# Actions speak louder than words: Exploring Pragmatism in Osteopathy

Thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy

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March 2021

## Abstract

**Title**: Actions speak louder than words: Exploring Pragmatism in Osteopathy.

**Purpose**: To develop a conception of osteopathic practice that assists in defining the profession. Practices by those who comprise a profession are representative of the profession. As such, practices of professional osteopaths were analysed: what they were and how they were conducted, to develop a conception of practice. The key research questions were: *What role does clinical reasoning play in defining osteopathic practice? What are the acts that constitute osteopathic clinical practice? How might Pragmatism provide a philosophy that informs the principles and practice of osteopathy? Can Pragmatism provide a bridge to the issues within osteopathy?*

**Method**: Pragmatism provided the epistemology with meaning occurring from socially situated acts. Fifteen Australian registered osteopathic practitioners volunteered to have their practice videoed and then respond to a semi-structured interview. The interview addressed questions about the acts that occurred in the consult, with the video recording as a prompt. The transcripts were interpreted, coded and the emergent themes from all transcripts were then pooled and coded to develop knowledge themes.

**Findings:** Eight knowledge themes emerged from the interpretive analysis:

1. Practitionership: The Professional Practitioner Context is Intrinsic to the Consult
2. Holistic Biomechanics: Thinking of the Body as a Unit;
3. Communicating: Connecting to the Wonder, the Passion, the Nature of the Whole Person

4. The Foundation of the Consult: Individualized Interaction with the Patient Develops Comfort, which Leads to Trust;
5. Clinical Reasoning and Judgment are Critical to Practice: They are Continuous, Integrated and Transformative;
6. Verification: Knowing of the Case in the Present;
7. The Plan: An Outcome Is Expected, Negotiated and Enacted; and
8. Manual Technique: Proficiency and Delivery.

In turn these knowledge themes were discussed as 'A Pragmatist Model of Osteopathic Practice' through four knowledge claims:

1. Knowledge Claim 1: That osteopathy as a professional practice is constructed by a set of epistemic practices and Pragmatism is the philosophy to support conducting these practices in society.
2. Knowledge Claim 2: That society is a superordinate theme in professional practice and Social Praxis provides the tools for managing the consentient acts required to conduct professional interaction.
3. Knowledge Claim 3: That the consult is the key space for conducting phronesis or wise practice to the case through the dialectic interaction of "I "& "me".
4. Knowledge Claim 4: That the application of phronesis in resolving social problems involves the weaving together of human knowledge and meaningful judgments for the ongoing benefit of society

**Conclusions:** Osteopathic practice is a professional social behaviour that interprets a patient's concerns with a series of gestures and acts to construct a shared meaning as a basis for ongoing acts that are aligned with establishing meaning relating to the sensitising impulse. Key to these gestures and acts is a structured organised approach

that consists of social praxis that supports the conducting of phronesis in the betterment of society. The professional social behaviour contains within it all that is the osteopathic profession and is focused on an individualized experience that occurs within the consult, as the key vehicle of the acts of the profession.

**Key words**: George Herbert Mead, osteopathic medicine, osteopathy, phronesis, Pragmatism, praxis, social behaviour, practitionership.

**Doctor of Philosophy Student Declaration**:

I, Christopher Macfarlane, declare that the PhD thesis entitled: Actions speak louder than words: Exploring Pragmatism in Osteopathy, is no more than 80,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work.

I have conducted my research in alignment with the Australian Code for the Responsible Conduct of Research and Victoria University's Higher Degree by Research Policy and Procedures.

Signature  Date: 4th April 2021

Word count:

| | |
|---|---|
| Front section, abstract & contents pages: | 2744 |
| Body of thesis inc quotes, tables and figures: | 75037 |
| References: | 7148 |
| Appendices: | 9890 |
| Total: | 95133 |

## Dedication

Andrew Taylor Still

'*I know this book is far from perfection, and it is my hope and wish that every osteopath will go on and on in search for scientific facts as they relate to the human mechanism and health'* (Still, 1910, p. 2).

George Herbert Mead

'*His mind was germinative and seminal. One would have to go far to find a teacher of our own day who started in others so many fruitful lines of thought; I dislike to think what my own thinking might have been were it not for the seminal ideas which I derived from him. For his ideas were always genuinely original; they started one thinking in directions where it had never occurred to one that it was worthwhile even to look'*
(Dewey, 1931, pp. 310-311).

**Acknowledgements:**

It seems obvious to acknowledge my supervisors as without them there would be no thesis. However, I would like to particularly reflect upon my primary supervisor, Neil. In his gentle manner he encouraged me to expand my thinking well beyond my circumstances and he did so in a subtle gentle manner, and with such efficiency that it seems surprising that such change can occur. I also happily acknowledge my family who has suffered through my mental and physical absence over these years, whilst bringing me many cups of tea.

An Ode to Tea

When the world is at odds,
And the mind is at sea,
Then cease the useless tedium,
And brew a cup of tea.

There is magic in it's fragrance,
There is solace in it's taste;
And the laden moments vanish,
Somehow into space.

And the world becomes a lovely thing!
There's beauty as you see;
All because you briefly stopped,
To brew a cup of tea.

Author unknown

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## Acronyms, Abbreviations and Definitions

In this thesis a number of terms will be used that either possess a definition operationalised to the osteopathic profession, or are health related terms not in common usage.

**AHPRA** - Australian Health Practitioners Regulating Authority is the national organisation appointed by the minister for health in the Federal Government body that implements the National Registration and Accreditation Scheme for health practitioners (https://www.ahpra.gov.au/About-AHPRA/What-We-Do.aspx)

**Allied health** - There is no universally accepted definition of allied health professions. Allied health professionals are health professionals that are not part of the medical, dental or nursing professions. The osteopathy profession in Australia claims to be part of allied health (https://ahpa.com.au/what-is-allied-health/).

**Alternative medicine** – The Merriam-Webster Dictionary definition defines alternative medicine as healthcare and treatment practices or any of various systems of healing or treating disease, including traditional Chinese medicine, chiropractic, folk medicine, faith healing, homeopathy and naturopathy, that minimize or eschew the use of surgery and drugs and are not included in the traditional medical curricula.

**Client** - A person who engages the professional advice or services of another.

**Complementary therapy** – This MeSH is described as: Therapeutic practices which are not currently considered an integral part of conventional allopathic medical practice. They may lack biomedical explanations but as they become better researched some (physical therapy modalities; diet; acupuncture) become widely accepted whereas others (humors, radium therapy) quietly fade away, yet are important historical footnotes. Therapies are termed as Complementary when used in addition to conventional treatments and as Alternative when used instead of conventional treatment.

**HVLA** - high velocity low amplitude (HVLA). Also called thrust treatment method. An osteopathic method in which the restrictive barrier is engaged in one or more planes of motion and then a rapid, therapeutic force of brief duration traveling a short distance is applied within the anatomic range of motion (Educational Council on Osteopathic Principles, 2017). It is the osteopathic manipulative technique associated with the 'click' or cavitation of the joint.

**Manipulation** – This MeSH term is described as: Various manipulations of body tissues, muscles and bones by hands or equipment to improve health and circulation, relieve fatigue, promote healing. This term is also used by Mead to refer to the manipulation of communicative acts on a path to meaning.

**Manual therapy** – This MeSH term is described as: Various manipulations of body tissues, muscles and bones by hands or equipment to improve health and circulation, relieve fatigue, promote healing.

**OBA** – The Osteopathy Board of Australia. This board administered by AHPRA represents osteopaths. It registers osteopaths and students of osteopathy; develops standards, codes and guidelines for the profession; handles notifications, complaints, investigations and disciplinary hearings; assesses overseas trained practitioners to practise in Australia and Accredits courses of osteopathic study.

**OIA** – The Osteopathic International Alliance is an alliance of osteopathic organisations around the world to advance and support the unity of the global osteopathic profession (Osteopathic International Alliance, 2012)

**Osteopath** - A person who has achieved the nationally recognized academic and professional standards within her or his country to independently practice diagnosis and treatment based upon the principles of osteopathic philosophy. Individual countries establish the national academic and professional standards for osteopaths practicing within their countries (international usage). (Educational Council on Osteopathic Principles, 2017)

**Osteopathic physician** – This MeSH is described as: Licensed physicians trained in Osteopathic Medicine An osteopathic physician, also known as D.O. (Doctor of Osteopathy), is able to perform surgery and prescribe medications.

**Osteopathy Australia (OA)** – The professional association representing osteopaths in Australia.

**Patient** – This Medical Subject Heading (MeSH) describes patient as: Individuals participating in the health care system for the purpose of receiving therapeutic, diagnostic, or preventive procedures.

**Somatic dysfunction** – Impaired or altered function of related components of the body framework system: skeletal, arthrodial and myofascial structures, and their related vascular, lymphatic and neural elements. It is characterized by positional asymmetry, restricted range of motion, tissue texture abnormalities, and/ or tenderness. The positional and motion aspects of somatic dysfunction are generally described by: (1) The position of a body part as determined by palpation and referenced to its defined adjacent structure, (2) The directions in which motion is freer, and (3) The directions in which motion is restricted. Somatic dysfunction is treatable using osteopathic manipulative treatment. (Educational Council on Osteopathic Principles, 2017)

# Chapter 1 Introduction to the Study

## 1.1 Introduction

This thesis presents a study that observed the actions of osteopathic practitioners in Australia, and explores these actions with the philosophy of Pragmatism. Osteopathy, as a profession, professes a set of characteristics upon which the general public, as client patients, attend osteopathic clinics (Beaton, 2010). These characteristics are based upon the concept of the osteopath professional using specialised knowledge to interpret and treat a client (Brante, 2010). Clients present to the osteopath with a variety of ailments, from which they expect some benefit or amelioration, with the professional '*applying "higher," abstract principles learned by study and training'* (Brante, 2010, p. 850) to transform the patient's complaint. In osteopathy such benefit or amelioration is provided largely through manual approaches that are used to gather data and effect a treatment. This chapter will provide an overview of the study, initially outlining the background. The chapter will then outline the research problem, question and aims and conclude with an overview of the significance of this study.

## 1.2 Background to the study

"What's the difference between an osteopath, chiropractor and physiotherapist?" If there was a dollar given each time that question was asked, someone could be a millionaire! This question indicates that there is a perception of a commonality across these three professions, that their practices share similarities. It is this question that started my thinking about the inquiry for this study. The answer, it turns out, is as simple as it is complex, and it depends on who is asking. This is

because whoever is asking it, is doing so with a particular perspective in mind, and therefore, a certain focus to the question. As such, a client will ask from a particular perspective, perhaps which profession is best for their concerns, whereas a regulator will want to know what are the parameters for regulation of each, and an educator will want to know what to include in the curriculum for a profession.

Defining a profession like osteopathy: the relationships, experiences and practices, is important for different reasons, with a reason to support a role in society including the health marketplace. Musculoskeletal conditions are found in 30% Australians and in 65% of these with one other chronic condition, making it the fourth largest contributor to disease burden (Australian Institute of Health and Welfare, 2019, p. 7 & 9). Back pain and related problems are the most common of these musculoskeletal conditions occurring in 16% of the population (Australian Institute of Health and Welfare, 2019, p. 7). Such a burden on society has been growing along with the professions that profess to service it, of which osteopathy is but one. When I commenced osteopathic practice in the state of Victoria in 1988 the profession was a tiny 32 osteopaths. The health professional space that claims to service this growing disease burden has become more crowded over time, with osteopathy in Victoria in 2020 fifty times the size with 1,578 practitioners of the 2,546 nationally (Osteopathy Board of Australia, 2020b). Defining a profession has an increasing imperative when there are multiple groups staking space in the musculoskeletal health provision marketplace taking up community resources. Such groups, along with osteopathy, include registered practices, like medicine (118,996 practitioners),

chiropractic (5,500 practitioners) and physiotherapy (33,792 practitioners) (AHPRA, 2020a), as well as non-registered practices, including myotherapy and massage. Osteopathy has a responsibility to itself and to those who interact with it: the regulators, critics, allied fields, as well as clients or patients, who all wish to know and understand the place of the profession in society. The description of the osteopathy profession is explored in detail in Chapter 2.

In addition to a position in the marketplace of society, the osteopathy profession interacts with other professions and government, including utilising private and public funds in its conduct. For a growing healthcare profession like osteopathy, this brings responsibilities and expectations to support a useful role to society. It, and by default those who make the profession, need *'to critically examine'* (Hammond et al., 2016) the values and contributions the profession makes to society. This generates a necessity for osteopathy to address or define the professional role, with some viewing a research agenda as '*essential',* as it can inform the role of osteopathy in the health care system. (Steel et al., 2017, p. 33)

The need for research in osteopathy has been a global catch-cry for more than a decade (Licciardone, 2008). Osteopathy is related to many fields of science or knowledge and borrows from them all, providing broad opportunities for research. Further, much of the underpinning knowledge for manual manipulative therapy interventions may be seen as utilising similar approaches and biological mechanisms (Bishop et al., 2015; Esteves et al., 2020; Todd et al., 2015; Zegarra-Parodi et al., 2015) with *'signs that manual therapy approaches are merging for the benefit of best care approaches*' (Smith, 2019, p. 4).

The topic is of interest to me, as osteopathy has been the subject of my entire working life. Personally, my father is a physiotherapist and chiropractor of more than a half century – one of the few so dual qualified. This influenced the start of a deep relationship with osteopathy, with private practice for over 30 years, leading professional groups, publishing and academia for 30 years. Over my professional life I have employed and engaged many different health professionals. A step in my career journey took me to Victoria University in 2012, and I became the discipline champion for osteopathy in the 24-million-dollar university wide interprofessional education and practice (IPEP) project. This role required meetings with different health professionals, who described what their profession was, and what about it that was defining or unique. It was sobering, that despite strong professional assertions, there were many similarities across the health professions. This experience helped crystalize the thoughts about what might define osteopathy. Clearly osteopathic practitioners felt there was a difference between osteopathy and other professions, as did the patients I treated. Despite these connections, I do not *know* physiotherapy or chiropractic, as I have not examined them. Further to this, I have not examined the practice of osteopathy to the depth of this project, which focuses on what osteopaths, fifteen to be precise, do in their practice. What did I say to the question outlined above? I told the patient what I was going to do and I gave a brief summary of the professional assertions of the other professions and suggested that if the person wanted to know more, they should look at the websites of the others. It was never fully satisfactory, but became the foundation for this PhD journey.

*'Reflective conduct takes place with reference to problems that emerge in **the world that is there**, and the construction of scientific objects is aimed at solving these problems.'* (Cronk, n.d., emphasis in original)

## 1.3 The Research Aims

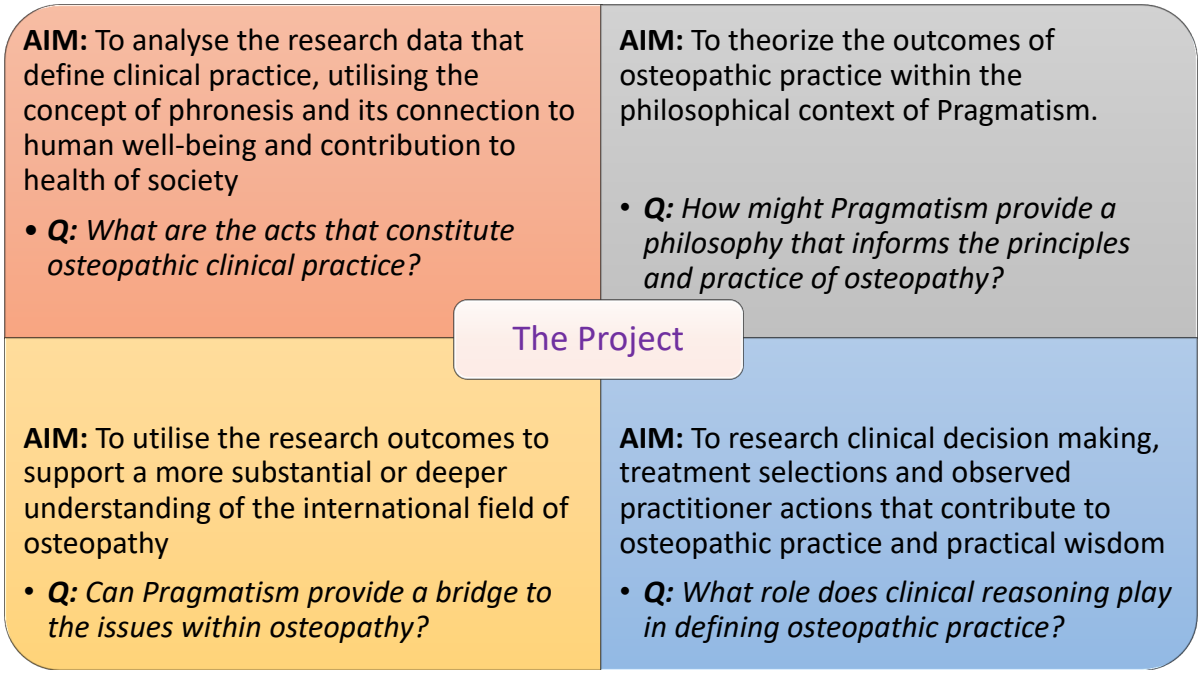



*Table 1.1Project aims and research questions.*

The aim of the project was to explore the profession of osteopathy within the framework provided by Pragmatism. This was to elucidate the elements that comprise practice and to theorize the nature of these in relation to Pragmatism. The idea was for a project that could contribute in a practical manner to defining the broad nature and experience of osteopathy: that the project would align the theory (philosophy) and practice (treatment act) of osteopathy in a holistic fashion and would support the evolving professional identity. In ensuring that theory is relevant, it is then available and useful to the practitioner, to support their practice as it evolves over a career. Finally, such a project would provide a philosophy

that supports the learning of practice in an educational context. The aims of this project and the related research questions are summarised in Table 1.1 above.

The aims of the project:

1. *To theorize the outcomes of osteopathic practice within the philosophical context of Pragmatism*. Pragmatism will provide a lens in which to view and analyse the observed acts of clinical practice. Pragmatism has not been explored within osteopathy, although it has been in other health practices.

2. *To research clinical decision-making, treatment selections and observed practitioner actions that contribute to osteopathic practice and practical wisdom*. Clinical decision-making has been recognized as central to health practices, including osteopathy (Grace et al., 2016; Thomson et al., 2013a). Clinical decision-making as reasoning utilises phronesis as practical wisdom in the application of the reasoning process. In this project, clinical reasoning is examined in the literature synthesis (Chapter 2.6.1) and analysed in the discussion chapters in relation to Pragmatism as an act in the consult.

3. *To utilise the research outcomes to develop a more substantial or deeper understanding of the international field of osteopathy*. The principals of osteopathy as representative of the philosophy are debated, challenged and criticised in a global profession dialectic. Pragmatism as a philosophy of the act (Mead, 1938) provides a central philosophy through experience

and meaning as a central concept (Barnett, 2020). This project aims to contribute to this dialectic of philosophy in a practical manner by disseminated the findings of this project. It also hopes to contribute to the evolving understanding of Pragmatism and its practicality, by extending it to osteopathic practice.

4. *To analyse the research data that define clinical practice, utilising the concept of phronesis and its connection to human well-being and contribution to health of society*. This project will consider phronesis as '*knowing how to act in a situation in order to achieve the goals of professional practice*'. (Tyreman, 2000, p. 120). Phronesis is key to practice and clinical reasoning. Phronesis is the wise practice, considered the realm of the expert and that which brings together the acts of practice. Phronesis is considered in the discussion section and how it connects the acts of osteopathic practice to conducting the consult.

## 1.4 The Research Questions

The 'What's the difference' question cannot really be answered without a reasonable knowledge of each profession. It is also likely that it doesn't matter, as the important element is whether or not the perceived problem can be dealt with by the professional engaged. 'What's the difference' is really about illuminating the practices of a profession, so that those that wish to engage it have something to go on. Thus, to identify a difference requires the ability to be able to assess the characteristics of one profession, and then contrast them with those of another profession. This leads to the question: 'what are the characteristics of

one of these practices?' This is represented in the first research question: *What are the acts that constitute osteopathic clinical practice?* Reviewing the literature for acts that characterise osteopathic practice led to the central role played by clinical reasoning and the development of a diagnosis (Spadaccini & Esteves, 2014; Thomson, Petty, & Moore, 2011). From this developed the question: *What role does clinical reasoning play in defining osteopathic practice?* Attempts have been made to classify the characteristics or acts of osteopathic practice and these are discussed in detail later in Chapters two and three. There are different approaches to completing this task. Some authors have focussed on the philosophy or principles of the practice (Fryer, 2013), some have considered the specialized knowledge (Fryer, 2016), and others considered the special features of the practice, such as clinical reasoning (Grace et al., 2016; Thomson, Petty, & Moore, 2014). This project took a philosophical direction and sought a representative philosophy of practice. Pragmatism (see Chapter 4) was chosen as it professes to a primacy of practice, (Barnett, 2020) to being a philosophy of practice (Hooley, 2020) focussing on developing meaning from social behaviour or interaction (Mead, 1938), or as Mead (1922, p. 163), a noted Pragmatist puts it, '*significance belongs to things in their relations to individual'*. This led to the third research question: *How might Pragmatism provide a philosophy that informs the principles and practice of osteopathy?* The final research question is derived from the critique of the model and theories that exist in osteopathy, best summarised in a recent editorial in a key osteopathic journal:

> *'Scholars and academics from the field are now openly expressing their difficulties in understanding, explaining, defending, and justifying central models of osteopathic care'* (Esteves et al., 2020, p. 1).

