor change);
- changes to research objectives;
- changes to research protocol;
- changes to participant recruitment methods;
- changes / additions to source(s) of participants;
- changes of procedures used to seek informed consent;
- changes to reimbursements provided to participants;

- changes / additions to information and/or documentation to be provided to potential participants;
- changes to research tools (e.g., questionnaire, interview questions, focus group questions);
- extensions of time.

To notify the Committee of any proposed modifications to the project please complete and submit the *Modification Request Form* which is available from the Managing Your Ethics Approval SBREC web page. Download the form from the website every time a new modification request is submitted to ensure that the most recent form is used. Please note that extension of time requests should be submitted prior to the Ethics Approval Expiry Date listed on this notice.

Change of Contact Details

Please ensure that you notify the Committee if either your mailing or email address changes to ensure that correspondence relating to this project can be sent to you. A modification request is not required to change your contact details.

4. Adverse Events and/or Complaints

Researchers should advise the Executive Officer of the Ethics Committee on 08 8201-3116 or human.researchethics@flinders.edu.au immediately if:

- any complaints regarding the research are received;
- a serious or unexpected adverse event occurs that effects participants;
- an unforeseen event occurs that may affect the ethical acceptability of the project.

Kind regards

Rae

Andrea Mather and Rae Tyler (Mon, Wed and Fri morning)
Executive Officers, Social and Behavioural Research Ethics Committee
Research Development and Support
P: (+61-8) 8201 3116 | andrea.mather@flinders.edu.au
P: (+61-8) 8201 7938 | rae.tyler@flinders.edu.au

Flinders University
Sturt Road, Bedford Park, South Australia, 5042
GPO Box 2100, Adelaide, South Australia, 5001

http://www.flinders.edu.au/research/researcher-support/ebi/human-ethics/human-ethics_home.cfm

Proactively supporting our Research

CRICOS No: 00114A This email and any attachments may be confidential. If you are not the intended recipient, please inform the sender by reply email and delete all copies of this message.

Appendix 11 - Profiles of the researcher and participants

Hubert van Doorn is a GP Supervisor currently practising in Shepparton Victoria. He has had a range of roles in Medical Education spanning four decades. Prior to being in Shepparton he worked as a Medical Educator in the Northern Territory, preceding this he was a Practice Principal and Supervisor in Melbourne.

The GP Supervisors who were interviewed are based in Victoria in a range of urban, regional and rural practices. Most of them are longstanding GP Supervisors in practices where they have been for many years. Also all them have organisational and/or educational roles in GP and/or medical student training in addition to their practice based supervision and teaching of Registrars.

In order to maintain anonymity of supervisors, and preserve uniformity, the female forms of the personal and possessive pronouns have been employed in the stories and interpretations.

Appendix 12 - The phenomenology of practice

Introduction to the guiding notions from van Manen, Benner and Giles

Phenomenology of Practice is the title of one of van Manen's books (2014) and also of a journal article. (2007). The sub-title to the book is; meaning giving methods in phenomenological research and writing. This points to what Phenomenology of Practice is about. His articles and books provide extensive offerings of how to actually do phenomenological research in the real life settings of professional practice. A useful summary is found in the journal article.

> *In doing phenomenological research, through the reflective methods of writing, the aim is not to create technical intellectual tools or prescriptive models for telling us what to do or how to do something. Rather, a phenomenology of practice aims to open up possibilities for creating formative relations between being and acting, between who we are and how we act, between thoughtfulness and tact* (van Manen 2007, p.13).

Patricia Benner is regarded as the founding figure in phenomenological research in nursing practice. Her research on expertise (Benner 1984) revealed support for its development from clinical settings and practice-based experience, in contrast to following procedural guidelines. Her influence in this work arises from being a role model portraying the importance of this type of enquiry into clinical practice, along with documenting what the research needs to articulate.

David Giles practices have spanned; teaching, teacher education, research and educational leadership. His research method emphasises relational sensibilities (2019, p.14) and this has been adopted into this work. Through his supervision I have been engaged in an hermeneutic phenomenological apprenticeship. The skills that he has enabled within me, have been put to work in how the research has been appreciated, interpreted, and offered.

van Manen

The following entries are quotes taken from Max van Manen's *Researching Lived Experience.* (1997, pp. xi-xv) *"How do we experience the lifeworld?...... "We take part in shaping and creating it"*(xi). But *"language is simply inadequate in describing experience".*(xiii) " *But while our spoken or written words may never coincide with the actual sensibility of our lived experiences, it may still be possible and worthwhile to try to emulate our pre-reflective life by means of life-world sensitive texts"….. "by learning a language, we learn to live in collective realms of meanings"* (xiii).

"HP (Hermeneutic Phenomenology) *employs a heuristic of discovery: we discover possibilities of being and becoming"* (xiv). Essences are often what phenomenology seeks to discover. What is their nature? Van Manen says; *"the essence of things depends precisely on the play between difference and sameness".* He adds that they are not fixed properties. They are constituted meanings.

From and through these words, van Manen's counsel is an encouragement to discover, then shape a creative way with words, to capture the nature of the phenomena of interest in a shareable format. To summarise, his advice is that the language of hermeneutic phenomenology needs to; shape and create, emulate pre-reflective life, discover possibilities of being and becoming and play between difference and sameness.

Benner

Benner's advice captures how this needs to be done in the context of researching the phenomenology of her practice, which is nursing (Benner 1994, p. xvii). *"The interpretation must be auditable and plausible, must offer increased understanding, and must articulate the practices, meanings, concerns, and practical knowledge of the world it interprets".*

Giles

The explicit acknowledgement in Giles's (2019 p.2-3) work, that phenomenological research was able to explore taken for granted phenomena, meant that this was a valid way to undertake this research. *"Phenomenological research explores understandings and meanings that we have taken for granted about the essential nature of relationships within our everyday experiences"*. He makes an important point about interpretation. This involves much more than simply re-phrasing what has been said.

> *Interpretive and hermeneutic analyses of the experiential stories open and uncover the ontological spaces within the text, as well as the meanings located between the lines, together allowing for the emergence of powerful phenomenological themes.*

This was an important learning in order to be able to embark on this project. Additionally, this research began with the personal realisation of perceiving the experience of tacit knowing. As shared in the introduction this is irreducibly connected to whom I am. Giles validates the importance of this connectedness in his work on relational leadership. He does this by referencing the work of Palmer (1997).

> *One consequence for teaching is captured by Palmer's notion that we teach out of who we are (1997); that is, teachers and leaders are always projecting who they are and how they are to others* (2019 p.35).

This notion validated the importance of finding and portraying those instances in the Supervisors' stories where they reveal aspects of themselves that influence how they work.

To conclude

A selection of ideas and quotes are offered here as they formed a set of guiding notions for me as a novice researcher. None of them are dictates for action. I have interpreted them as scholastic encouragers to seek, find, describe and interpret the tacit nature of supervisors' knowing.