From incoherence arises confusion, which in practice and can turn some practitioners off using evidence in practice, turning them inward to rely on what they have always done. Esteves et al. (2020) refer to this confusion: *'during the past 15 years, there is, however, an observable expanding gap between what is taught in osteopathic education and what is known by the scientific community'* (p. 2). This goal is embodied in the fourth research question: *Can Pragmatism provide a bridge to the issues within osteopathy?* The research questions are summarised with the research aims in Table 1.1 above.

## 1.5 Significance of the study

The participants of society have an interest in what it is that osteopathy, as a profession, has to offer them. What value it might have to them. Osteopathy needs to provide for this. Politicians in Australia quote the '*pub test'* (SBS Urdu, 2019) when referring to the validity or usefulness of a policy. The '*pub test'* asks: "what is a reasonable expectation for this study?" It is equally valid to ask the "so what?" question of this project. Research can become abstract and irrelevant to a profession; that is, it may fail the '*pub test*' and become a 'who cares'. Ironically this would defeat the purpose of Pragmatism. Pragmatism, with its focus on practice, means that to avoid becoming a 'so what', and to pass the '*pub test*' this project must impact practice:

1. The thesis and subsequent publications, through the literature, will engage the ongoing dialectic about the philosophy of the osteopathic profession, as well as contributing to the literature of Pragmatism and its relationship to healthcare practice. There is little written about Pragmatism in relation

to osteopathy, with Paul Orrock referring to pragmatism in his doctoral thesis as the *'philosophical paradigmatic stance taken in this thesis is that of pragmatism. Pragmatism is oriented toward solving practical problems in the real world'* (Orrock, 2017, p. 16)

2. The thesis and subsequent publications will contribute a theoretical overview to inform the teaching practice in osteopathy. It provides an understanding to practice and theory focussing on the social nature of the act. If different forms of knowledge are integrated, through the '*theorizing of practice*' (Hooley, 2020), it can provide practical assistance in the different areas of osteopathic educational practice providing a pass to the 'pub test'.
3. At an individual level, the concept of a practical philosophy which links the theory and practical elements of the profession provides a practical focus to help reduce the abstract nature of philosophy. This may help reduce practitioner anxiety and doubt relating to the underpinnings of osteopathy, allowing a greater focus on the other issues from the myriad that face practitioners.

## 1.6 Structure of the thesis

This project and subsequent manuscript have developed from my journey as a researcher. This project sits astride the imaginary practice-theory divide; in much the same way that I have balanced an academic career of three decades with a practical career of tens of thousands of treatments. This manuscript as an outcome of my practice is written to describe a journey through the weaving of

scholarly literature, personal experience and qualitative research in a structured scientific manner that theorizes practice (Hooley, 2020).

Chapter 1 is designed to set the scene, including addressing the aims and significance of the research. Chapters 2 through to 4 are structured as a literature synthesis, with the aim of structuring the literature review to present the necessary background and make an argument to support the rationale and pass the 'pub test'. Chapter 2 starts out with an overview of osteopathy – a history and the key criticisms. It then follows with an overview of osteopathic professional knowledge including clinical reasoning, with the chapter summarising the main knowledge issues for osteopathy. Chapter 3 provides an overview of Pragmatism and completes the background necessary to take the reader through the next chapters. Chapter 4 and 5 consider the strategies of inquiry underpinning this project and by association my thinking, and the methods used to conduct the research. Chapter 6 leads into the results of the study and takes the reader to Chapter 7 where the results will be discussed. Chapter 8 will conclude the thesis by revisiting the aims and questions of the project to ensure that they are addressed, with Chapter 9 the references and Chapter 10 containing the appendices.

# A LITERATURE SYNTHESIS

# Chapter 2 Background and history

## 2.1 Introduction

To make judgements about osteopathy and its practice requires an understanding of the how the profession defines itself and the pertinent critiques. This synthesis provides a background of the osteopathic profession from its inception to today to describe and position the profession in relationship to pertinent critique, as well as providing a background to those who will be interviewed for this research. This synthesis identifies the primary criticisms, bringing together knowledge from relevant fields and weaving them into arguments to support the research rationale.

The literature for this project was identified in two ways. The first was a deliberate exploration of a field identified as relevant to the research aims and questions, including clinical reasoning (Chapter 2.6.1) and describing the osteopathic profession (Chapter 2.4 / 2.5). The second way literature was identified was in relation to fields of knowledge that emerged in this exploratory process, for example power, as an influence in society (Chapter 3.6). The factors weighed up in selecting literature for this project include the author(s), the journal, the type of paper, the cogency of the writing, any related editorial or published critique and the alignment with the argument. Although not used formally, the elements of the CASP checklist also helped inform the appraisal of literature (Critical Appraisal Skills Programme, 2018).

The literature chosen is a bricolage, a construction or synthesis, woven into arguments that are used to develop the research question, aims and

methodology that underpin the thinking relevant to this project. Bearman and Dawson (2013, p. 253) term this a '*qualitative synthesis'*, which they state is synonymous for an *'evidence synthesis'* or *'integrative reviews'*, and that '*study findings are systematically interpreted through a series of expert judgements to represent the meaning of the collected work'* (Bearman & Dawson, 2013, p. 253). From an ethical standpoint, describing a literature synthesis also supports the reader assessing this work and the rigor of the study by providing transparency to the process, as well as making explicit the literature used to construct the underpinning arguments.

> *'A clearly described framework enables the readers to make a critical assessment of the work, using their own expertise, drawn from their own contexts'* (Bearman & Dawson, 2013, p. 258).

## 2.2 The Times

The two key fields of practice for this research, Osteopathy and Pragmatism, have their origins in the United States of America in the late 19th century. Osteopathy and Pragmatism evolved in a country at change, having endured the significant impact on the nation of a civil war (1861-1865), and then the significant social change and industrialisation of the latter 19th century (Addams, 1907, pp. vii, 136) and a political landscape in Europe building to the first world war (1914-1918) (Ormerod, 2017). Life in America was impacted by Turner's 'frontier theory': '*American social development has been continually beginning over again on the frontier'* (Ridge, 1993, p. 60). Turner felt that America's social institutions had evolved differently to Europe, due to the different geographical influences of the free land and westward advancing settlement of the developing USA that

ceased in 1880 (Ridge, 1993, p. 59). Mead (1930) in his critique of the philosophies of the American Pragmatists Royce, Dewey and James, indicates it *'was a mind that brought with it from Europe habits already formed'* (p. 212), that predicated culture, particularly with religion and politics, brought to the USA by the initial settlers. After outlining the European influence, Mead (1930) somewhat supports this frontier thesis, suggesting that the town meeting was the development of an American political approach, and that it was only due to '*practical necessity in the administration and distribution of public lands'* (Mead, 1930, p. 212), that led to the national state as a political focus.

The political and social changes were hand-in-glove with knowledge, which was undergoing a revolution. Science representing knowledge had been in a flux in the previous centuries, separating from the church as the centre to knowledge. Galileo (1564-1642) is representative of this separation having faced the Inquisition for contradicting conventional Church wisdom that the earth was the centre of the universe ("Galileo Galilei (1564-1642)," 2006), leaving an '*uneasy relationship between church and science*' (Suran, 2010, p. 586). These changes accelerated in the 150 years after, with Augustus Comte (1798-1857), a philosopher of science, founding positivism. Positivism is *'a philosophical ideology and movement'* (Feigl, 2020)*,* that has developed *'through several stages known by various names, such as empiriocriticism, logical positivism, and logical empiricism, finally merging, in the mid-20th century, into the already existing tradition known as analytic philosophy'* (Feigl, 2020). Positivist thinking is '*commonly associated with experiments and quantitative research, positivism is considered a form of or a progression of empiricism'* (Ryan & Sfar-Gandoura,

2018). *'The basic affirmations of positivism are (1) that all knowledge regarding matters of fact is based on the "positive" data of experience and (2) that beyond the realm of fact is that of pure logic and pure mathematics*' (Feigl, 2020). Bonell et al. (2018) in their research to determine if the randomized control trial (RCT) is a positivist method, extend these two affirmations to the following tenets: *'the primacy of direct sensory information as the basis for scientific knowledge; the requirement that theoretical terms must equate with empirical terms; the aim of developing universally applicable laws; and the unity of method between the natural and social* sciences' (Bonell et al., 2018)

Irby (1990) groups this flux into two scientific revolutions. The first underpinned by Newton's (1643-1727) physics and Descartes' (1596-1650) dualism. That you could understand nature by reducing it to its smallest part, that nature was '*a perfect machine governed by exact mathematical law'* (Irby, 1990, p. 622). The second revolution Irby (1990) indicates started at the beginning of the 20th century with Einstein (1879-1955) and the idea that '*modern physics can be characterized as organic, holistic, and ecological'* (Irby, 1990, p. 622). Post-positivism, as a critique of positivism, emerged as a part of this revolution, primarily in the reinterpreting the notion of reality to one that is '*imperfectly and probabilistically apprehendable*' (Denzin & Lincoln, 2018, p. 111). The universe was a system '*pictured as an indivisible, dynamic whole whose parts are essentially interrelated'* (Irby, 1990, p. 622). The nature of positivism, represented by the first revolution, had an influential effect on science and knowledge and was the overarching paradigm for inquiry at the time Dr. AT Still (1828-1917) was thinking about his new practice. Still was born in the first revolution and was a product of

his society. The powerful effects on society of science moving away from the Church, '*away from medieval notions of totalitarianism based on royal decrees'* (Park et al., 2020, p. 691) and that of the American frontier society impacting Still at all levels. The epistemological influence on society and Still is summarised: '*Until the start of the 20th century, all philosophical research theories were theories of knowledge (epistemologically driven) involving one single reality (ontology) independent of researchers'* (Ryan & Sfar-Gandoura, 2018). It is understandable that some view Still as a positivist, as Still uses the language of this paradigm in his writing demonstrated with terms like '*osteopathy as a science'*, and others cited in Lucas and Moran (2007). Positivism was dominant and Still saw God and nature as perfect and the master architect, and an osteopath was a mechanic. Still's language is commensurate with this revolution because it is what he knew, it is where and how he developed his ideas and it was the context of his practice.

Even though Still was a child of the first scientific revolution, he grew up and practised in the wind of discoveries like the impact of the knowledge of Darwin's evolution producing an '*intellectual crisis'* (Hooper & Wood, 2002, p. 41). Mead (1935, p. 66) describes this as '*the stream of intellectual life that was floating through the western world'* that was influencing American colleges around 1892. Einstein was also a product of his society and like Still he would have been maturing and thinking whilst the second scientific revolution was emerging. It is arguable that Still was calling for science as an organising strategy to knowledge in osteopathy and that he saw science as '*only a tool or a key'* (Still cited in Lewis, 2012, p. 81). Still had '*no use for theories unless they are demonstrated'* by a scientific approach described as one who *'courts investigation and proves by*

*demonstration that every statement is a truth'* (Still cited in Lucas & Moran, 2007). Still was active in this timeline of change and although he uses the language of the first, it is arguable that his thinking is that of the second revolution. As an example, Still exhorted the study of anatomy as fundamental to osteopaths. Anatomy is learned in small parts and with dissection. Still exemplifies the ideas of the second revolution through his idea of reformulating it back together, as a functioning whole with the principle: 'The body is a unit' (see Chapter 2.7.3).

Although classed by Irby (1990) as two, these scientific revolutions are arguably the metamorphosis of one, as the evolution of human inquiry. The evolution of human inquiry has moved from the dark ages with a conception of God as central to knowing and knowledge given from God or her agents – the Church, to the notion of different types of knowledge and people inquiring using the relevant tools to do so (Suran, 2010; Vogel, 2018). At first the inquirer conveniently explores what is nearby and directly about, represented by the physical-biological world, breaking it down into mentally digestible bits to help develop an understanding, an approach to inquiry still used today.

The second revolution can be viewed as a development of the first. Once the natural world, as that which is seen and touched, has been explored and conquered, the next step was to look at the lived, the abstract untouchable world. The approaches used and available weren't applicable, so new concepts were required. Thus, at the same time as Planck (1858-1947), Einstein and company were describing the physical world, others like Jane Addams (1860-1935), a founder of social work, were describing the lived or social world.

Irby (1990) uses the tree as a metaphor to define each revolution as a paradigm, and the intertwining branches of each tree the inter-relationship of the two paradigms. I argue that Irby's view supports the past dualistic thinking and that inquiry is one tree with the trunk representing human inquiry, and the branches representing the different approaches or paradigms of inquiry. This notion is supported by Thomson and Abbey (2017) who note that osteopaths are able to *'draw upon research from different paradigms that aligns with their personal approach to practice and informs their decision making'*. This dialectic about the nature of human inquiry and knowledge has continued in education and social science, for example as the '*Science Wars'* (Flyvbjerg, 2001, p. 1) or *'paradigm wars of the 1980's'* (Denzin & Lincoln, 2018, p. 4). This dialectic is also present in osteopathy with the *'potential contribution to the osteopathic body of knowledge'* of the qualitative paradigm not assessed (Thomson, Petty, Ramage, et al., 2011), foretelling in the decade since this publication of an increased literature in the qualitative paradigm for osteopathy.

The critique of knowledge continues, (Brosnan, 2016) and it is pertinent to osteopathy. *'Scientific criticism is an integral part of scientific inquiry'* (Kaufmann, 1959, p. 831). Human inquiry and knowledge have been subject to evolution and they continue to be subject to a professional dialectic, as the ideas of today need metaphors that represent the current thinking, new truths and ideas emerging from the old (Thomson, Petty, & Scholes, 2014). Anatomical 'discoveries' still occur, with the lymphatic system in the head described in the last decade (Hitscherich et al., 2016). Fryer and Pearce (2013) use the relatively new technology, Transcranial Magnetic Stimulation (TMS), coupled to an established scientific method of a repeated-measures design, to assess the established

osteopathic technique: Muscle Energy Technique (MET). Such changes in biological understandings and advances in technical knowhow impact osteopathy. The ideas from the past and put forward by Still, such as vitality, and the 'perfection of God' have been adapted. Such technology as TMS was certainly not available to Still or any osteopaths prior to the mid 1980's! Although these examples focus on the biological, different 'knowledges' are at play in a practice like osteopathy, for example biological and psychosocial categorised by Fryer (2017a). Knowledges that are relevant to a profession are subject to revision as can be seen in undergraduate program curricula over time.

## 2.3 Society & Profession

> *'A Profession is a disciplined group of individuals who adhere to ethical standards and who hold themselves out as, and are accepted by the public as possessing special knowledge and skills in a widely recognised body of learning derived from research, education and training at a high level, and who are prepared to apply this knowledge and exercise these skills in the interest of others'* (Australian Council of Professions, 2003).

'*The world is a world of events*' (Mead, 1959, p. 1). Professions are a social construction and a healthcare profession, like osteopathy, positions itself in this world of events to interact, to conduct their practice and to beneficially address the needs of society. Tyreman (2000), an osteopath himself, notes that '*health care practice by its nature involves practitioners in taking some kind of action'* (p. 118). For osteopathy as *'for social psychology, the whole (society) is prior to the part (the individual), not the part of the whole; and the part is explained in terms*

*of the whole, not the whole in terms of the part or parts'* (Mead, 1934/2015, p. 7). Dividing the whole helps to understand the individual. There are two classes or social groups that form the basis of the social interaction and behaviour that is osteopathy. The first is the '*concrete social classes or subgroups*' (Mead, 1934/2015, p. 157) which, in this case refers to the osteopathic practitioner group or profession. The descriptive qualities of osteopaths are more extensive, as there are structured common grounds that bind them together, that which comprises the osteopathic profession. The second group is the '*abstract social classes or subgroups*' (Mead, 1934/2015, p. 157) which, as the client or patient group is harder to describe due to a broader membership.

The basic biological impulses seen in 'lower animals' that have social groups, such as dogs and apes also occur in humans. These biological and physiological impulses, '*constitute the foundation of all types or forms of social behavior, however simple or complex, crude or highly organized, rudimentary or well developed'* (Mead, 1934/2015, p. 228). In the concept of social behaviourism the following basic behaviours occur: reproductive, parental, neighbourliness and exchange (Mead, 1934/2015). *'The family is the fundamental unit of reproduction and maintenance of the species'* (Mead, 1934/2015, p. 229). This basic family unit is scaled up to the whole of society, with the organization, the sociality undergirded by communication – gestures and speech. The import of social organization on the human species is represented by the phenomenal rate of neuronal interconnections developing in a child's brain, from an average of 2000 connections per neuron at birth to around 15,000 by seven years (Graham,

2011). Many of these interconnections are to support social behaviour and language.

> *'He* [Mead] *then set out to show how mind and self are not biologically given but are social emergents, how language serves as a mechanism for the appearance of mind and self in the social act, and how the ongoing social process generates the mind and self, thus freeing conduct from a mentalistic and subjective interpretation'* (Strong, 1939, p. 71).

In much the same manner as the family unit is the basis of society as an organisation, the 'doctor osteopath' and the 'client patient' comprise a patient-practitioner dyad (dyad) as the base unit of organization for the health professions. The impulse of neighbourliness as a '*co-operative activity, assistance to those in trouble and in suffering'* (Mead, 1934/2015, p. 258) and that of the parenting behaviours would appear closely related, or developed into the role of healthcare. This basic impulse and unit that comprise a health profession like osteopathy, is the basis for a whole field of knowledge as specific training (techne), learning (episteme) and wise thinking judgment (phronesis) to function as professional practice. These basic elements are structured into conceptions of practice and Donald Schön draws '*attention to three criteria for professional judgment – pragmatic usefulness, persuasiveness, and aesthetic appeal*' (E. A. Kinsella cited in Kinsella & Pitman, 2012, p. 47). Kinsella and Pitman (2012) outline four requirements for a profession: provision of a needed social service; a specialized literature underpinning the intellectual basis of the practice; a set of standards to ensure minimal competence; and fourthly,

autonomy for the profession and individual in using their judgment (Kinsella & Pitman, 2012, p. 12).

> *'The family, like every other element of human life, is susceptible of progress, and from epoch to epoch its tendencies and aspirations are enlarged, although its duties can never be abrogated and its obligations can never be cancelled' (Addams, 1907, p. 78).*

Professions are a part of society, and like human life progress and evolve as change is constant (Thayer, 1982, p. 12; Winit-Watjana, 2016). Today's healthcare professions and the systems they operate, particularly in developed nations, are dominated by biomedicine. 'Conventional' biomedicine as the application of biology and biochemistry to manage human physiology with medicines, became the dominant model for multiple reasons including as a result of the social-technological change including the epidemics and the trauma and injuries of a world war in the late 19th and early 20th centuries. Biomedicine is particularly useful in the acute phase of disease and trauma and the ability to address risk as the impact to health measured in significance to impact on life, through mortality and/or significant morbidity. That is to say that biomedicine demonstrated a needed social service, (Kinsella & Pitman, 2012, p. 12) and utility in the marketplace passing '*the ultimate test of value in practice'* (Shulman, 1998, p. 518) particularly on a supposed 'mortality-morbidity' scale. Utility in medicine represents the impact to the individual and societally, through political and economic impacts from pandemics and epidemics that can lead to political unrest (Tyreman, 2011). Risk to health is related to health issues that are perceived as a threat to life, with the potential for irreversible outcomes occurring in a relatively

short period of time, with/out significant pain and associated co-morbidities. This risk is represented as diagnoses of irreversibility, as permanent impairment represented as a ratio of the loss of function and time, with the highest being a short time to death. Irreversibility as a concept (Yanovsky, 1978), as being able to reverse or minimise the effects of poor health, is central to healthcare and this is where the utility resides. It is the idea of providing care to reverse or reduce the symptoms and remove the interruption to client's life story. The concept of irreversibility is reflected in treatment. For example, surgery and a hip joint does reverse motion loss and reduce pain, although the replacement itself is irreversible. Therefore, diagnoses that describe a greater, permanent or irreversible threat to health (bacterial infections, heart disease), and treatments that have a greater risk of irreversibility (surgery, prescribed medications) are higher risk and professions such as the allopathic medical profession that deals in irreversible disease and is skilled in irreversible treatments, is considered to have a greater utility.

Primary healthcare practitioners such as medical and osteopathic, who take patients directly from the public, are taught to recognise the signs and symptoms of risky presentations as 'red flags'. This is because patients may present with undiagnosed irreversible issues as life-threatening consequences and practitioners need to be able to manage or refer these in an appropriate manner. This leads to some confusion as osteopaths acting in a primary role outside of the main (biomedical) health model, are called Complementary as their practice compliments the biomedical health model. More confusion can arise as irreversibility provides for some hierarchy of health professions, represented

through a division of labour, with the medical profession as holders of the knowledge and decision-making, deciding the diagnosis, treatment and providing some treatment. Less risky treatments and patients are managed by the 'Allied Health' profession, and although there is no universal definition, the peak body defines allied health as *'health professionals that are not part of the medical, dental or nursing professions'* (Allied Health Professions Australia (AHPA), 2020). This means that some healthcare is delivered by allied health, of which the osteopathy profession in Australia includes itself, along with twenty other health professions such as social work, physiotherapists and dieticians (Allied Health Professions Australia (AHPA), 2020). Finally, those whom support an alternate thinking to biomedicine maybe termed Alternative, such as Chinese medicine or Homeopathy.

Osteopathy is a good example of the confusion, as historically there were suggestions that osteopathy was an alternative way to the dominant healthcare of the day (Gevitz, 2014d; McGrath, 2013). Still postured loudly and vigorously osteopathy was different to the medicine of the time, he saw '*osteopathy as an Independent System'* (Still, 1902), and

> '*It does not ask nor has it ever asked help of allopathy, homeopathy, ecleticism or any other system of healing. It claims independence from all of them, and ability to steer its way in the future as in the past'* (Still, 1902, p. 21)

Befitting a bricoleur, Still had a practical approach, with his acts telling a different truth. He did not abandon medicine and he continued to use some medicines,

surgery and obstetrics in his practice (Peppin, 1993; Still, 1902, p. 300) and these were taught at his college (Gevitz, 2014c; O'Brien, 2017). Therefore, perhaps somewhat confusingly, osteopathy maybe viewed as Alternative, Complementary, and in the USA part of the dominant biomedical model. This characterization befittingly represents the terms Complementary and Alternative, which are abbreviated as CAM, often being used synonymously as the definition is unsettled (Banton, 2019). The hierarchical relationships are not clear, are subject to change and hence provide for confusion and an indecisive flavour (Gale, 2014). Only a continuing professional dialectic will help provide clarity for the osteopathy profession.

> *'It is inherent in the definition of a Profession that a code of ethics governs the activities of each Profession. Such codes require behaviour and practice beyond the personal moral obligations of an individual. They define and demand high standards of behaviour in respect to the services provided to the public and in dealing with professional colleagues. Further, these codes are enforced by the Profession and are acknowledged and accepted by the community'* (Australian Council of Professions, 2003).

Professionals want to make the best decisions – wise decisions to help best manage irreversibility. Kinsella suggests six criteria to help professionals with wise practice or phronesis: *'pragmatic usefulness, persuasiveness, aesthetic appeal, ethical considerations, transformative potential, and dialogic intersubjectivity'* (Kinsella cited in Kinsella & Pitman, 2012, p. 4). Phronesis is defined in the dictionary as practical understanding; wisdom, prudence; sound judgement, and by Kinsella and Pitman (2012) as involving *'deliberation that is*

*based on values, concerned with practical judgment and informed by reflection. It is pragmatic, variable, context-dependent and orientated toward action'* (Kinsella & Pitman, 2012, p. 2). These qualities or conduct of phronesis are leveraged from basic human socializing instincts and supported by particular training to support the interaction in the treatment dyad. Tyreman (2000) in his focus on phronesis and wisdom in practice states that the *'key points are that phronesis involves engagement with actual concrete situations…'* (p. 120). Over time action becomes more efficient with repeated use and situations more familiar. Deliberation, judgements or reasoning are part of how the individual will conduct themselves in the practice. Brendel (2009) notes that *'there is no single set of clinical considerations or ethical theories to guide the physician and the patient toward the most appropriate decision-making process in the context of clinical complexity, ambiguity, and uncertainty'* (p. 34). The thinking of Brendel (2009) was significant for this research. Brendel (2004) proposes the four Ps: Pluralistic, Participatory, Practical and Provisional as a focus on the qualities of the act of clinical practice and the meaning as the outcome. Essentially the four Ps (Brendel, 2009, p. 29), listed below, represent aims of practice or questions a clinician can ask of their practice to support wise practice or phronesis.

1. *'The practical dimensions of all scientific inquiry*
2. *The pluralistic nature of the phenomena studied by science and the tools that are used to study those phenomena*
3. *The participatory role of many individuals with different perspectives in the necessarily interpersonal process of scientific inquiry*
4. *The provisional and flexible character of scientific explanation'*

   (Brendel, 2009, p. 29).

The criteria from Kinsella and from Brendel are *'orientating practitioners toward phronetic or wise judgment in professional practice'* (Kinsella & Pitman, 2012). Kinsella and Pitman (2012) call for *'renewed attention to phronesis*' (p. 1), which is fortunate for this research and will be addressed later in this thesis.

## 2.4 The founding of osteopathy

Dr Andrew Taylor Still (1828-1917), the founding father of osteopathy was the middle of seven children born to Abram, a Methodist preacher and doctor, and Martha Still in Virginia, USA. The Still family were at the heart of the frontier, where life was tough and they relied on a meagre income supplemented by living off the land. Andrew Still followed his father as a preacher and was also apprenticed by him to study medicine (Gevitz, 2014a; Lewis, 2012, p. 17), going into medical practice as it was for the time. Andrew Still married Mary Margaret Vaughn (1832-1859) on 29th January 1849. Mary died ten years later, two months after the birth of their fifth child. Still remarried in 1860 to Mary Elvira Turner (1834-1910).

It was the societal influences in Still's life and work, that placed him in the position to construct his ideas into a practice and test them in the '*crucible of the field'* (Shulman, 1998, p. 518). In addition to his family life, significant personal health experiences were important to his conception of medicine. These include at age ten Still had a headache, so he placed a blanket over the rope swing he had been on, and used it as a pillow to sleep on. Later he awoke with no headache. He used a modification of this approach to manage his headaches for years after (Lewis, 2012, p. 22). In another incident Still had injured his chest on a saddle,

and after enduring heart palpitation symptoms for ten years, accidentally cured himself by leaning on croquet balls against a tree (Lewis, 2012, p. 73). Other significant life events include being exposed to the injuries from fighting in the American civil war for the North and the anti-slavery movement (Lewis, 2012; Still, 1908). Still lost two children from his first marriage and one from his second wife to meningitis in 1864. Such experiences led him to question his medical practice (Trowbridge, 1990, p. 94).

Still's life story as a husband, father, farmer, preacher, inventor and a medical doctor of the day, is a personal representation of the influences present in the USA that produced Pragmatism and osteopathy. Demonstrating the qualities of a bricoleur, as bricolage was essential for Still and his family, not just to survive life on the frontier, but also for Still to develop a new approach to medicine – to consider the connection of the physical body with health complaints. Still gathered together a multitude of 'truths' from 'his life practice', the acts that had helped him through his frontier life:

- Inventing and problem solving in farming;
- The change in his Methodist religious background to Spiritualism and his views of God and nature;
- Physical experience of pain relief such as relief of a headache from the rope swing and self-back manipulation with the croquet ball;
- Exposure to magnetic healing, bone setting and indigenous (American Indian) health;

- The domination of Galenic medicine (Pasipoularides, 2014) and the old 'heroic' medicine with bleeding and strong poisonous drugs, like mercury familiar to Still from his early doctoring becoming unpopular;
- Changing patient demand and the local market for healthcare (Gevitz, 2014a);
- Competing approaches like homoeopathy, home herbal remedies, the drugless magnetic healing and eclectic medicine (Trowbridge, 1990, pp. 16-18, 91);
- An emerging modern medicine from the industrial revolution and new scientific and medical discoveries (Lewis, 2012, pp. 51-63) including germ theory (Strickland & Patrick, 2015) and advances in anatomy, physiology and patient care (Littlejohn, 2000).

Still's bricolage coalesced '*at 10am on 22 June 1874*' (Lewis, 2012, p. 77; Still, 1908, p. 94), as the idea that he eventually called osteopathy. Still '*combined contemporary philosophical concepts and principles with existing scientific theories. Always a pragmatist, Still accepted aspects of different philosophies, concepts and practices that worked for him and his patients'* (Seffinger et al., 2011, p. 9). Despite being so specific as to the date of his discovery of osteopathy, Still had been thinking, study and working directly on the idea for at least two years and although he had this moment of clarity in 1874, he did not come up with the name until 15 years later in 1889 (Lewis, 2012, p. 77). No stranger to adversity, Still had to fight to have osteopathy recognised by his community. At first he was rejected and scorned by his home, the City of Baldwin and by Baker University that he had helped form with a grant of land (Lewis, 2012, p. 86; Still, 1908, p. 97). In response at the end of 1874 Still moved to Kirksville

Missouri, where he took nearly 20 years to develop his conception, and in his middle age he set up his school of osteopathy in 1892 and it is still there today as the A.T. Still University (2020).

The challenges for Still and his osteopathy continued as it expanded across the continental USA. Osteopathy was more easily accepted by the public than by competing professions and the different state legislatures. Even after Still's death in 1917, the political upheaval continued in the USA, with the 1961 merger of the Californian osteopaths representing both the end of osteopathy and a rebirth with the rest of the osteopaths in the USA uniting and reinvigorating their drive for equality with the allopathic (medical) practitioners (Gevitz, 2014d; Wardwell, 1994). This merger represented the birth of the dual osteopathic profession of today, where, by 1970, all US states and territories licenced osteopathic physicians (Baer, 2006), and allopathic practitioners with equal practice status. Osteopaths outside of the USA have limited practice (Burke et al., 2013; Gougian & Berkowitz, 2014).

At the same time osteopathy was expanding in the USA, it also expanded internationally with British people training in the USA and returning to the UK to practice. Arguably, the most significant return was John Martin Littlejohn (1865-1947). Littlejohn was a Scot with qualifications in law, divinity and languages, a medical degree from Glasgow University, and he had embarked on a PhD at Columbia College New York (O'Brien, 2017) . He had travelled to the United States due to ill health, where he had come across Dr Still (Lewis, 2012). He studied osteopathy before taking up a position in the new physiology department

as chair, and later as Dean of the teaching faculty. After a falling out, Littlejohn and his two brothers, also medical doctors and on Dr Still's staff, went to Chicago and set up the American College of Osteopathic Medicine, now the Chicago College of Osteopathic Medicine (CCOM) (Pettman, 2007). After he left Chicago Littlejohn returned to England and set up The British School of Osteopathy (BSO) in 1917 (Pettman, 2007) and saw out his days there.

The story of osteopathy moves to Australia. A handful of American trained osteopaths had brought osteopathy to Melbourne, Australia before 1909 (Hawkins & O'Neill, 1990, p. 20). However, the more significant expansion for Australian osteopathy was from the United Kingdom. Osteopathy developed in the state of Victoria primarily with imports from, or Australians traveling to the BSO in the UK. There were locally trained osteopaths from colleges of chiropractic, osteopathy and naturopathy that came and went in the unregulated environment in Australia (Hans A. Baer, 2009). The osteopathic profession in Victoria was included in the Masseurs Registration Act in 1922, however this did not appear to have a big impact until state regulation for chiropractors and osteopaths in 1979.

Government regulation does provide for some legitimisation of a profession and through this, development of the profession (Willis, 1977). This legitimisation, in part, accounts for the opposition to regulation of osteopathy in the UK in 1935, evidenced by the number of letters to the BMJ in the 1920s to 1930s. A similar event occurred in the 1970s with health professions including physiotherapy (McMeeken, 2018) opposing the subsequently successful regulation and

establishment of a joint Victorian Chiropractors and Osteopaths registration Board in 1979 following on from the publication of the Webb report (Edwin C Webb (*chairman)* et al., 1977). Regulation did bring some controversy, as only two locally trained osteopaths were included under a 'grandfather' clause, with a further fifteen required additional training and all the British and American trained osteopaths not requiring any assessment in this new registration (Rawlings, 2001). The regulation process evolved with a review leading to the creation of profession specific registration boards in 1997: The Osteopaths Registration Board of Victoria (Research Data Australia, N.D.). The other states of Australia had similar processes occurring in parallel, with Victoria leading the way. In 2010 a Federal act was established in Australia to regulate ten health professional groups, administered by the Australian Health Practitioners Regulating Authority (AHPRA) (Osteopathy Board of Australia, 2020a). Each profession has a relevant board, in the case of osteopathy: the Osteopathy Board of Australia (OBA)(Burke et al., 2013). As at 2020, there are currently 15 regulated professions. (AHPRA, 2020d)

With the registration of osteopaths and chiropractors in Australia came government funded training. In 1982 a predecessor of RMIT University (Melbourne) started the first government supported program for osteopathy in Australia and the world (Hans A. Baer, 2009). This led to the demise of the last private training for osteopaths in Australia (NSW) and set the scene for today (2020), where there are three universities training osteopaths in Australia: Southern Cross University (SCU) in New South Wales, RMIT University (RMIT) and Victoria University (VU) both in Melbourne. Curriculum changes are ongoing with VU and SCU altering the course length from 5 years to 4.5 and 4 years

respectively and RMIT reverting back from a Bachelor/Master program to a double Bachelor degree. Osteopathy in Australia shares a heritage with its global osteopathy cousins where adversity, controversy and change have been continued bedfellows.

The history of osteopathy has produced two variants of osteopaths in the osteopathic profession. The first are the fully-licenced 'osteopathic physician' found in North America, who can practice in all medical specialities, undertake surgery and prescribe medications, and are similar to the general practitioner and medical practice known in Australia and the UK (Adams et al., 2018; Steel et al., 2017). For example, an American osteopath suggests that American colleges of osteopathy implement an allied profession *'OMM assistant'* (Lennon, 2020, p. 56), who would treat patients using osteopathic manipulative medicine (OMM) supervised by an osteopathic physician. This was a similar model used for physiotherapy in the early 20th century in Australia, with direct access to physiotherapists without a medical referral, occurring in Victoria in 1976 (Kruger, 2010; McMeeken, 2018, p. 141). The American Osteopathic Association (AOA), as the professional association works to assist osteopathic physicians gain reciprocal practice rights globally (Gougian & Berkowitz, 2014). The second variant 'osteopath', representative of those found in Australia have limited practice. They do not participate in specialty practice, do not undertake surgery or have access to prescription medication. These osteopaths are found primarily in the United Kingdom, Australia, New Zealand, Canada (Commonwealth and Anglophone countries) and other jurisdictions outside of North America including Europe and Singapore (Gougian & Berkowitz, 2014). They practice primarily

outside of the hospital systems, although they are included in the national health systems in a limited manner (Hans A Baer, 2009). They use manual and other techniques to deliver therapy. These two groups of osteopaths have largely co-existed harmoniously, and there is an Osteopathic International Alliance (2012) (OIA) to support global collaboration.

It is noteworthy, that three American trained osteopaths were convicted in Melbourne in 1926 for practising medicine without a licence (Hans A Baer, 2009, p. 20; Hawkins & O'Neill, 1990, p. 19). A decade later in 1935 in the United Kingdom, a parliamentary bill was withdrawn that would have statutory regulated osteopaths (General Osteopathic Council, 2019). The outcome recommended by the House of Lords Select Committee was for voluntary regulation, with statutory regulation achieved much later in the UK in 1993 (Collins, 1997; General Osteopathic Council, 2019; Standen, 1993; Unattributed, 1935 ). This meant the dual relationship with medicine and osteopathy that was to become present in the USA, did not occur in Australia or the UK. Perhaps this in some way extended or protected the manipulative heritage of osteopathy, given the argument that the knowledge and principles from osteopaths to distinguish between osteopathic medicine and allopathic medicine in the USA provide no empirical evidence Peppin (1993). There are those (Baer, 1987; Hans A. Baer, 2009; Gevitz, 2006; Tyreman, 2013) who argue, although refuted by others (King, 2016), that osteopaths in the USA have ceased the emphasis on manual practice and have become indistinctive. Wardwell (1996) philosopher and sociologist with a Ph.D. in history of chiropractic, even questions whether the title osteopath will remain in the future! Whatever the evolution of osteopathy, there are, nevertheless,

distinctive differences between the osteopathic physicians of the USA and the osteopaths of the Commonwealth and other countries. This history and evolution of osteopathy conditions the osteopaths of today, who are the subject of this research project.

## 2.5 The osteopathy profession

'*Concerning the aim of human endeavor, Aristotle says, there can be no uncertainty: every one is agreed that it is happiness'* (Nicklin, 1901, p. 228). Happiness as the basis of human endeavour is then the base aim for a profession, such as osteopathy. Happiness is the notion that good health supports a good life and in healthcare is defined as supporting the ability to live a 'good life'. '*Happiness is the healthy function of all the human faculties, working harmoniously together and at their highest level, and observing the conditions which delimit their sphere'* (Nicklin, 1901, p. 228). A profession emerges in society as an organised response to gestures that sensitise society, to gestures from individual members. This 're-*act*-ion', is central to the philosophy of Pragmatism. Mead indicates that experience is structured around a disruption of continuity and this disruption constitutes Cronk's (n.d.) '*problem to be overcome',* an impact to happiness, leading to action to restore happiness. Thus, osteopathy is representative of a profession sensitised to the community, for potential interaction in relation to the sensation indicated, which includes those responding to the need for care and those responding to providing care. Although Mead's comment below refers to religion and economics, it relates just as well to healthcare, which contains similar human attitudes:

> *'To take a distinctively human, that is, self-conscious, social attitude toward another individual, or to become aware of him as such , is to identify yourself sympathetically with him, by taking his attitude toward, and his role in, the given social situation, and by thus responding to that situation implicitly as he does or is about to do explicitly, in essentially the same way you take his attitude toward yourself in general conversation with him, and are thus made self-conscious' (Mead, 1934/2015, p. 300).*

A caring practice with some physical component has probably always been part of society, arising from basic family instincts, with a manual approach to healthcare recorded before 400 BCE (Pettman, 2007). Ideally osteopathy provides '*safe and ethical care that meets the patient's needs'* (Tyreman, 2011, p. 216). Osteopathy professes to address an aspect of society, that is people who have a perception of less-than-optimal health. All healthcare in the early 21st century must respond to the continual societal, financial and innovation changes (Davidson et al., 2006) represented in the prevalence of lifestyle disease and chronic illnesses such as diabetes mellitus, heart disease and obesity (Australian Institute of Health and Welfare, 2019; Shannon, 2011). King et al. (2015) drawing on social theory, argue that shifting the focus to the health user from the overall profession, is a mechanism to manage professional boundary disputes. For a profession to remain relative to, and to continue to engage its clients, the profession needs to adapt to change. Such adaption along with the promulgation of its related knowledge to the members will support its continued development and service to its clients. McGrath (2015) indicates the challenge ahead for the osteopathic profession to develop an identity, which fortunately supports this

study. However, ironically he cautions that should the profession identify successful practices that define the profession, supporting the King et al. (2015) notion of focussing to the health user, these successful practices will be picked up by others to incorporate into their practice, on an ethical-best-for-patient basis, leading to continued overlap and confusion (McGrath, 2015). The process of mainstream medicine incorporating complementary and healthcare practices is by '*pluralization, incorporation and integration'* (Gale, 2014, p. 811), which may define the evolution and subsequent indistinctiveness of osteopathy in the USA. This does indicate the evolutionary forces and social interaction, such as the progression of knowledge, actively leading change in the professions (King et al., 2015). Osteopathy has demonstrated success in both 'exporting' its ideas, such as specific manual therapy techniques like MET (Clar et al., 2014), Strain-Counterstrain (SCS) (Lewis et al., 2011) and the theoretical constructs such as controversial cranial techniques (Brough et al., 2015) that were developed by osteopaths and have moved well beyond the profession to be utilised by other professions such as physiotherapy and approaches like cranio-sacral therapy. Manual therapy techniques appear more easily transferrable than osteopathic theoretical models, which have not necessarily translated as well. This may be because techniques have a shared practical knowledge, such as engagement of the client, manual handling and palpation skills. It has also subsumed others concepts and practices, like the use of dry-needling (Rickards, 2009) a westernisation of Chinese acupuncture. Evolution and change continue for health professions, with some claiming that the *'movement towards an integrated approach to health care is inevitable'* (Hilbers & Lewis, 2013, p. 58). Integrated healthcare in the Hilbers and Lewis (2013) example refers to, through a disease

lens in oncology care, the inclusion of multiple treatment modalities, including CAM, for patient care. Hilbers and Lewis (2013) do not define if this is through one or many practitioners, they are nevertheless outlining an approach to changing practice.

Some health professions define practice by anatomical region, such as podiatry with practiced largely limited to issues below the knee. Others like midwifery, define practice as limited to a stage of life: '*services that promote health and wellbeing for pregnancy, birth, the postnatal period and transition to parenting'* (AHPRA - Nursing and Midwifery Board, 2020). Again, some others use specialisation, and as musculoskeletal pain demonstrably impacts the happiness of society (Walker et al., 2003), there is debate about a 'manual specialty'. A combination of chiropractic, physiotherapy and osteopathy, associated with the spine as a source of disease (Johnson et al., 2018). A practitioner who has knowledge of the spine and the relevant processes, has access to specialised imaging like computed tomography (CT) or magnetic resonance imaging (MRI) and is able to treat using manual therapy, rehabilitation, with access to certain related relevant drugs and treatment procedures. Musculoskeletal pain, most commonly as sprains and strains or minor orthopaedics represented as syndromes or chronic conditions, is the primary patient presentation and forms a large part of limited practice osteopathy today (Adams et al., 2018; Fryer, 2017a; Orrock, 2009b; Steel et al., 2017). Norman (2000) notes that a key factor in determining what a disease is relates to the basic science, the history and a known agent. Syndromes are less likely to be a disease, because '*no satisfactory scientific mechanism has yet been found to explain their features' (p. s128).*

Criticism relates to the treatment of musculoskeletal conditions which, are not readily defined as a disease. The AIHW report does not define musculoskeletal conditions instead describing what they are: '*Musculoskeletal conditions comprise more than 150 different conditions of the bones, muscles, ligaments, connective tissues and joints. They are the most common chronic conditions in Australia'* (Australian Institute of Health and Welfare, 2019). Such a broad set of conditions does contain some acute presentations and serious diseases. However most do not generally present as high-risk diagnoses, they maybe already diagnosed and have a management strategy in place, and the symptoms maybe self-limiting and therefore do not rank as high risk. Patients *'often gravitate to CAM because they suffer from chronic conditions that orthodox medicine does not handle to their satisfaction or because they live in morbid fear that they will lose their ''wellness''* (Beyerstein, 2001, p. 231). If the primary field of practice is with a group of musculoskeletal and chronic conditions that are low risk and require little or no specialised knowledge, a threshold is not achieved making the profession not bona fide or distinct. It is characterised as a '*pseudo-medical practice'* (Unattributed, 1924, p. 963) and *'a faith'* (Langdon-Brown, 1937), which means there is no requirement for government regulation to mandate minimal competence, no need for autonomy of judgment or government funded education.

Still did not class his osteopathy as a limited or specialised manual therapy profession. He saw osteopathy as a way to reform his clinical practice to avoid the mistakes he had seen (Shannon, 2011). Thus, osteopathic medicine from early on was for all intents and purposes complementary to established medicine,

albeit a version of medicine quite different to that of today. Still was keen to express a philosophy and define his different or alternative medicine, he claimed a *'natural theology'* (O'Brien, 2017, p. 7) and that *'our captain is the God of Nature who has never failed in any of His plans or specification' (Still, 1910, p. 8)* God was the '*Architect of Life*' *(Still, 1910, p. 8)* and that nature was perfect, and as such the body contained all the natural healing processes. Still linked the perfection of the body to God as an ideal or copy but not as one. Disease was a product of obstruction to the blood, nerves and other processes. The body was subject to mechanical and other derangements that then meant it could be subjected to, and remedied with manipulation to restore the perfection, the normal mechanical function. Still made many such statements and in time the principles of osteopathy were developed as a representation of the philosophy that underpins the profession. Some osteopaths claim these principles are representative of practice and define the profession (Peppin, 1993), and others point to criticism and changes to these over time (Gevitz, 2006; O'Brien, 2017).

*'There is only one medicine'* claims Shine (2001, p. s146), who feels that if society accepts that evidence informs healthcare, then there can be only one healthcare, albeit with culturally sensitive facets. Tyreman (2011) suggests that the values claimed by CAM are shared across healthcare, which means the values of CAM are not definitive, but it does lend support to the notion of a single healthcare with ideal shared values. A shared values concept is supported by Pellegrino and Thomasma (1981), who claim that a philosophy of medicine is a philosophy of healthcare, which can help settle claims of confusion. This shared values was not supported by Brosnan (2016) in her report on the differences in the Chinese

Medicine and osteopathy academic traditions. She says these differences '*unsettle the depictions of a homogenous CAM ontology and epistemology so often mobilised in debates over CAM's evidence base'* (Brosnan, 2016, p. 14). Confusion seems like a fair criticism in this light, with Stempsey (2008) who notes that '*philosophy of medicine cannot be defined exactly, because both philosophy and medicine have fuzzy edges*' (p. 382) with McGrath (2015) and Gale (2011) suggesting caution with '*caricaturing'* biomedicine or CAM, because the boundaries aren't *'stable or impermeable'* (Gale, 2011, p. 249).

It can be argued that there is one healthcare based on the notion of happiness as a life endeavour. The concept of happiness is then supported by a broad philosophy of health that meets the variations of society and it is implemented by the different professions through their lenses. Therefore, categorising a profession such as osteopathy relates to the role it has negotiated with society. In essence a pragmatic view would best support practice: '*Perhaps we philosophers of medicine should be as generous in recognizing work that illuminates the theory and practice of medicine, wherever we might find that work'* (Stempsey, 2008, p. 391)

## 2.6 Knowledge for Osteopathy

This section considers epistemology in osteopathy. A broad knowledge is important for osteopathy to buttress the field of practice represented through educational practice, clinical practice, and research practice. Knowledge directly supports one of the criteria for a profession noted above: a specialized literature underpins the intellectual basis of the practice. The other three-the provision of a

needed social service; standards to ensure minimal competence; and autonomy of judgment for the profession and individual-have a direct relationship with knowledge. As also noted above, the irreversibility represented in the diagnosis requires knowledge and impacts the value of a profession. Being able to describe a causative agent that addresses the presenting symptoms, particularly with high risk and potentially irreversible situations is part of the 'gold' standard for diagnosis (Bachmann et al., 2005; Cardoso et al., 2014).

Still recognised the importance of knowledge, exhorting: *'"Osteopathy is knowledge, or it is nothing"'* (Peppin, 1993, p. 205). Osteopathy asserts an association with the broad health knowledge of historical medicine, with Littlejohn who *'forcefully argued, "Osteopathy claims that it is the heir of all the medical knowledge accumulated through the ages and it takes the position that the use of drugs as remedial agents is a mistake in Therapeutics'* (Gevitz, 2014b, p. 121). On the other hand criticism of the intellectual basis of osteopathy from other professions and individuals has been consistent from the early days (McGrath, 2013). Such critique was well developed some 25 years after Still commenced teaching osteopathy, at a transitional time early in the profession outside the USA, in the UK as evidenced by the many letters from the medical profession published in the British Medical Journal (BMJ) in the 1920s – 1930s (Oldfield et al., 1925; Unattributed, 1924, 1935). Some of the letters were supportive and others critical of the failed effort of the UK osteopathic profession attaining statutory regulation in 1935. The following excerpt from an editorial in the BMJ dramatically represents the criticisms:

> *'These examples will show that osteopathy is a compound of sense and nonsense; and that the latter is of a dangerous kind is evident from the statements of osteopaths themselves that "adjustment" is an efficient cure for all diseases, including fevers and new growths' (Unattributed, 1924, p. 963).*

The examples referred to in the quote are from osteopaths who are cited as having successfully treated a goitre (thyroid gland enlargement) and acute indigestion. Identifying osteopathy as *'nonsense'* diminishes osteopathic specialized knowledge. The author(s) identify osteopathy as dangerous because it implies that '*adjustment'* is a cure-all, a generalisation of knowledge as a panacea that puts a patient at risk of harm from the wrong diagnosis and treatment.

Change is perpetual with philosophers of science continuing to debate science, therefore what science is changes over time (Holton, 1981, p. 17; Irby, 1990) and subsequently knowledge as an output of science also changes. The aims of science are diverse (Potochnik, 2015), with science exploring new ideas and answering questions (Astin, 2002). Science through its output of knowledge supports the humanistic or social skills necessary to apply a resolution to a problem that impacts the human endeavour of happiness. Change is perhaps best characterised by a duality of activism and resistance (Denzin & Lincoln, 2018). There are those who embrace change and may be viewed as activists, pushing the envelope of the broadest rules or definitions: what is science; knowledge; or research. Then there are those who want to keep the status quo, the resistors who view knowledge as settled or fixed. They are unsupported by

the very method they proclaim brought them to their opinions with history on the side of the activists. A millennia old dialectic is present on these topics, and it is not by fringe commentators. Harris (1981) develops a critique of a perceived 'resistance in science', Popper's falsification of the hypothesis. He notes that Popper felt that there was no logical justification that future events could be predicted from past experience. After presenting the argument that all propositions are based on preconceptions and therefore can never be proved right or wrong, Harris (1981) suggests somewhat pragmatically, that a rational scientist *'never troubles his head about logic of what he is doing, but has no doubt that his activities yield information about the real world'* (p. 51). Harris (1981) continues: '*Rationality helps, but it is not a prescription for making discoveries*'. Given the changing nature of science and knowledge, it is important to be clear on concepts that support a project, to be transparent, so that a reader can make informed judgments.

The changes in knowledge for osteopathy since Still started his educational establishment have been documented (Gevitz, 2014b) and the critique continues, for example in an area of osteopathy that considers techniques or osteopathic medical manipulation (OMM) to the cranium: *'There is arguably as much, if not more, current research attention devoted to cranial OMM as there is to any other single OMM procedure, yet cranial procedures remain the most controversial*' (King, 2012, p. 9). A systematic review in 2016 concluded: *'that methodologically strong evidence on the reliability of diagnostic procedures and the efficacy of techniques and therapeutic strategies in cranial osteopathy is almost non-existent' (Guillaud et al., 2016, p. 2).* Brendel (2003) identifies a domination of

reductionist over eclectic thinking as a 'resistance' in psychiatry. Fryer (2017b) and D'Alessandro (2016) do similar for osteopathy, with all three suggesting the need to challenge their profession's thinking. Fryer (2017b) takes the next step and using recent evidence and the biopsychosocial model proposes a new approach, described later in this Chapter (2.7.4). Fortunately for my work, Brendel (2003) suggests that Pragmatism '… *may be able to provide a helpful set of principles and tools by which psychiatrists [osteopaths] could work through the dialectic of explanation that continues to bedevil the field'* (p. 570).

> *'There is a profound need, therefore, to critique current explanatory paradigms and develop other paradigms that are neither reductionistic nor eclectic, but are potentially multifactorial and rooted in empirical science'* (Brendel, 2003, p. 566).

### *2.6.1 Clinical reasoning*

Reasoning and its outcome decision-making have been key to human existence for millennia. Decision-making and its specialist subset clinical decision-making, *'clinical reasoning, or one of its many synonyms - problem-solving, decision-making, judgement'* (Norman, 2005, p. 418) has been subject to extensive research with many books and thousands of scholarly articles refining the understanding of it for at least half a century (Monteiro et al., 2018; Norman, 2000; Thomson et al., 2013a). Clinical reasoning is the thinking process in which clinicians, like osteopaths and medical doctors, collect data about a patient's presenting complaint, consider this data (reason) and then come up with an outcome (judgment), before applying a treatment or management process and evaluate this action (Levett-Jones, 2009).

Clinical reasoning as a focus came into my professional journey with my master's degree paper: 'Novice clinical practice at Victoria University'. In that paper a particular novice osteopath practice was considered in light of the skills acquisition framework elucidated for nursing by Benner (2004), based on the staged model of skill acquisition initially described by Dreyfuss and Dreyfuss (1980). The Dreyfuss brothers examined decision-making in chess players, air force pilots and military tank drivers. It is important to know why air force pilots do what they do, as trial and error can be disastrous. Decision-making in a risky situation is also of peak interest for the medical field, where surgeons and other health workers make life and death decisions (Ericsson, 2008). The literature is well developed for medicine and less so for other professions, such as physiotherapy (Black et al., 2010; Higgs et al., 2008; Jensen et al., 2000).

The clinical reasoning process occurs in the brain of one individual to develop meaning for the professional or clinical interaction. These clinician-in-brain-neurological processes that support clinical reasoning are described as two types (Croskerry, 2009). Type 1 is a rapid, intuitive, pattern recognition process, that occurs in the fast dopamine neurotransmitter highly connected neurones in the limbic region of the brain. This cognitive system is designed to develop patterns of common behaviours, so that when actioned they appear automated. This automation process is important and when the central nervous system gets the pattern recognition 'right', it gives itself a reward using the neurotransmitter dopamine, which among other functions is nicknamed the happy hormone (ScienceDaily, 2016). Pattern recognition has evolved as a protective system allowing quick reaction in relation to biological or basic instincts recognising patterns of danger and benefit. It is the inductive thinking reasoning process,

where the brain recognises a group of gestures and communication as a pattern and insinuates a probability from these. '*Typification*', as pattern recognition or inductive reasoning, is '*one of the main ways that humans make manageable the unmanageable complexity of the reality we face especially* the reality of *other people and their differences*' (Frank cited in Kinsella & Pitman, 2012, p. 55). Inductive reasoning as a result of the pattern system contains a potential inherent bias, with part-patterns being construed to be the whole pattern.

Type 2 reasoning is the a priori hypothetico-deductive, slower analytical process relying on frontal region central nervous system processing power, which is limited by cognitive load. Deductive processing then produces inferences as decisions based on the processed data. It is active in present time, narrow or constrained to a particular perspective. Ideally the dual process system assesses incoming data – observations, palpation and other sensations, for patterns and checks the assumptions based on these patterns to processes these data into significant objects for the dyad. Deductive reasoning is also where repeating patterns are 'leant' to then become patterns.

> *'Positivism is aligned with the hypothetico-deductive model of science that builds on verifying a priori hypotheses and experimentation by operationalizing variables and measures; results from hypothesis testing are used to inform and advance science'* (Park et al., 2020, p. 690).

Practically '*the act, then, and not the tract, is the fundamental datum in both social and individual psychology when behavioristically conceived, and it has both an inner and an outer phase, an internal and an external aspect'* (Mead, 1934/2015, p. 8). That is to say that the focus of the neuronally conducted decision process

is the outcome – the decision or action. Moving from a clinician performance of clinical reasoning to a patient focussed view of clinical reasoning, Montgomery (2013) takes a personal narrative in her book about clinical decision making, which was seminal in supporting my understanding that the reasoning used in medicine as a specialized or developed version of general decision-making. Montgomery (2013) categorizes patient care as requiring contingency to manage practical reasoning. She uses the term phronesis, described from an Aristotelian view, as a '*flexible, interpretive capacity that enables moral reasoners to determine the best action when knowledge depends on circumstance'.* (Montgomery, 2013, pp. 4-5) She goes onto state that '*physicians – however scientific they may be – are not engaged in a quantifiable science but in a rational, interpretive practice'* (Montgomery, 2013, p. 6). Keeping with a practical theme, Montgomery (2013) outlines the idea of metaphor in teaching clinical reasoning. She uses the metaphor 'when hearing hooves think zebra' to indicate the presence of bias in the reasoning process. This focus on metaphor encouraged me to use the metaphor: *'Actions speak louder than words'* in the title of this project. Ironically, at the time, I had little idea of how pertinent this title would turn out be to be.

> *'The assumption of a single, universal problem-solving process common to all cases and all physicians may seem unreasonable, but from the perspective of the then-current view of problem solving, it was quite plausible' (Elstein, 2009, p. 8)*.

This quote from Elstein (2009) a noted clinical reasoning researcher, reflecting on his 1978 medical inquiry project supports a generalised approach to

reasoning. Norman (2000) another key researcher in clinical reasoning in a special presentation reflecting on over thirty years of research extends the generalised approach with:

> *'It appears to me that these thinkers are urging us to a reconciliation in our own field—expertise in clinical reasoning is neither mastery of analytical rules nor accumulation of experience, it is both'* (Norman, 2000, p. s132).

These observations were prescient. Norman (2005) states in an editorial that:

> *'It became clear early on that the process was almost too universal, in that everyone, young or old, novice or expert, was doing approximately the same thing'* (p. 425)

It is appropriate that given all humans essentially share the same processing equipment (a brain) that an overarching decision process would be apparent. It is the very mark of economy, and evolution is economic, to utilise an already apparent skill and adapt it to suit the purpose. Croskerry (2009) describes how these processes work together in *'a Universal Model of Diagnostic Reasoning'*, that the process of clinical reasoning is consistent or '*Universal'*. It also supports the comments of both Elstein (2009) and Norman (2000) above and even uses the word 'universal' in its title that Norman (2005) uses in his editorial. Although the dual process model did not describe everything, Custers (2013) in his criticism of it reminds us that despite the advances in this field, further research is required, such as how do the different processes interact (Norman et al., 2013; Parker-Tomlin et al., 2017).

> *'It seems that, in reality, a physician does not use just intuitive or analytic systems and the mind of physician operates in the space between them, while the dual-processing theory ignores this*' (Yazdani & Hoseini Abardeh, 2019, p. 712).

The overarching clinical decision-making process is likely an interplay between the Type 1 and Type 2 processes (Parker-Tomlin et al., 2017), a non-linear, spiral and flexible process utilising different aspects of the reasoning process. Custers (2013) posits a *'cognitive continuum theory'* where the reasoning processes act together in a flexible or *'quasirational'* manner (Custers, 2013, p. 1075), operating in the mental space between Type 1 and 2, supporting Montgomery's (2013) idea above of the best action in the circumstance. Not everyone agrees with how these two types of reasoning interact, other than to say they do and it is methodologically difficult to research (Monteiro et al., 2018; Norman et al., 2013). Researchers want to understand this interplay, especially in expert clinicians, to support the teaching of clinical reasoning skills (Durning et al., 2015). Nevertheless cognitive continuum theory has a pragmatic flavour and does support the variations on the clinical reasoning theme that come with the background, context or '*prisms of prior experience*' (Norman, 2000, p. s132). What training was had, what theory was learned, what technical skills mastered and in what situation these were applied. These factors all impact on experiences and prior experience helps determine the decisions and these decisions represent meaning for the practitioners. In summary:

> *'One thing is clear. There is no such thing as clinical reasoning; there is no one best way through a problem. The more one studies the clinical expert, the more one marvels at the complex and multidimensional*

> *components of knowledge and skill that she or he brings to bear on the problem, and the amazing adaptability she must possess to achieve the goal of effective care'* (Norman, 2005, p. 426).

Clinical reasoning is clearly central to health and osteopathic practice (Spadaccini & Esteves, 2014; Thomson et al., 2013b), as is required to deliver a treatment and management plan. There have been few studies of clinical reasoning specific to the osteopathic profession (Grace et al., 2016; Thomson, Petty, & Moore, 2011; Thomson et al., 2013a). Fortunately for the osteopathic profession both Thomson et al (2013a) and Grace et al (2016) suggest clinical reasoning with an osteopathic fingerprint, with Grace et al. (2016) describing a two-phase approach to reasoning and that more research is needed. Thomson et al. (2013a) in considering clinical reasoning in osteopathy interviewed twelve UK registered osteopaths of whom ten were clinical educators. Thomson et al. (2013a) asked nine of them to describe their clinical reasoning processes, they also videoed a further three and used the video as a prompt to support the interview. Finally, Thomson et al. (2013a) reinterviewed five participants who represented key areas of his study. In total Thomson had twelve participants and seventeen interviews. Thomson et al. (2013a) developed a conception of practice, illuminated by Donald Schön's work on reflective practice (Schön, 1983), ranging from 'technical rationality' to 'professional artistry', with practitioners' approach to a patient classified as either 'Treater, Communicator or Educator'.

As clinical reasoning is a specialised subset of general reasoning with 'universal' process, what is it characterizes osteopathy? Grace et al (2016) make tentative suggestions based on a two-stage process with others describing a universal

process. Exploring clinical decision making was one step in my Ph.D. journey and is represented in the aims of this project. At this point, the question arose for me: clinical reasoning is a universal process central to practice, but not definitive, then what defines clinical practice? Clinical practice must be 'governed' by something. Norman (2000) provides some guidance:

> *'And the role of experience with individual examples in refining the concepts is critical. Moreover, the philosophical work and the demonstrations of optical illusions show us that the external environment is not delivered to the senses intact, but is filtered through the prisms of prior experience. These are important lessons for instruction in clinical reasoning'* (Norman, 2000, p. s132).

## 2.7 Knowledge in Osteopathy

Knowledge is the foundation of professional practice. The knowledge expressed in a specialized professional literature represents a cornerstone of professional actions. It contributes to the autonomy of the profession by assisting the individual in using their judgment (Kinsella & Pitman, 2012, p. 12). Specialized knowledge first developed in osteopathy when Still reflected on his medical practice and constructed a bricolage, a model of healthcare that he called osteopathy. Models represent epistemological tools that assist in the operation of knowledge in practice, such as applying clinical reasoning knowledge to clinical practice. Three areas are discussed in this section: two models imported into osteopathy – the Evidence Based Medicine (EBM) and the Biopsychosocial models, and then the models developed specifically by osteopathy. The literature presented demonstrates a professional dialectic that supports a specialized knowledge

being present in osteopathy. Such a dialectic is a healthy sign of an evolving living profession and has been present in osteopathy since its founding.

Models or representations of knowledge provide help with answering the question: *In what terms should I think about the world?* (Davis et al., 1993, p. 17). Given such a broad remit, it is not surprizing that there is a considerable literature pertaining to models as knowledge. Models of care have no universal definition, with Davidson et al. (2006) reporting that the Queensland Government in 2000 '*concluded that a model of care is a multi- dimensional concept that defines the way in which health care services are delivered'* (Davidson et al., 2006, p. 48). If a model defines healthcare delivery then *'A health profession often owns its identity by the originality and relevance of therapeutic models it defends'* (Esteves et al., 2020). In defining models of knowledge, it is instructive to consider the dictionary definition of model, as 'a system of postulates and inferences presented as a description', a representation of ideas, or a 's*urrogate '*(Davis et al., 1993, p. 17). *'Models are used in a variety of ways in scientific practice; they can, for example, function as proto-theories, pedagogical devices, or as tools for generating and testing hypotheses'* (Bokulich, 2011, p. 33). Bokulich (2011) goes on to argue that *'in some cases - models can perform an explanatory function as well'* (Bokulich, 2011, emphasis in original). Models help with reasoning, they help practitioners bridge the conceptual gap between philosophy (theory) and practice, in that they *'guide and stabilize their research and practice'* (Bradley, 2008, p. 300). Keller (2000, p. S78) suggests that '*economy of representation is a primary function that any model is intended to serve'*. Models as '*a medium of human expression'* are '*efficient'* (Davis et al., 1993, p. 17), in that they provide

'*a fragmentary theory of intelligent reasoning'* (Davis et al., 1993, p. 17). Models help speed up the decision process, saving time and energy by representing profession specific thinking with context relevant information, that underpins the professional role and scope of practice. A second efficiency gain is that models allow for the determination of consequences '*by reasoning about the world rather than taking action in it*' (Davis et al., 1993, p. 17). Models, by combining images, symbols and/or words represented in a figure or diagram, provide a quick contained approach to thinking about an area of interest or relevance. Models are not all positive. Models represent a generalizing of understanding that focuses on certain concepts excluding others (Brendel, 2003) and in this process something is lost which represents a gap in theory and practice. Therefore, if a model is applied without consideration of the individual context, it can expose this gap. Ironically, a model supports the incorporation of theory into practice, by helping manage the conceptual gap supporting the ability to apply knowledge to a patient practitioner situation, for a beneficial outcome. The process that formed a model allows for review and testing of the model but is not always applied in practice.

Osteopathy itself is a model of healthcare utilising the *'judicious Hippocratic principle of allowing first the "vis medicatrix naturae," the healing force of Nature (Φυσις), a chance to assert itself, and intervening only if this proved ineffective*' (Pasipoularides, 2014, p. 47). Still states that '*Nature is health' (Still, 1902, p. 22)* and *'Osteopathy is to me a very sacred science. It is sacred because it is a healing power through all nature*' (Still, 1910, p. 10). Still goes on to reflect*: 'I began to realize the power of nature to cure after a skilful correction of the conditions causing abnormalities had been accomplished so as to bring forth pure*

*and healthy blood, the greatest germicide'* (Still, 1902, p. 10). Still advises the practitioner that '*Nature has no apology to offer. It does the work if you know how to line up the parts'* (Still, 1910, p. 25). Words such as '*skilful'* and '*know how to'* indicate a knowledge to support the practice.

The reasoning process is central to 'know how' as practice, as it defines the diagnosis and the outcome. Two models that support clinical reasoning, imported into osteopathy, and discussed below are Evidence Based Medicine and the Biopsychosocial models. Osteopathy also developed its own 'in-house' models, outlined below, including the principles of osteopathy that provide a perspective to the clinical reasoning process. These models provide a lens for thinking, as a priori theorizing represented as patterns or constructs of grouped physical and symptomatic findings, based on observation that represent osteopathic diagnostic models, or profession specific knowledge, that underpins clinical reasoning peculiar to osteopaths (Grace et al., 2016; Lee, 2008; Liem, 2016; Seffinger et al., 2011, p. 5). These theoretical models or frameworks are designed to guide and explain decisions leading to osteopathic treatment (Lederman, 2017; Lee, 2008; Smith, 2019).

### *2.7.1 Evidence Based Medicine*

The Evidence Based Medicine (EBM) movement is a modern example of the knowledge dialectic in healthcare present for more than two decades (Greenhalgh et al., 2014). EBM is a knowledge framework or strategy that Greenhalgh et al. (2014) describe as '*a "new paradigm" for teaching and practising clinical medicine'*. EBM was defined as: '*Tradition, anecdote, and*

*theoretical reasoning from basic sciences would be replaced by evidence from high quality randomised controlled trials and observational studies, in combination with clinical expertise and the needs and wishes of patients'* (Greenhalgh et al., 2014). As such, knowledge applied in clinical practice from opinion and personal expertise was reoriented to foremost value and preference knowledge from evidence, particularly that derived from the randomised controlled trial (RCT). The RCT is essentially a model that provides a certain organised structure to give voice to data and it is positioned as the reference or Gold Standard for evidence (Brosnan, 2016). The RCT is not well suited for methods of practice where the practitioner is the tool for delivering the health intervention, like osteopathy and other CAM (Brosnan, 2016). The RCT is better suited to pharmaceutical treatments where the delivery is separate to the diagnosis, and the particular characteristics of pharmaceuticals – as poisons and the associated risk –warrant the RCT as the method.

The EBM movement has had an impact on the osteopathic profession represented through a professional dialectic. An RCT does not say how each practitioner should incorporate this knowledge into clinical practice, although through the pyramid of evidence below (Figure 2.1) provides some direction with a weighting hierarchy. Fryer (2011) addresses the application of EBM to practice through a critique of the historical theoretical underpinnings of the osteopathic technique Muscle Energy Technique (MET), reporting that the evidence to

support the underlying mechanism of MET is unclear (Fryer, 2011; Fryer & Pearce, 2013).

Fryer (2011) uses this example of applying evidence to an osteopathic technique, to introduce the term *'evidence informed practice'*, in recognition of the

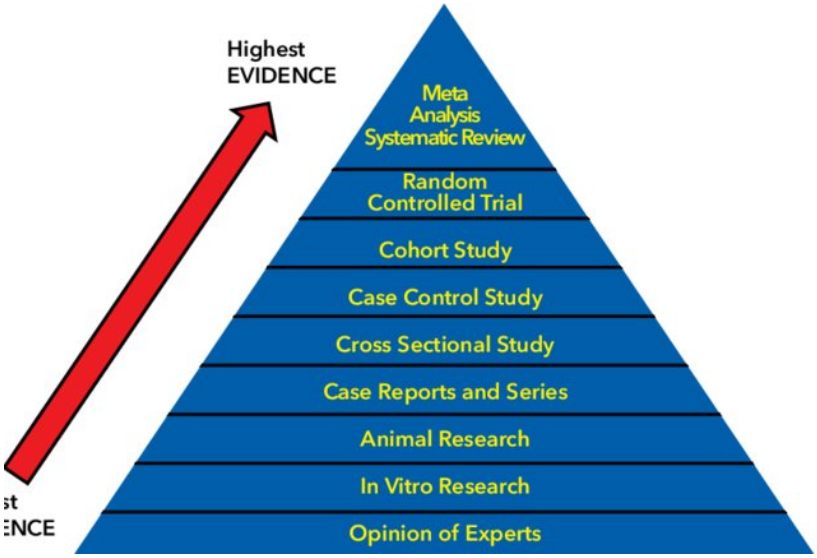



*Figure 2.1 Pyramid of evidence (credit: Roulet J-F, 2017, p. 92)*

uncertainty of the knowledge best suited to support osteopathic practice. What evidence is and what it means for osteopathic practice is an ongoing debate that osteopathy needs to increasingly engage in, so that it can establish a profession informed view. The use of evidence to support practice is '*now considered a common-sense approach to modern healthcare provision*' (Sundberg et al., 2018) in that it can facilitate ethical and best practice. In light of this potential the profession has also called for developing a research agenda applicable to osteopathy (McGrath, 2015; Steel et al., 2017), an increased involvement of the profession in research (Lucas & Bogduk, 2011; Macfarlane, 2016) and the demand for more research evidence, including that arising from RCTs, to support osteopaths and their practice (Steel et al., 2017).

To support the professional dialectic a section was established in one of the two profession specific journals to support transfer of learning and integrate *'current research evidence with the expertise and craft knowledge'* in osteopathic practice (Thomson & Evans, 2016). In addition, learning to use EBM in practice is included in some undergraduate teaching programs (Vaughan et al., 2019). Enabling access to evidence has been facilitated with the development of the Internet and relevant online medical databases, the osteopathic profession in Australia provides regular emails with access to articles to update members on perceived relevant research (Leach et al., 2019), as well as inviting practitioners to present abstracts at the annual conference. These actions to support the professional dialectic are based on a *'view that increasing osteopathic research will strengthen the position of the profession'* (Blaich et al., 2018, p. 22), although how far evidence-based concepts or *'real evidence based medicine*' (McGrath, 2015, p. 8) have penetrated the osteopathic profession is not fully appreciated.

There have been two surveys, one in the UK and one in Australia, conducted to determine the attitudes of osteopaths to EBM (Leach et al., 2019; Sundberg et al., 2018). Both studies indicate that the osteopaths who responded to the online questionnaire had a positive attitude toward EBM. However, although the numbers of respondents was statistically relevant with the fully completed response levels at 7.2% for UK (Sundberg et al., 2018) and 14.6% for Australian osteopaths (Leach et al., 2019), this response level is perhaps more representative of those who are positive about evidence as a tool for practice, whilst the majority are at best equivocal. Clearly this is another step in the dialectic that requires further exploration.

Knowledge has continually changed since before Still incorporated his new ideas and learning into his practice. His approach could be considered using the evidence or approach to knowledge of the day. It was not EBM, an RCT or a meta-analysis, as these were not available to Still. Experimental philosophy has a history from the 1720s, but experimental methods did not become well used in medicine until becoming the standard for therapeutic evaluation in the 1950s (Meldrum, 2000). The widely published evidence pyramid image, Figure 2.1 above symbolizes a view in the timeline of the knowledge debate, valuing knowledge derived from experiments (Pandis, 2011) more highly than any other. The evidence pyramid itself is subject to critique, with some questioning the ranking of some evidence and that the hierarchy is too simplistic (Alper & Haynes, 2016). Pfitzner (2018), echoing the hierarchical criticisms, suggests to the editors of a journal to upend the evidence pyramid in the case of certain clinical presentations that aren't amenable to a RCT.

The critique of EBM is outlined in the well written essay from Greenhalgh et al. (2014), with the aptly descriptive title '*Evidence based medicine: a movement in crisis?'*. These authors provide a summary of the critique in five areas with the evidence quality being *'misappropriated by vested interests'*, increased volume of evidence being unmanageable, marginal statistical benefits, inflexible rules driven by management rather than patient concerns, and finally guidelines unable to respond to multimorbidity (Greenhalgh et al., 2014). McMeeken (2018), a leading physiotherapist suggests that EBM was about power, dominated by those in the driving seat:

> *'Medicine sought to regain its power and slow the onslaught of alternative practice by creating evidence-based clinical practice, based on randomised control trials. Such men (and they were nearly always men) could thus garner research grants while simultaneously promising best patient care'* (McMeeken, 2018, p. 34).

Greenhalgh et al. (2014) indicate that '*evidence based medicine has not resolved the problems it set out to address'*. I think it is too soon to call, as the data to support this comment is not complete. Whilst the critiques pointing out the negatives of EBM have credibility, as is the case with many debates, there is a pendular nature across a spectrum of argument with focus on the positives and negatives. An example of a swing to the negative is 'scientism', defined by the Merriam-Webster dictionary as *an exaggerated trust in the efficacy of the methods of natural science*. Even the meaning of scientism is up for debate (Pigliucci, 2015), a microcosm in the larger debate about knowledge. An example of scientism perhaps represented in the over-valuing of the RCT, where theory knowledge (episteme) is considered superior to other knowledge, such as technical (techne) or practical (praxis) knowledge.

> *'CAM remains ''alternative'' because its practitioners depend on subjective testimonials rather than randomized clinical trials (RCTs) for support, and because most of their hypothesized mechanisms are at variance with those accepted by basic science'* (Beyerstein, 2001, p. 230)

To the other swing of the pendulum the central role or over reliance of opinion in healthcare perhaps contributed to the development of EBM. Clinical practice focussing on the practitioner centred practice and not the patient was explored

in: '*A Taste of My Own Medicine: When the Doctor is the Patient*' (Rosenbaum, 1988) the basis of a 1991 cinema movie – *The Doctor,* starring William Hurt. It is possible that the emergence of the Biopsychosocial model from the founder Engel in 1977 suggesting that the focus is on the whole patient and the Evidence Based Medicine (EBM) movement from the initiator Sackett in 1981 suggesting a focus on the whole data pertaining to a patient's diagnosis, were related to the overuse of practitioner centric practice and the subsequent harm as described above. Perhaps the evidence in EBM is knowledge that is socially constructed and is more readily accessible today due to technology change in printing and the internet. It is appropriate professional practice to take a pluralistic approach to practice epistemology, to include evidence representing social knowledge, remembering that less-that-ideal approaches negatively impact, as demonstrated, the social good through patients and practitioners.

Time continues to move on represented by change with patient disease and clinical issues, the debate on EBM and the RCT appropriately continues. Knowledge and subsequently practice will continue to change as it has always done so and in response health professionals will continue a dialectic to address the concerns. More than one hundred years ago, Littlejohn asked what impact the introduction of germ theory was to have on the osteopathic profession (Orenstein, 2019). EBM, RCTs and the evidence pyramid are representative of a perspective of knowledge that may not be relevant to all aspects of healthcare. They were developed in a professional dialectic to improve critiques of practice. It is incumbent upon each profession to articulate their model of practice and how to incorporate the most useful knowledge into practice. Alper and Haynes (2016)

present a new modified pyramid to manage their criticisms, with Tugwell and Knottnerus (2015) in their editorial providing an alternate circle model to manage the criticism of hierarchy, asking '*Is the 'Evidence-Pyramid' now dead?*' McGrath (2015, p. 8), contributing to the dialectic, identifies different types of knowledge for practice: professional experience, clinical wisdom and patient preference, stating: *'This has most recently been reiterated as 'real evidence based medicine'* (McGrath, 2015, p. 8). Perhaps a more accurate description would be 'most useful knowledge-based practice'.

> '*It [osteopathy] claims to be the heir of all that is good and true in the history and healing art and to be co-extensive with the field of unhealthy, including all these principles which are requisite to make it perfectly successful and all-sufficient system*' (Littlejohn, 2000).

### *2.7.2 Biopsychosocial model*

Bradley (2008) reviews the biopsychosocial model in light of the Pragmatist tradition. *'At the most fundamental level, both Engel and the pragmatist share importance of healing conceptual divisions between science and humanity'* (Bradley, 2008, p. 301). He considers it the outcome of a Pragmatist, although he notes that Engel (initiator of the biopsychosocial model) did not claim to be a Pragmatist or follow any particular philosophy. Bradley (2008), discussing psychiatry, supports instituting an overall philosophy. He suggests a model, such as the biopsychosocial model, to provide for the progression of scientific knowledge, supported with the necessary humanistic knowledge for a health science. Osteopathy has engaged this debate with Penney (2010) urging support for Engel's biopsychosocial approach:

> *'"Symptoms should be conceptualised as the result of a dynamic interaction between psychological, social and pathophysiologic variables", the 'biopsychosocial model"* (Engel 1977 cited in Penney, 2010, p. 42)

Osteopaths have always dealt with patient pain presentations and without some success there would be little of the profession today. Pain presentations have been focussed through the somatic dysfunction related to injuries that result from engaging with the physical environment and subject to physical laws of Newton. These include sprains and strains from falls and knocks due to physical momentum, and slow speed physical changes such as compensatory posture patterns and movement asymmetry related to the biomechanical structures or the physical body. In an ongoing profession dialectic Fryer (2017b) and (Smith, 2019) outline new understandings toward pain that remind the reader of the contribution of the central neurological control systems. Both authors argue that a clinical approach that utilises the biopsychosocial model can incorporate these new understandings and consider the patient holistically. They argue the biopsychosocial model may help improve efficiency, effectiveness and clarity of thinking for clinical practice and support any patient approach (Fryer, 2017b). The idea is that using the biopsychosocial model to think holistically will link the sensations experienced in the physical biomechanical patient-self, such as muscular tension pain in the lower back, to the social, mental and spiritual self. This will then provide for relevant treatment and management to best support the patient, although this model does not explicitly include the practitioner context.

### *2.7.3 Osteopathic principles*

The philosophy of osteopathy has been seen as important by some as osteopaths, since it was espoused by Still in 1899, in his aptly named book *Philosophy of Osteopathy*. Philosophy is also referred to as principles of osteopathy, or the tenets of osteopathy. There are those osteopaths that find the principles defining of the profession, with them being enshrined in the ECOP definition of what constitutes an osteopath:

> *'A person who has achieved the nationally recognized academic and professional standards within her or his country to independently practice diagnosis and treatment based upon the principles of osteopathic philosophy. Individual countries establish the national academic and professional standards for osteopaths practicing within their countries (International usage)' (Educational Council on Osteopathic Principles, 2017)*

As stated in the above definition: an osteopath practices using the principles of osteopathy. Historically, osteopathic principles are described as the 'early period' with an original list of principles distilled from Still's writings by the early osteopaths and considered to end in 1910 (Stark, 2013), although perhaps in 1922 when the first consensus was written down (Evans, 2013). The next period from the early 1900s, nominated as the 'traditional' that ends when the principles were updated in 1953 (Evans, 2013; Stark, 2013). The modern period occurring to 2002 when the principles were again modernised (Evans, 2013; Stark, 2013). The current period is characterised by a *'concept of health care supported by*

> *expanding scientific knowledge that embraces the concept of the unity of the living organism's structure (anatomy) and function (physiology)* (Educational Council on Osteopathic Principles, 2017). It is based on the following principles:
>
> *'(1) The human being is a dynamic unit of function;*
>
> *(2) The body possesses self-regulatory mechanisms that are self-healing in nature;*
>
> *(3) Structure and function are interrelated at all levels;*
>
> *(4) Rational treatment is based on these principles.'*
>
> (Educational Council on Osteopathic Principles, 2017)

The value of these principles provides for debate and disagreement, with their utility being subject to continued debate (Fryer, 2013). Some claim their continued relevance today (Paulus, 2013; Thomas, 2012). Commentators like Cotton (2013) indicate the value of the principles as providing a solid place to stand to adapt to the changes that beset all professions over time and Thomas (2012) specifying elements of modern practice expectations, such as patient advocacy and keeping up with technology linking the principles to modern day practice. Others criticise their value and relevance (McGrath, 2013) and further the debate, even questioning if the osteopathic profession has not morphed into a pale reflection of its original self (Tyreman, 2013). Evans (2013) supports the changes in the principles over time, but in a positivist romantic notion wants to *'achieve the ultimate goal - to enshrine a set of eternal truths within a list of principles'* (p. 52). Tyreman (2013) articulates a broad critique, that the osteopathic principles are broad, ambiguous and do not bind specifically to

osteopathy. As a result, they do not provide a unique identifier for osteopathy. They do not provide a definitive clarification of the manual hands-on practices of osteopaths. The non-specific argument about principles is also supported by Pellegrino and Thomasma (1981), who argue that a philosophy of medicine is a philosophy of healthcare. The title to their book: *A Philosophical Basis of Medical Practice: Toward a Philosophy and Ethic of the Healing Professions* indicates their thoughts on medical as synonymous for healing. This is a factor for osteopathy and likely all healthcare to consider, as the fundamentals of medical and healing rely on knowledge from shared fields. If there wasn't an underlying commonality to epistemology, as well as ontology, then healthcare wouldn't be healthcare. This is why the principles appear broad or generic, because they are required to support these overarching epistemological (and other) principles. It then becomes incumbent upon each profession to articulate a distinctive philosophy with the umbrella of common healthcare goals.

The debate of principles in osteopathy is echoed in psychiatry with Brendel (2003) noting a profession specific dialectic where clinical psychiatrists *'often find themselves caught in the deep conceptual confusion that the reductionism/eclecticism dialectic presents'* (Brendel, 2003, p. 566) that impacts there clinical decision making. This exact reductionism/eclecticism dialectic is not present in osteopathy. However, a similar dividing or dualistic knowledge dialectic is represented with osteopathic principles. Tyreman (2013) indicates the generic nature of osteopathic principles, mirroring the eclectic end of Brendel's dialectic described in the quote above, that provide for an open set of knowledge. The reductionist side of the dialectic in osteopathy is reflected in the post-positivist language of eternal truths from Evans (2013), supporting the RCT as the 'best'

knowledge. Osteopaths who claim one type of approach from a whole selection, or a reductionist label, such as ‘structural osteopath’ or ‘cranial osteopath’ (McGrath, 2015), make for a confusing picture, as this does not appear to be patient centric, or meet the holistic claim made by osteopaths (Smith, 2019). Further to this with the continued growth in the osteopathic profession and the nature of change including knowledge, areas of practice, social expectations of health and all the factors that impact on a health profession, the principles do not appear to be enough (McGrath, 2013). Over time, the principles have served as a focus or clarion call for osteopaths, they are seen as a unifying factor – with those who claimed them labelling themselves ‘osteopath’. This unifying force also places the philosophy central to criticism. This dialectic represents a broader debate about knowledge in osteopathy, which is where this journey moves to.

### *2.7.4 Osteopathic diagnostic models*

Osteopathy has developed different models to assist clinical thinking and the application of practice for different patient presentations. These models have permeated the profession through texts like ‘Foundations of Osteopathic Medicine’ (Seffinger et al., 2011). The five models described in Seffinger et al. (2011, p. 5) have been subject to revision, with Grace et al. (2016, p. Table 2) adding Biomedical (indicated by ‘Not Chila’) and dividing metabolic-energy model from Seffinger et al. (2011, p. 5) into two (indicated by Chila*). These osteopathic or thinking models maybe considered profession specific knowledge, designed to facilitate or short-cut clinical thinking. These models are summarised in Table 2.1 below, with a comment relating to the underpinning theory, area of practice and scope of practice for osteopathy in Australia.

| Model name | Theory | Area | Scope |
|---|---|---|---|
| **Biomechanical** | Integrated biomechanical function supports optimal health | Musculoskeletal system: joints, fascia, ligaments, function as motion and posture. | Manual management. May refer if pathology present i.e., tendinosis, stress fracture |
| **Biomedical Not Chila** | Disease model: germ theory, trauma, pathology reduces health | Body systems, vital signs, red flags | Require referral. Supportive manual or rehabilitative treatment in some cases |
| **Behavioural** | Psychosocial factors impact health through multiple systems. | Psychosocial factors: relational, occupational and financial. Stress = increased pain sensation and poor health practices | Establish if pathology present. Supportive manual treatment in some cases |
| **Energy expenditure Chila*** | Optimal energy utilisation, not directly related to nutrition, supports health | Chronic fatigue, low energy reported impacting patient health narrative | Establish if pathology present. Supportive manual treatment, management and rehabilitation in some cases |
| **Nutritional Chila*** | Nutrition as macro and micronutrients are required for optimal function which equals best health | Dietary assessment for deficiency or altered nutritional status. | Establish if pathology present. Supportive manual treatment, management and rehabilitation in some cases |
| **Neurological** | Impeded neurological pathways impact health | Includes central and peripheral neurological structures. Issues such as centralized pain, concussion, balance. | Supportive manual treatment with some pathology. Peripheral nerve entrapment such as meralgia paresthetica |
| **Respiratory/ circulatory** | Supply of nutrients ($O_2$) is facilitated by Resp/Circ system. Ideal functioning of system ensures best supply | Heart, lungs, circulatory and lymphatic structures. Certain areas i.e., lymphatic trunk and associated structures i.e., thoracic diaphragm | Supportive treatment with some pathology. Some specific strategies including lymph drainage and balance thoracic diaphragm tension |

*Table 2.1 Representative models of osteopathic thinking*

Osteopathic diagnostic models have not transferred well from the profession, are criticized within the profession due to lack of specificity in defining treatment approaches, and lack of evidence of their effectiveness (Lederman, 2017; Smith, 2019). The *'value of a scientific model is measured not by whether it is right or*

*wrong but by how useful it is'* (Bradley, 2008, p. 305, emphasis in original). The utility of such knowledge is governed by multiple factors and the greater and more flexible the utility, the more generalizable these models become, which is both a strength and a weakness. On the one hand these models are flexible providing a variable non-proscriptive approach to practice, on the other these models are generalized which through a broad inclusiveness leads to indecision and confusion. This flexibility reflects a gap between theory and practice. As an example, the low energy levels from the psychological impacts of a person not living in their usual or expected manner from an unresolved ankle sprain leads to the question as to which model should a clinician apply to their practice. In their editorial Esteves et al. (2020) summarise the critique of osteopathic models with:

> *'We would argue that incoherence within models, lack of theoretical and empirical support, oversimplification, pseudoscience, and absence of consensus over the validity of the profession's conceptual framework are some of the challenges osteopathic education and research are facing'* (p. 1).

Perhaps models are instructive for the time they are instituted, with a model being *'modified or discarded when it no longer helps to generate and test new knowledge'.* (Bradley, 2008, p. 305). Smith (2019), makes the call for a reflection on recent models proposed for osteopathy and that it is time for a change! She asserts that new evidence undermines current clinical assumptions and they are out of date. Smith (2019) considers the biopsychosocial model first proposed for osteopathy by Penney (2010) in the light of two new approaches: that by Fryer (2017a), discussed in this project, that focuses on pain as a key clinical

presentation and that by Lederman who focuses on the self-healing aspect of the body (Smith, 2019). Her approach includes the consideration of the new evidence to support the clinical and educational practices in osteopathy. She portrays an inclusive '*Pain Process & Patient Values'* model utilising the biopsychosocial model as a foundation (Smith, 2019). Smith (2019) is attempting to mitigate the issues of generalization that also apply to the biopsychosocial model by providing guidance to implementing practice. Time will tell through the ongoing professional dialectic as to the success of this model as an understanding develops on how the practice elements might fit together (Esteves et al., 2020).

Models developed or integrated into osteopathy will continue to require substantiation through acceptable methods for as long as the profession continues. Wolinsky (2008) reflects on the time and issues relating to the acceptance of major ideas, such as Darwin's theory of evolution or the helicobacter's relationship to stomach ulcers. Even in their own areas, these well-researched and broad reaching concepts took time to make their mark. Seventeen years is the estimate indicated for research to change practice in the biomedical field (Vaughan et al., 2019). The cycle of review of osteopathic principles was approximately half a century. How long is the cycle of knowledge and integration in a small, less funded, possibly less scholarly active profession, as that of osteopathy? To represent scholarly activity, osteopathy has 0.5% of the profession with a PhD (Adams et al., 2018), and it is 3% in physiotherapy (Australian Institute of Health and Welfare, 2016).

### *2.7.5 Science knowledge as specialized knowledge*

As the fundamental constituents of science are open to cogent criticism, the claim of a unified truth against which healthcare, including CAM is compared, is untenable (Gale, 2014). On this basis it is presumptuous to discount a field of healthcare based on what is claimed as 'accepted science'. Potochnik (2015) responds to this noting *'that science does not aim to provide truth, but instead to provide understanding* (p. 72). Still expounded osteopathy as '*a scientific knowledge of anatomy and physiology'* (Still, 1902, p. 18) along with '*important studies'* (Still, 1902, p. 27) of particular knowledge disciplines, including anatomy, physiology, chemistry, principles of osteopathy, symptomatology and surgery (Still, 1902). The import of science in osteopathy is supported more than 100 yeas later in an editorial by osteopaths Lucas and Moran (2007), who make an argument for science as a central tenet in osteopathy. Potochnik (2015) indicates that: '*All the aims of science further cognition or action; indeed, they further human cognition or action, as a science by and for human beings should'* (Potochnik, 2015, p. 78). Still's recognition of the importance of specialized scientific knowledge for osteopathy was furthered by others. Osteopath Louisa Burns in the early 1900s, used animal experiments to explore the relationship of the 'osteopathic lesion' with the viscera, with a contemporary example of this trend from Muller et al. (2014) with their systematic review of osteopathic manual therapy for irritable bowel syndrome. Denslow in the 1940s, and then Korr from the 1950s, explored the neurological mechanisms of the osteopathic lesion (Chaitow et al., 2004; Licciardone, 2007). More recently Zein-Hammoud and Standley (2015) explored the role of the connective tissue cells, fibroblasts for manual techniques. Italian osteopaths D'Alessandro et al. (2016), pick up the

neurological research translating the considerable recent advances in the neurophysiological understandings of pain to manual therapy as a generalization, and osteopathy as a subgroup. D'Alessandro et al. (2016) propose an '*interoceptive paradigm'* relating to pain presentations, in contrast to the *'exteroceptive paradigm'* they state has dominated osteopathic / manual therapy thinking and is out of date, which also contributes to Smith's (2019) model noted above. That is to say, stimuli to the body from the exterior (exteroceptive*)* as the prominent causative factors of patient clinical presentations has dominated the thinking, rather than stimuli from the internal (interoceptive*)* structures.

Exploring the science was to generate knowledge specific to the practice of osteopaths to develop a theoretical basis, or a foundation that describes the understanding and explains osteopathy. It was hypothesised that biological (physiological) mechanisms predicated patient symptoms. Such biological mechanisms were coded or represented as the 'osteopathic lesion', renamed the 'somatic dysfunction' (see next section below). The somatic dysfunction was integral to the professional understanding of the associated biological mechanisms because knowing what happens when a somatic dysfunction is addressed provides understanding to resolving a patient's issue. Such knowing was particular to the changes and outcomes from the manual techniques applied to the somatic dysfunction. As science has advanced, there has been a coalescence of the underpinning science that supports the physiology of manual therapy (Fryer, 2017a; Patterson, 2015; Standley, 2014).

### *2.7.6 Somatic dysfunction as specialized knowledge*

Still, the early osteopaths and osteopaths today considered disease '*the result of an anatomical abnormality that could lead to physiological impairments'* (Liem, 2016, p. 655). These anatomical abnormalities obstructed the flow of bodily fluids like blood and cerebrospinal fluid (CSF) and impacted the neural control centres leading to disease. Somatic dysfunction is an explanatory model that hypoth esizes that a particular set of sensations palpated by the osteopath in the body of the patient, represent physiological changes of the complaint. Somatic dysfunction is defined as: *'impaired or altered function of related components of the body framework system: skeletal, arthrodial, and myofascial structures, and their related vascular, lymphatic, and neural elements' (Educational Council on Osteopathic Principles, 2017)*. It is characterised by sensations described as TART: '*tissue texture abnormality, asymmetry, restriction of motion, or tenderness'* (Licciardone et al., 2012, p. 785). The somatic dysfunction is considered reversible, and amenable to manipulative procedures. *'Relief from obstruction is the chief aim of osteopathy'* (Schiller, 1971, p. 263), with the aim that that removing the obstruction of fluids would ensure normalised physiology, restoring the body tissues to a normal (Fryer, 2016) and the patient's issue would resolve.

Although *'considered a central concept of the theory and practice of osteopath for over a hundred years'* (Fryer, 2016, p. 52; Schiller, 1971), the somatic dysfunction is subject to criticism (Liem, 2016) and considered '*anachronistic*' by some (Fryer, 2016, p. 53). Schiller (1971), equating the term 'spinal irritation' to the somatic dysfunction, reports it present in the literature from 1820's and in common use in the late 19$^{th}$ century. Schiller (1971) discounts the special nature

of somatic dysfunction to osteopathy as it was already a term in broad use. Criticisms of somatic dysfunction include lacking specificity, lacking reliability for detecting clinical features, providing a label that may disempower patients and is not useful for interprofessional communication (Fryer, 2016; Liem, 2016). Somatic dysfunction is included in the International Classification of Disease (ICD-11-CM Code M99.0), which may be seen as an attempt to make it a more broadly useable term, however Fryer (2016, p. 59) considers the term '*most likely serves'* the United States professions billing of patients. Liem (2016) approaches the history and evolution of somatic dysfunction identifying a professional dialectic of introducing evidence to this specialized osteopathic knowledge proposing an up-to-date understanding and that collaborative research should continue. Fryer (2016) proposes an explanatory conceptual model for the palpatory cues associated with the somatic dysfunction. He suggests a diminution of the centrality of somatic dysfunction, suggesting that it '*may have usefulness as a model for interpreting palpatory diagnostic signs and aiding clinical reasoning for manipulative treatment'* (Fryer, 2016, p. 61). He goes on to summarise the key critique: '*the relevance of somatic dysfunction to health status or disease is <u>not established</u>'* (Fryer, 2016, p. 59, emphasis added)

### *2.7.7 Manual technique as specialized knowledge*

The OIA indicate osteopathic manipulative treatment (OMT) as a *'core activity'* or practice characteristic for osteopathy (Osteopathic International Alliance, 2012, p. 3). Osteopathy in Australia and outside of North America utilises manipulative or manual therapy approaches as their primary treatment modality (Fryer, 2017a; Lévy et al., 2020), with the aim of changing the physical findings related to the examination including the somatic dysfunction. The terms manual therapy,

manual medicine and manipulation are used interchangeably and refer to the *'skillful use of the hands'* and '*therapeutic application of manual* force' (Educational Council on Osteopathic Principles, 2017) to the patient. The 'adjustment' or High Velocity Low Amplitude (HVLA) manipulative technique, the kind where a pop (cavitation) occurs, particularly in a spinal joint has been a focus or synonymous with manipulative techniques (Evans, 2010). OMT has been subject to a professional dialectic over the years, with an array of individually described manual techniques that comprise the treatment armamentarium (Adams et al., 2018, p. Table 3; Evans, 2010) outlined in the ECOP glossary (Educational Council on Osteopathic Principles, 2017) that represent the specialized OMT knowledge. The definition of manual medicine:

> *'(1) The skillful use of the hands to diagnose and treat structural and functional abnormalities in various tissues and organs throughout the body, including bones, joints, muscles, and other soft tissues as an integral part of complete medical care.*
>
> *(2) This term originated from the German Manuelle Medizin (manual medicine) and has been used interchangeably with the term manipulation.*
>
> *(3) This term is not identical to manual therapy, which has been used by non-physician practitioners (e.g., physical therapists)' (Educational Council on Osteopathic Principles, 2017).*

The history of manual therapy or manual manipulative treatment of the body has a long and extensive history in many cultures (Pettman, 2007). It includes age-old massage like the Egyptian essential oil massage and Chinese body work (Tui Na), as well as ancient Greek bone setting or manipulation, described by

Hippocrates and later Galen (Paris, 2013). Historically, manual techniques may have arisen from a basic parental instinct. The instinct to rub a sore body part, to help a child feel better from a bump or sprain after a fall, is a physiological complex. The touch from the rubbing impacts the spinal based sensory neurones, as well as hormones and neurotransmitters released in the central nervous system. In simple terms, some touch sensory receptors transmit faster than related pain receptors, arriving at the spine more quickly to inhibit the spine neurones from receiving the pain sense. This provides some immediate sense of pain relief and is represented in the gate-control theory for pain (Mendell, 2014). It is possible that this parental act may have been one of the early approaches to manual therapy, that was to advance to become massage and other manipulative techniques that comprise the manual therapy armamentarium.

There are different forms of manual clinical activity including examinations, special tests, supportive and therapeutic touch, as well as deliberately structured actions related to OMT. Discriminative touch, as diagnostic palpation (Liem, 2014), is a manual skill that is considered the basis of OMT and as such is important to osteopathy (McGlone et al., 2017; Patterson, 2012). It is a '*major building block of osteopathic clinical practice and clinical decision making, being essential to evaluate somatic dysfunctions'* (Liem, 2014, p. 243). Palpation is required to complete the manipulative techniques that comprise OMT. Developing the necessary proficiency to complete the manual tasks in a healthcare, like osteopathy, requires training for the techniques, as well as for palpation (Aubin et al., 2014). HVLA is representative of specialized training for the palpation as well as the physical mechanics of completing the technique and

managing the associated risk. Touch is also important for others and has an interprofessional remit as identified in the meta-ethnography from Kelly et al. (2018), who considered 41 papers from seven professions, including osteopathy. Kelly et al. (2018) state: '*There is a case for developing a practice of touch and, given the breadth of interest in it, perhaps an interdisciplinary one'* (p. 200). Peppin (1993) explores touch as a potential pivotal difference between the allopathic and osteopathic medicine professions in the USA, with others stating *'it differentiates the unique training and practices of osteopathic physicians*' (Elkiss & Jerome, 2012). As such, discriminative touch as palpation, with a professional focus, is considered specialized knowledge.

The criticisms of manual therapy are summarised through three considerations outlined below. The first criticism is that OMT is not defining of practice, with McGrath (2015) stating that such an idea is confusing and irrelevant, partly because too few American osteopaths use OMT, and partly that osteopaths identify with different manual technique streams for their practice (McGrath, 2015). Aside from the many health professions where manual techniques use is a core approach, there are those health practices not associated with manual therapy history that have manual techniques as core to their practice, such as nursing who state: '*So strong is nurses' advocacy for touch that they have suggested it be regarded a practice in its own right to safeguard its central place in nursing* care' (Kelly et al., 2018, p. 200). Touch itself is a basic human need (Elkiss & Jerome, 2012), linked to social cognition (Kirsch et al., 2018). Touch is subject to pitfalls associated with perceptual and personal bias (Liem, 2014). Thus, the mechanisms are not necessarily specific to osteopathy (McGlone et al., 2017), making effects from OMT difficult to measure.

The second criticism is that the biological mechanisms of OMT are not fully understood and that the relationship to somatic dysfunction is not demonstrated. This criticism represents an ongoing research field that is progressing, with a 2019 paper that reviewed the theory underpinning HVLA suggesting a '*paradigm shift from a joint- centric to a neuromuscular mechanism may reflect the direction osteopathic manipulative medicine is heading as a whole'* (Hennenhoefer & Schmidt, 2019, p. 693). The lack of understanding of the relationship between patient symptoms, the biological mechanisms underpinning examinations and OMT, the lack of reliability and validity of osteopathic practices reflects on the ethical basis and also utility of osteopathic practice.

Thirdly, ethical considerations relate to implementing treatments that carry some risk to the patient where the mechanisms and physiological links from the patient complaint to the effect of OMT are not fully understood. This consideration of the risk and benefit ratio from treatment is represented primarily by cervical HVLA (Wand & Cassidy, 2012). The physical stress and motion component of HVLA produces a risk of injury to the patient's joints and neural tissues, especially in the more delicate cervical spine. The amount and type of risk is subject to research, with transient effects most common, however there is a small risk of permanent injury and death (Nielsen et al., 2017). In a 2012 editorial in response to lobby group pressure to remove complementary medicine courses, including acupuncture, chiropractic, natural medicine and osteopathy, from universities, the authors note *'… the association of stroke and chiropractic* [osteopathic] *manipulation for neck pain was found to be no stronger than that between vertebrobasilar stroke and a general practitioner consultation'* (Myers et al., 2012,

p. 70). However, in contrast a 2017 systematic review indicates that serious adverse events in spinal manipulation range '*from 1 in 20,000 manipulations to 1 in 250,000,000 manipulations'*. They conclude their review demonstrated the extensive literature on risks with spinal manipulative therapy, but '*unfortunately, the majority of reviews are non-systematic and of poor quality'* (Nielsen et al., 2017). Not being able to fully appreciate risk of technique also impacts on perceived utility and the ability for a client to provide fully educated consent.

## 2.8 Summary

A hallmark of osteopathic practice are manual techniques, but manual techniques were in use before Still unveiled osteopathy. Paris (2013) notes that manipulative techniques were established by 1870, before Still unveiled osteopathy. Schiller (1971) was not discounting the value of 'spinal irritation' representing somatic dysfunction (this was done by others), he was indicating that Still did not discover this concept or 'invent' manipulation, therefore it could not be considered specialised knowledge of the profession. The inference being that the concepts and treatment were in general use already, and that even if they (somatic dysfunction and manual technique) do count for specialized knowledge, they were not specific to osteopathy. The value for osteopathy is perhaps more that Still developed a particular focus or '*packaged'* (Peppin, 1993, p. 210) the ideas. Taking old or current knowledge and repackaging it with new understandings is a valid endeavour. It represents the integration and application of generalized understandings and concepts to a particular enterprise. This formulation by Still is described in a key osteopathic educational text the 'Foundations of Osteopathic Medicine' (Seffinger et al., 2011), authored by content experts in collaboration

with the professional association for American osteopaths: the American Osteopathic Association (AOA):

> *'In his unique way, Still integrated many of these concepts into his new system and molded it into a distinctive medical school curriculum that continues to evolve today' (Seffinger et al., 2011, p. 15).*

Osteopathy like all health systems is embedded in the culture of the day (Tyreman, 2011). Delineating a profession as it is today, provides a line in the sand that allows the change, that is embodied through the challenges and issues of society and healthcare as a subset, to be recorded (King et al., 2018). Addams (1907) a pioneer in social work, 1931 Nobel Peace Prize winner (National Association of Social Workers (NASW), n.d.) issues the following warning for not adapting to contemporary issues:

> *'To fail to apprehend the tendency of one's age, and to fail to adapt the conditions of an industry to it, is to leave that industry ill-adjusted and belated on the economic side, and out of line ethically*' (Addams, 1907, p. 136).

Challenges trigger questions or somewhat more dramatically, *'ruptures and rifts provide unique opportunities for synthesis and integration*' (Brendel, 2004, p. 150). Change has been constant for osteopathy since Still lived through his frontier life, questioned and changed his practice and developed osteopathy. Medicine could be considered similar with the winding down of the millennia old Galenic medicine and since the mid-1800's the cycle of change has been and continues to be, relentless for healthcare (Teppone, 2019). Change demands

responses and answers that are best dealt with by the profession as representatives of the particular knowing. Change is represented by upheaval, but although it may be painful, the outcome is not necessarily bad. If knowledge is considered a social product and these debates a social conflict or argument, then the message from Flyvbjerg (2001) is encouraging:

> *'There is mounting evidence, however, that social conflicts themselves produce the valuable ties that hold modern societies together and provide them with the strength and cohesion they need; that social conflicts are the true pillars of democratic society.' (p. 108)*

The critique on osteopathy resolves into two key areas. (Willis, 1977) The first, relates to the contested nature of knowledge in osteopathy. Is osteopathy scientific? (Willis, 1977) How do humanistic understandings interact? How are the scientific and humanistic relevant to practice? In addition, do the philosophical claims stack up? If the primary reasoning thesis, that of biomechanical concepts, is out of date (Esteves et al., 2020; Smith, 2019), then how does this critique of osteopathic reasoning impact the clinical practice? Smith (2019) and Fryer (2017b) present models for practice based on the biopsychosocial model and linking to whole-of-practice models. Smith (2019) and Fryer (2016), represent those calling for the inclusion of current evidence into today's practice. This is not a limited evidence of scientific biological mechanisms, but for a broader understanding about people in society. Calls for change occur in cycles, and can be viewed historically, for osteopathy (and other professions) with Still reformulating his medical practice around new knowledge of the time. Today is no different with the changes in health from acute epidemics, to chronic disease

demanding changes to practice. The timing of this project may be serendipitous, with the osteopathic literature replete with criticism of the models of osteopathy and the proposition of new approaches. Pragmatism, as noted earlier and discussed in the next chapter, is proposed as a philosophy of practice. This project follows the advice from Tyreman (2013), although the osteopathic practitioners observed for this project were not defined as expert:

> *'to look again at what expert osteopathic practitioners actually do, particularly those who claim to offer something special and innovative. Analysing their **acts** should provide a more accurate picture of the values and mores they exemplify than devising theoretical accounts that (history teaches) will be wrong.' (Tyreman, 2013)(emphasis added)*

The second key area of criticism, pertains to describing the profession, and this area is highly contingent upon the first, outlined above. Professions assert specialized knowledge and training (Beaton, 2010; King et al., 2018) that is made available to society, demonstrating the symbiosis of knowledge and the profession. This is central to the critique of osteopathy: is osteopathy a definite profession? Does it provide specialized knowledge and specific skills? Is it different from other professions that profess manual techniques, such as massage, chiropractic and physiotherapy (Tyreman, 2011). Does general (allopathic) medicine provide treatment for what osteopaths claim? Willis (1977) addresses the question whether society needs another profession. This is a broad and interesting issue outside the scope of this report. Suffice to say that thus far society has supported the legitimization of many more professions since the comment by Willis in 1977, including osteopathy.

*'Our clinical approach entails a method by which we categorise or stratify people presenting for care and then implement treatment for them. Thinking clearly about this will help us to articulate the premises and claims that we as osteopaths make'* (Vogel, 2017, p. 2).

# Chapter 3 Philosophy, Pragmatism and this research

Pragmatism as a philosophy was unknown to me at any depth until my supervisor provided an article that described using Pragmatism to support a practical approach to the curriculum by a Chicago high school using a culturally sensitive salsa recipe to link science, business, maths and community in a holistic learning event (Bruce & Bloch, 2013). In this same paper the research by psychiatrist David (Brendel, 2004; Brendel, 2009) is referenced, who addresses a schism he sees in psychiatry between the humanistic and pharmacological approaches to patients. I recognised the potential for osteopathy to benefit from this research. Bruce and Bloch (2013) explore Pragmatism because it provides a link from theory to action. This seemed to have potential for osteopathy for two key reasons. The first is the notion of Pragmatism resolving schisms in practice, addressing the theory-practice gap by connecting knowledge with human realities, with practice. The second is a generalization of practice – a theory of practice, generalizable to the act of educating professionals for their practice (Shulman, 1998). It is for these reasons that Pragmatism will be explored for this literature synthesis.

## 3.1 Introduction

Philosophy, as literally the love of wisdom or the pursuit of knowledge, has several branches or special areas. This research relates primarily to the branch of epistemology: '*Pragmatism is principally a theory of knowledge with distinct*

*views about the origin, nature and limits of human knowledge'* (Almeder, 1986, p. 79). Pragmatism didn't just appear, but had its roots in classical thinking and '*can be traced back to the academic sceptics of classical antiquity'* (Ormerod, 2017, p. 892). Thayer (1982) reinforces the historical link by noting that the key early philosophers of pragmatism were *'thoroughly trained and absorbed in Anglo-European philosophy and literature'* (p. 11). Ormerod (2017) points to the mid-nineteenth century German philosopher Kant's ideas around '*Pragmatic belief*' as being a key influence on the early Pragmatists. Hundert (1995) notes that Aristotle puts the act at the forefront, in concluding *'that reason "by itself moves nothing; it is only when it is in pursuit of an end, and is concerned with action, that it moves anything"* (p. 26).

Charles Sanders Peirce (1839-1914) was credited with the 'principle of Pragmatism', by William James (*Pragmatism: a reader*, 1997, p. xv). The Pragmatism of Peirce was taken up by others including his fellow early thinkers William James (1842-1910), John Dewey (1859-1952) and George Herbert Mead (1863-1931). These scholars recognised the value of Peirce's concept, significantly extending Pragmatism and taking it to the world. Jane Addams (1860-1935) is an important inclusion to the early thinkers of Pragmatism because through her pioneering social work with her Hull House venture which '*became (and continues to be) the flagship of the settlement movement in North America, which tried to overcome the disconnections created by class and race in large urban areas'* (Hamington, 2004, p. 97), she demonstrated Pragmatism's practical side. Addams *'honed pragmatism as a tool of social transformation'* (Morrison, 2016) and is credited as founding occupational therapy (Ikiugu &

Schultz, 2005), which shares a practical approach helping clients engage with their environment and like osteopathy aims '*to achieve optimal health and wellbeing'* and '*create a meaningful life and to engage with wider society and culture'* (Occupational Therapy Australia, 2020). The practical was also demonstrated by John Dewey and his experimental school in Chicago and with James (1995) who says that the *'whole function of philosophy ought to be to find out what definite difference it will make to you and me, at definite instants of our life*' (p. 20). This practical nature and the capacity to transform practice is key to the aims of this research to provide a philosophy to support the profession develop and adapt to criticism and change. More than this, a philosophy of practice impacts on more than epistemology as knowing informs our being, our life.

> *'His principal contribution to fundamental logical theory, that is, his own highly technical definition of the three categories or modes of being (1) Things, that is, individuals; (2) objects of conception, that is, universals; and (3) signs. Peirce often mentioned, in conversation, these "'three sorts of being" as the essential feature of his philosophy'* (Royce & Kernan, 1916, p. 702).

## 3.2 What is it?

To appreciate this American philosophy requires a journey through the history to identify the main protagonists and key points. Considered the founder, Peirce is the leading protagonist. The son of a prominent Harvard maths professor, he was a Harvard graduate, with a good understanding of chemistry (Thayer, 1982, p. 43) and mathematics. Peirce's thoughts '*arose from the tradition of American*

*thought which flourished at the time*' (Mounce, 1997, p. 7), which had its origins in the European traditions that extended back to ancient Greek philosophy. Peirce had taken to philosophy in his 20s reading Kant, with the central idea that '*sensory experience is permeated with order'*, significant for Peirce and the Pragmatists (Mounce, 1997, p. 7). This personal characterization is instructive, as it demonstrates the background that ensured Peirce was able to contribute to the philosophical dialectic in science and knowledge that led to his conceptions of Pragmatism. Peirce defined Pragmatism through the following maxim*:*

> *'Consider what effects that might conceivably have practical bearings we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object'* (Peirce cited in Thayer, 1982, p. 48).

### 3.3 The Act

Peirce's definition of Pragmatism commenced a philosophical dialectic with some of the great American scholars of the early 20th Century. 'The Act' is central to Pragmatism because as noted in Peirce's maxim above, it embodies the '*object of our conception*'. *'The act is the situation wherein environmental stimuli and organic responses mutually arise'* (Stevens, 1967). Pragmatism is *'"a philosophy in which the meaning of actions and beliefs are found in their consequences"'* (Clarkson & Adams, 2018).

> '*That distant object as a temporary future and the experimental nature of the act relegate to the oncoming event the capacity of control, thereby transforming action into a process that has within it past, present, and future' (Strong, 1939, p. 74).*

As the father of semiotics, Peirce had an interest in the meaning ascribed to ideas and their effects. '*No concept, says Peirce, is indefinable; if it were, we could never say what it meant'* (Weiss, 1942, p. 188). For Peirce '*pragmatism was essentially for making ideas clear, a principle in logic, teaching us how significant definitions are to be made'* (Weiss, 1942, p. 188). Peirce writes that Pragmatism '*is merely a method of ascertaining the meanings of hard words and of abstract concepts'* (Peirce cited in Thayer, 1982, p. 57). It is from these ideas that a philosophy of action emerged - Pragmatism, and that *'concrete experience is necessary if we are to distinguish feelings from ideas and are not to take every difference in meaning'* (Weiss, 1942, p. 189, emphasis in original).

Although not successful in his personal life, Peirce left a considerable scholarly legacy (Mounce, 1997). Along with being one of the founders of semiotics – signs and their use (Weiss, 1942). He also defined the concept of abductive reasoning which is a form of logical inference or inference to the best explanation (Douven, 2017), which is important for clinical reasoning. He also conceived the idea that electrical switches could undertake logical operations – the basis for computers today. Weiss (1942) notes that the '*method by which Einstein revolutionized modern science is the method Peirce first formulated and analyzed in 1878*' (p. 189). Peirce had strong views and he was critical of others interpretation of Pragmatism. Toward the end of his career, after 1905, renaming his brand as 'Pragmaticism' and referring to himself as a logician:

> *'For Peirce was not only the formulator of pragmatism as " a maxim of logic ". . . serving to show that almost every proposition of ontological*

> *metaphysics is either meaningless gibberish... or downright absurd' (Gallie, 1946, p. 27).*

Like Peirce and the other founding thinkers of Pragmatism noted above, William James made significant international scholarly contribution, becoming world renowned in psychology (Thayer, 1982, p. 123). James was the son of a wealthy family and had a privileged education that included studying medicine and some time as a student of Peirce at Harvard. Peirce's personal life had been in disarray and this impacted his academic life. His ideas on pragmatism had been dormant for twenty years until James saw something in his work (Weiss, 1942, p. 187). James is credited with introducing Pragmatism to the world in 1898, attributing the principle of Pragmatism to Peirce (*Pragmatism: a reader*, 1997, p. xiii). Menard in his book (*Pragmatism: a reader*, 1997) claims that Peirce and James were part of a philosophy club – the metaphysical club, that existed in 1872, and were lifelong friends (Thayer, 1982, p. 124). Thayer (1982, p. 124) indicates that the difference with the two, was that '*Peirce sought meaning – and the explication of ideas – in general schema and formulae of (possible) action'*, and that '*Peirce was a realist',* whilst James '*focused on the function of ideas in experience, upon the distinct contributions that ideas of beliefs make in specific human actions*' (Thayer, 1982, p. 124). There is much written as to the differences between the protagonists of Pragmatism. One author reports thirteen varieties of pragmatism present in 1908 (Almeder, 1986), another defines Peirce as a '*Realistic Pragmatist'* and James as a '*Nominalistic pragmatist*' (Olshewsky, 1983, pp. 202-203), and Thayer (1982, p. 30) summarising Peirce as '*as a logician and James*

*as a humanist'.* However, the differences can be viewed as perspectives on Pragmatism honed by the background of the writer (Mead, 1930).

In the second in a series of lectures in 1906-1907 titled '*What Pragmatism Means',* James refers to Pragmatism as *'the pragmatic method'* (James, 1995, p. 18). He goes on to define Pragmatism as being: '*primarily about settling metaphysical disputes that otherwise might be interminable'* (James, 1995, p. 18), which is encapsulated in one example he provides that is a grand metaphysical argument: '*is the world fated or free?*' James (1995) indicates that the '*pragmatic method'* can be used to *'interpret each notion by tracing its respective practical consequences.*' James (1995) asks: '*What difference would it practically make to anyone if this notion rather than that notion were true?'* (p. 18). James (1995) thinks that '*The whole function of philosophy ought to be to find out what definite difference it will make to you and me, at definite instants of our life*' (James, 1995, p. 20). He uses words like '*concrete fact'*, *'concreteness and adequacy',* and '*towards action and towards power.'*(James, 1995, p. 20). Dewey in the preface to his book 'Logic: The Theory of Inquiry' writes:

> *'But in the proper interpretation of "pragmatic," namely the function of consequences as necessary tests of the validity of propositions, provided these consequences are operationally instituted and are such as to resolve the specific problem evoking the operations'* (Dewey, 1938b, p. iv)

The act, as gestures as the basic unit of interaction, is the focus because of the consequences and meaning that emerge from the interaction. The whole process is summarised:

> *'For Mead (1929), problems, including scientific problems, arise when action is blocked, when the unquestioned flow of experience is interrupted. Reflection ensues, solutions are first conceived and then tested in action. If nature "sustains the proposal," the problem is resolved and action proceeds*' (Johnson & Shifflett, 1981, p. 151).

Mead (1938) describes four the stages of the Act, summarised in Chapter 1 of his book, 'The Philosophy of the Act'. These are outlined below:

A: The stage of impulse

(i) sensitivity as a function of response, (ii) the problematic situation

For osteopathy, Mead's 'blocked action' may arise from a physical sensation such as back or neck pain (Fryer, 2017a), which becomes a problematic situation when it is an interruption, or a lack of adjustment for the human organisms social perception of their body. The interruption is described by Frank (cited in Kinsella & Pitman, 2012, pp. 54-55) as being to the rhythm of life or flow. The problem or 'interruption' can be, and is, many and varied Mead (1938) noting that the *'object is thus always an expression of a peculiar relation between itself and the individual, but it is an objective relation*' (p. 7).

There is a step before reflection and the sensation is translated by the organism into a *'lack of adjustment'* (Mead, 1938, p. 6). That is related to biology and physiology and is expressed through the structure of the nervous system with its related hormones and neurotransmitters. This sets the body up in such a way that responses to certain sensory stimuli enhance or trigger a 'fight or flight' stress response in the organism (D'Alessandro et al., 2016). This biology is closely

interactive with social behaviours and habits. For example, a person who injures themselves in a fall, is sensitive or attentive to the results of the injury. The response is multifactorial being related to the physiology of the injury, the prior experiences of the person, their social situation, as well as what might be – the uncertainty of the impact on their overall function in life. All-in-all the reflective period that brings about the sensitivity is a social-biological construction and '*to note that a malady can feel like a block or disruption that gets in the 'way' of our journey'* (Tyreman, 2015, p. 477).

> *'In summary, structural sociality on the human level can be expressed in terms of the social constitution of the self over against the generalized other. Temporal sociality can be expressed in terms of play and game situations by which an organized self is constituted by taking on the perspective of more widely differentiated actual and even possible communities. But sociality should not be viewed apart from the biological act'* (Stevens, 1967, pp. 630-631)

B: The stage of perception

(i) perception, (ii) the sensuous character of things, (iii) the reality of the object in perception

Sensuous and sensitized are used in the sense of Mead and an awareness or 'a sense' of the impulse, not the more modern specialized sense of a neurological definition, which relates to a change in the physiology of the nervous system.

Mead notes that *'the vocal gesture, then, has an importance which no other gesture has'* (Mead, 1934/2015, p. 66). A vocal gesture allows for varied, distant

and disparate gestures to be bought to a focus. It does not need to be focussed to any specific individual, it does not rely on line of sight and can be used at a distance so the recipients do not need to be nearby. The vocal gesture is also readily assessable by the user to determine the accuracy of the intended gesture. Mead states that the vocal gesture *'pre-eminently provided the medium of social organization in human society'* (Mead, 1925, p. 271). The comment 'that's not what I meant to say*'* has been issued by many on observing the result of something spoken in haste or errantly. To avoid such an error Mead indicates that *'these so-called gestures belong to the beginning of the overt act, for the adjustments of others to the social process are best made early in the act'* (Mead, 1925, p. 271). This means that changes and accuracy in the intended conduct are established before any consequences occur. Such a role is seen in the negotiation of making an appointment, the initial role of greeting the client and the case history which precedes a physical exam. Other gestures or expressions are important but lack the distance benefit of the vocal: '*we may see or feel movements of our hands as others see or feel them, and these sights and feels have served in the place of the vocal gestures in the case of those who are congenitally deaf or deaf and blind'*. (Mead, 1925, p. 271).

Mead (1938) defines gesture as *'…those parts of social acts which serves as the cues and stimuli for the appropriate responses of the other forms involved in the whole social act'* (p. 448). Professional gestures are in a sense specialised social behaviour. The profession makes gestures that are essentially a broad consideration about addressing a sensitivity to a health narrative in a broad group of society through marketing, social interrelations like word-of-mouth and by other

means. A person, for example someone with musculoskeletal pain, must be 'sensitised' to osteopathy to seek out an osteopath and is then described as a patient. Those sensitised might include those seeking service for a health issue, but also others, such as government, observers and critics, sales people, students, insurance and journalists as members of society, who may be sensitised to gestures from osteopaths, but not seeking healthcare personally.

> *'That is to say, objects are constituted in terms of meanings within the social process of experience and behavior through the mutual adjustment to one another of the responses or actions of the various individual organisms involved in that process, an adjustment made possible by means of a communication which takes the form of a conversation of gestures in the earlier evolutionary stages of that process, and of language in its later stages'* (Mead, 1934/2015, p. 77).

C: The stage of manipulation

The cycle of the act is not a linear conducting of acts, nor is it equal on a temporal basis. A spatiotemporal distance exists that relates to the conceptual nature of understanding both physical and mental objects. Systems are not static, in the biological world new life emerges from a current form and there is a transitional stage in this biology before new life is described or has fully emerged (Mead, 1959). This '*state betwixt and between an old system and a new one*' (Aboulafia, 2016b, p. 13) was described as sociality. This in-between state also refers to a professional situation where at the commencement of the consultation there is one state, represented as the impulse and commencement of the act and at the end another state as the consummation of the act. The betwixt stage is where

there is manipulation that is represented by sociality. The qualification of meaning that emerges from a perception is akin to reducing the spatiotemporal distance. It takes time to gather the threads and different aspects that comprise an object, with some significant symbols emerging quickly and others more slowly. For example, on the one hand the dyad wants to qualify a conception of the risk to treatment quickly, on the other hand, the full meaning of an interaction may emerge over days, weeks, months or perhaps never.

Spatiotemporal distance is important for practice because it provides time and space for meaning to coalesce. Pragmatism recognises this as it allows for the fallible nature of knowledge. This is to say that this space provides for the possibility of imperfect practice and the inexact nature of interfacing with the world. Mead recognises this with the stage of the act - Manipulation, which allows for the tentative nature of approaching a sharp object and similarly because '*thought is essentially an action'* (Thayer, 1982, p. 85) it provides space for thinking and deciding. This space literally refers to physical space, as in discerning or manipulating the identity of a distant object until it is available physically for clarification. And mentally, as in time relative to the organism doing the thinking, as thoughts use little physical time and are not tied to the time and space relationship, except through the biology of the thinker.

> *'Things that are spatio-temporally distant from us can be brought into this instant only in terms of our immediate contact experience. They are what they would be if we were there and had our hands upon them. They take on the character of tangible matter. This is the price of their being located at the moment of our bodies' existence. But this instantaneous view has*

> *the great advantage of giving to us a picture of what the contact experience will be when we reach the distant object, and of determining conditions under which the distance characters arise'* (Mead, 1925, p. 261).

The senses are set up around coordinating this space. There is a cycle of manipulation, a back and forth as interaction. For example, vision, hearing and voice are designed to act at across a distance. '*It has been the vocal gesture that has pre-eminently provided the medium of social organization in human society*' (Mead, 1925, p. 271), in tandem with the auditory system. The visual system utilising mechanisms such ideomotion which '*are unconscious, involuntary movements that are performed by a person and that may be caused by prior expectations, suggestions, or preconceptions'* (Minasny, 2009, p. 12) provides feedback to an individual. The auditory system allows a vocal gesture to be heard by both in the dyad, providing feedback to all involved with the interaction, it also allows the originator to verify what was vocalised, as well as assessing a response from another to the same vocal gesture. It is used by both in the dyad with one participant attributing meaning to an audible gesture and the initiator conveying meaning. The auditory sense provides a social and professional tool with the ability to transmit a gesture at a distance and to more than a single individual. The auditory system is also used by a health professional in an examination sense to assess body noises, such as joint crepitus, heart and bowel sounds.

Managing the spatiotemporal space recruits all of the senses (Lévy et al., 2020), so along with the auditory and visual systems, the sense of olfaction through body

odours and scents informs both the social conception and the clinical reasoning of the professional. This sense has less individual control considerably reducing its ability to actively manage the spatiotemporal distance compared to the vocal-auditory and visual systems. Closing the spatiotemporal distance is key to establishing meaning for the dyad. Mead (1934/2015) describes a '*threefold or triadic relation between gesture, adjustive response, and resultant of the social act which the gesture initiates is the basis of meaning'* (p. 80). Triadic is also relevant to the patient-professional dyad in that manipulation provides space for decisions, communication and interaction for both individuals as two thirds, to work toward a shared concept as the final third of the whole (Olshewsky, 1983). The importance of this communication, this interaction '*lies in the fact that it provides a form of behavior in which the organism or the individual may become an object to himself*' (Mead, 1934/2015, p. 138). That is, this time-space provides the gap for an individual to consider what they are doing and what next. That is the triune of time to gather data, evaluate the data and make a judgment. This is the importance of the manipulation stage. Mead (1934/2015) neatly summarises this:

> *'The mechanism of meaning is thus present in the social act <u>before</u> the emergence of consciousness or awareness of meaning occurs. The act or adjustive response of the second organism gives to the gesture of the first organism the <u>meaning</u> which it has' (p. 77, emphasis added).*

D: The stage of consummation

Consummation in the Oxford Dictionary is 'the fact of making something complete or perfect'. Consummation is the end stage of the act. In a sense this stage is

represented by the act and sense of completion, like the end of an appointment. It also represents the start of the next act, such as some follow up from the appointment – further advice, another appointment or review. In this sense '*what we are going to do determines the line of approach and to some sense its manner'* (Mead, 1938, p. 24). An osteopath will do osteopathic things and therefore to achieve this the things done are determined as they need to be done to get to the end: '*In this sense the future is already in the act. And the past is also in the act, for facility and familiarity are products of past reactions*' (Mead, 1938, p. 25). Professionals realise this as they are able to organise a beginning and an end, and in essence predict the acts of an appointment by setting a fixed start and end time.

> *'The passage from the percept to the concept is by way of attentive selection and the source of this attentive selection must be found in the act. Knowledge predicates conduct, and conduct sets the process within which it must be understood'* (Mead, 1930, p. 223).

Pragmatists saw the act as central to life: '*All realities influence our practice*' (James, 1995, p. 19). Practice in this research relates to an osteopathic clinical work, however practice can be any practice where the professional consults with a client, for example, architecture or education. The pragmatic method tries '*to interpret each notion by tracing its respective practical consequences'* (James, 1995, p. 18). In this way the Pragmatists reduce the gap between theory and practice. The act is the focus because from the act consequence flows and it is these that are the '*practical consequences'* of James (1995). It is for this reason that decision-making as an act is such a focus. The spatiotemporal gap allows

for the decision-making process to occur, consummation is the time when this process coalesces into a judgment. By the consummation stage the impulse has been manipulated by the dyad and some perception or sense of meaning established. It is the time where decisions have been made and an object agreed upon. Objects include physical and non-physical: *'Beliefs, ideas, and theories are not exactly organs; but they are like organs in being instruments of action in certain experiential contexts'* (Thayer, 1982, p. 128, emphasis in original).

> *'And here lies the whole case of pragmatism in its interpretation of knowledge, for if the idea comes into the act, without becoming a part of the apparatus for intelligent control in this situation, the consequences will not test the truth of the idea. They will reveal nothing but the attitude of the individual'* (Mead, 1930, p. 225)

## 3.4 Truth as meaning

James claims that *'Pragmatism's primary interest is in its doctrine of truth'* (Thayer, 1982, p. 131). James (1995) devoted a lecture to '*Pragmatism's Conception of Truth'*, (James, 1995, p. x), famously asking '*What is the truth's cash value …'* (James, 1995, p. 77). The idea of a '*cash value'* may generate criticism about the shallowness or materialness of truth, however as a metaphor it is right on the money! Cash value is about the nature of the truth, the sensory effect of it, in the moment. This is what James was trying to get across: *'True ideas are those that we can assimilate, validate, corroborate and verify. False ideas are those that we cannot'* (James, 1995, p. 77). Instead of 'real' truth, we have to make do with truth that supported day-to-day action (Ormerod, 2017). The outcome corroborates and verifies such a truth, with Addams (1907), a friend

and contemporary of Dewey and James (Addams, 1907, p. xxxiii), believing that ideas, representing or synonymous with truth, should be judged *'only on the basis of whether they worked in practice'* (p. xlvii). Hickman et al. (2009) states that '*in this world, the truth of a judgment is found in the measure to which it satisfies the conditions of an objective problematic situation'* (Hickman et al., 2009, p. 160, emphasis in original). Mead (1935) reports that Dewey felt the pragmatic test of truth is, *'not in the agreement between an idea and an object external to it, but in the success of a plan of action'* (Mead, 1935, p. 76). Thayer (1982) in his introduction, writes that Dewey claims *'truth as warranted assertion'* (p. 259), and that a warranted assertion is an answer to a problematic situation. A clinical diagnosis, as a professional social behaviour, aims to provide meaning as a truth, a warranted assertion within the treatment dyad. For example, a diagnosis of muscle strain that was causing a patient's pain and motion stiffness emerges as meaning for the dyad following a case history and description by the clinician.

> *'The inquiry comes to a successful close when the problem is solved by transforming the indeterminate situation into a determinate situation, that is, into a situation where there is no longer need for doubt'* (Kaufmann, 1959, p. 830).

The truth identified as a diagnosis is then ratified by the outcome of the treatment plan as improvement or not in the presenting case. '*Truth with a big T – and in the singular, claims abstractly to be recognized, of course, but concrete truths in the plural need be recognized only when their recognition is expedient'* (James, 1995, p. 90). The ratification provides meaning to the diagnosis truth which may then become abstract, in that the strategy may be used (or not) in similar

circumstances or other ways such as sharing with friends as word-of-mouth, in society as a conception of the practice of the individual practitioner or the profession. This is a similar use of knowledge in case reports written for publication. The abstract meaning as a diagnosis becomes more transferable as it is reinforced, it becomes a product, it can be stored, recorded and retrieved as required, as a generalization that can be transferred by word-of-mouth, shared by a member of society to others. Truth has a product like quality, it has value when it is in use and none when it is not. The 'Truth' is a collective noun for the many truths that make up our lives. Truth makes itself up as we go through life (James, 1995, p. 93).

## 3.5 A theory of Inquiry

> *'The basic conception of inquiry as determination of an indeterminate situation not only enables the vexed topic of the relation of judgment and propositions to obtain an objective solution, but, in connection with the conjugate relation of observed and conceptual material, enables a coherent account of the different propositional forms to be given'* (Dewey, 1938b, p. iii).

In each of these sections I have attempted to focus on one protagonist of Pragmatism in an area chosen, as one that I felt the particular scholar had a key role in defining. However, this is somewhat unrealistic as the Pragmatic scholars noted here, as well as others developed their arguments in a dialectic over their careers. For the theory of inquiry, the focus moves to John Dewey (1859 – 1952) who had a long and productive career writing extensively on many topics in his

ninety-two years. John Dewey was educated as a teacher and after deciding teaching was not for him, went back to study, which included time with Peirce, influence from James through psychology and Kant through his PhD awarded by John Hopkins University in 1884, titled: '*The psychology of Kant'*. He is world renowned in his field of progressive education, he wrote extensively on democracy and was commemorated on a postage stamp in the USA. He was keen for participation in democracy, which can be viewed as a practical action of engaging in society. Mead writing about Dewey's philosophy indicates that '*knowing is a natural process'* and that '*knowing is the test of the hypothesis'* (Mead, 1935, p. 76).

> *'Accordingly, human inquiry is the process whereby we seek to pass from a state of not knowing how to respond to the world (an aggravating state from which we all wish to escape) to a state of forming beliefs that shall not fail as ways of adapting successfully to the world'* (Almeder, 1986, p. 80)

Inquiry is a '*purposive human activity'* (Kaufmann, 1959, p. 833) the act of seeking information by questioning; interrogation; investigation; for truth, information, or knowledge. '*An inquiry is, like any other action, the transformation of a given situation'* (Kaufmann, 1959, p. 829). '*Inquiry is the lifeblood of every science and is constantly engaged in every art, craft and profession'* (Dewey, 1938b, p. 4). Professional clinical practice, through a consult as inquiry, seeks to determine an indeterminate, '*perplexed, troubled, unsettled, open, imbalanced'* (Dewey, 1942, p. 295) situation and find a way of successfully adapting to the world. It is therefore central to osteopathy as a practice seeking to ascertain the nature of a

patient presentation. Inquiry supports the role of the osteopath as the leader, a health professional to determine if their services are appropriate and to negotiate with the patient in a '*doubt-inquiry-judgment process'* (Wolfe, 2012, p. 11). '*A pragmatist framework of inquiry views human beings as participants and experimenters in a community of inquiry'* (Wolfe, 2012, p. 2)

> '*Dewey divides the elemental features of inquiry into five steps: "(i) a felt difficulty; (ii) its location and definition; (iii) suggestion of possible solution; (iv) development by reasoning of the bearings of the suggestion (v) further observation and experiment leading to its acceptance or rejection: that is, the conclusion of belief or disbelief"' (Dewey cited in Bradley, 2008, p. 302).*

Inquiry is about finding out. *'The answerable resolves the questionable, but the questionable determines the relevance and adequacy of the answer'* (Thayer, 1982, p. 259). '*As a collaborative participant in knowledge production'* (Arnold et al., 2012, p. 286) the practitioner conducts the consult, using relevant tools, delving into questions and introducing knowledge to collaborate in an adequate answer. Inquiry is fundamental to life with decision thinking at its core. Decision-making is so important to the human organism that it is wired into the central nervous system. And this cognitive process as a generalized function, is subject to evolutionary forces to hone it. Decision making (DM) is key to health professionals acting and as such its own particular derivative is discussed in section 2.6.1. Professional practice requires decisions on the basis of the client and the best decisions support a whole host of positive outcomes for all involved. There is a large literature on decision making with a '*cognitive revolution in the*

*1960s'.* DM theory is classically based upon computational logic, the neural-network as a dynamic system 1980's - 1990s and probability theory in the 2000s, and *'these classical assumptions remain at the heart of traditional cognitive theories'* (Busemeyer & Wang, 2015, p. 163). The quantum cognition model is seen as providing an approach to resolve traditional issues with probabilistic models of DM. Quantum cognition provides '*the possibility to treat mutually incompatible ("complementary") DM problems … disjunction, conjunction, and order effects'* that have arisen from *'attempts to represent incompatible problems in the classical probabilistic framework'* leading to some *'35 basic paradoxes of classical DM-theory'* (Bagarello et al., 2018, pp. 49-50).

As a bricoleur making a collage with my practice, quantum cognition is appealing because I saw an explanation for Pragmatism's role in providing for the fallible nature of knowledge and knowing. It seemed to me that Pragmatism as reality in the making was supported by quantum cognition, which provided for the swampy nature of professional decision-making. Personally, I came across quantum physics through interest reading and was exposed to Werner Heisenberg's (1901-1976) principle of uncertainty. It seemed appropriate that the nature of an electron as a particle wave, represented the state of undecidedness that exists before a decision is made. It represented the potential for multiple options, for uncertainty. The process of then determining an electron with the observer influencing the outcome represented the coalescence of undecidedness to a form, a warranted assertion. That is to say, it appeared to me that the collapse of the potentialities of the electron into a single form represented Pragmatism's collapsing of philosophical disputes into the act.

> *'An anticipation of the eventual issue is an idea; such anticipation of a possible outcome defines being an idea; and (according to my view) such anticipations are necessary factors in effecting the existential transformation which it is the business of inquiry to accomplish'* (Dewey, 1942, p. 293).

A quantum cognition model considers the electrochemical function of an individual neurone and the role of groups neurones as an '*open quantum information system'* (Khrennikov et al., 2018, p. 3). Individual and groups of neurones have the electrochemical potential to be in a state of uncertainty '*e.g., neither quiescent nor firing, in information processing*' (Khrennikov et al., 2018, p. 2). Pointing to the flexibility from a group of neurones *'that includes random failure of generation, conduction, and acceptance of action potentials (by other neurons)'* (Khrennikov et al., 2018, p. 3). Two principles of quantum cognition that support professional clinical inquiry and decision-making acts are '*complementarity'* and '*superposition*'. Complementarity refers to '*psychological measures, such as judgments, often require one to take different perspectives, which have to be taken sequentially, and the context generated by the first measure disturbs subsequent ones'* (Busemeyer & Wang, 2015, p. Table 1 ). Superposition as a '*state means that all possible measurement values have some potential for being expressed at each moment'* (Busemeyer & Wang, 2015, p. Table 1 ). In a professional situation such measurement values as issues or considerations with the client can interact and impact each other to influence the final outcome. Superposition '*provides an intrinsic representation of the conflict, ambiguity, or uncertainty that people experience'* (Busemeyer & Wang, 2015, p.

Table 1 ). As such quantum cognition provides support for the necessary decision-making acts that underpins professional inquiry.

> *'In describing the stationary state, for instance, we can employ either the language of particles, according to which the ψ-function describes the probability of finding an electron at a point in space, or alternatively, the language of wave theory, according to which we speak of the distribution of charge density surrounding the nucleus'* (Camilleri, 2006, p. 308) [ψ (Greek letter psi) = wave]

### 3.6 Power and The Act

There are those who indicate Pragmatism does not deal adequately with the analysis of power (Wolfe, 2012, p. 2). Athens (2007) states that Mead *'makes the monumental mistake'* (p. 141) of viewing sociality as operating in institutions and by extension society rather than domination to which he applies a *'special meaning'* (p. 141).

> *'By overlooking domination's impact on all our societal institutions, Mead … failed to make it the basic principle on which all societies, past, present, and future, ultimately operate*.' (Athens, 2007, p. 139)

Power is a key concept for society (Wolfe, 2012) that includes a profession as an instrument of society: *'power relations are rooted in the system of social networks'* (Foucault, 1982, p. 793). Foucault defines specific social institutions, such as health clinics (Foucault, 1989) and prisons, to demonstrate the generalizable nature of his power relationships. A profession has a role to protect its knowledge, skills or ideas that are central to it, as well as empowering those that are part of

the profession (Brante, 2010). A profession, at its basis is the professional interacting with the client, forming an interaction of one organism responding with another. There is a strong corollary between the interrelations of a profession and that of individuals, although not exact. For example

> *'the sense of the self obtained through the realization of a function in the community is a more effective and for various reasons a higher form of the sense of the self than that which is dependent upon the immediate personal relationships in which a relation of superiority and inferiority is involved'* (Mead, 1934/2015, p. 316).

Power is intrinsic, a requirement to the act as it oils the social inter-relations that form society, as the ability of an individual to influence the behaviour of another or others, *'as direct or manifesting traits of pressure and resistant, facilitation and constraint'* (Wolfe, 2012, p. 2). Power is beneficial to both parties in the interaction, as without the expectation of a reaction, that would finish the interaction: *'A society without power relations can only be an abstraction'* (Foucault, 1982, p. 791).

'*Power exists only when it is put into action'* (Foucault, 1982, p. 788) and it is a *'set of actions upon other actions'* (Foucault, 1982, p. 789). In essence individuals and as members of society, accept power as a cost of doing society, and so it is managed and part of an acceptable social interaction. Power in itself is not a substance, it is only seen as an effect, hence Foucault's claim of studying subjects, which has much in common with Pragmatism describing meaning as emerging from interaction. The interaction commences with an initiating gesture that is responded to by another, the influence to respond is the oil that keeps the

interaction going. Each individual has a sense of self as in their "me", their self that facilitates their role in the interaction. Power is a form of agency, a need to have one organism respond to another. '*The exercise of power is not simply a relationship between partners, individual or collective; it is a way in which certain actions modify others'* (Foucault, 1982, p. 788).

Athens (2007) coming from a radical interactionist perspective defines domination as:

> *'the construction of complex social actions through some participants in the social act performing super-ordinate roles, other participants performing subordinate roles, and everyone assuming the attitudes of "others"'* (Athens, 2007, p. 141).

I argue that Mead did not make a mistake and the Pragmatists did not ignore power. First and foremost, Pragmatism does not focus on metaphysical arguments, but the meaning that emerges, much like Foucault's quote above where actions define the power relationship. I agree with Athens in his description above of domination and that there are super-ordinate and subordinate roles in society. Power is intrinsic to a treatment dyad and the doctor: patient relationship may be viewed as a super-ordinate / subordinate role. The practitioner admits the patient to their domain, holds the knowledge and takes the lead in the consult. The client expects power and accedes or acquiesces to power in return for a perceived benefit. The narrative in the dyad includes defining or negotiating this power and is codified in ethical expectations, social mores and regulations to ameliorate the abuse of power to manage the patient: doctor relationship.

> *'In effect, what defines a relationship of power is that it is a mode of action which does not act directly and immediately on others. Instead, it acts upon their actions: an action upon an action, on existing actions or on those which may arise in the present or the future*.' *(Foucault, 1982, p. 789)*

Domination as its synonyms of 'influence', 'oppression' and 'supremacy', whether on an individual or social basis generates attention from society. It is at odds with the basic instinct of neighbourliness, the 'give and take' that is required for social interactions and society to occur. The development of the social contract, over the centuries, as indicated by the likes of Thomas Hobbes, sought to provide some sort of certainty for families as the building block of society needs for basic biological necessities, such as food and protection. The root of sociality is a biologically environmentally driven socialisation, not a domination, which ultimately impacts people's lives negatively. As an example, actions of domination in a current day clinical practice would be viewed as pathological or socially unacceptable. Health interactions of today eschew domination, which is perhaps best represented as the inequality of practitioner centred practice or a patriarchal relationship which is being replaced (Athens, 2007, p. 144). Earlier in this report changes in practice centred around EBM and the biopsychosocial model are seen as moving toward the patient as central and are viewed as a new best standard of patient centred care (Butler, 2012).

Pragmatism deals with power from the view of the emergent meaning. In response to societal power or domination Pragmatists wrote extensively about democracy as an action to manage this, for example Jane Addams in her book '*Democracy and Social Ethics'*, and John Dewey who noted that democracy is

'*more than a form of government; it is primarily a mode of associated living, of conjoint communicated experience'* (Dewey, 1916, p. 95) Power goes unnoticed in the social contract represented in the "me" as the social conception of the self, until unbalanced, interrupting the "I" as the individual reflective self, by the consummation of acts that result in domination represented as negative adjectives. Society and individuals recognise domination and it is expressed or codified as unprofessional behaviour, through complaint mechanisms and by ethical practice expectations.

> *'… confronted with a social situation to which they cannot readily adjust and adapt themselves, or in which they cannot immediately integrate their own behavior; and the feeling in them which is concomitant with their facing and solution of such problems is that of self-superiority and temporary opposition to other individuals'* (Mead, 1934/2015, p. 320).

The drive to satisfy the situation arises from a sense of self or '*superiority*' (Mead, 1934/2015, p. 316) and is tied, for those involved, to the need to serve a function in society – to be useful. The 'sense of self' may be where power originates. A sense of self generates the need for self-preservation as well as individuality. A sense of self is important in maintaining the self and societal interactions, but an unbalanced sense of self becomes superiority. It is only when the sense of superiority becomes misused or pathological that there is a mismatch and may be viewed as actions of selfishness or domination. This is the sense of power used to manipulate, rather than to facilitate, make functional or initiate action, and Mead addresses misuse or inappropriate usage in his concepts on ethics:

> *'whereas the "asocial" aspect of human society – which is simply the asocial aspect of the selves of all individual members taken collectively – with its concomitant feelings on the parts of all these individuals of individuality, self-superiority to the other individual selves, and social independence, is responsible for the rise of ethical problems in that society*' (Mead, 1934/2015, p. 321).

## 3.7 Bringing it together

> *'If our conceptions of the object's effects are inadequate to our habits of action in relation to it, then our actions will relate us to these effects in such a way that they produce in us unanticipated sensations producing the perturbations of doubt. The sole object of inquiry is to avoid such surprises. The limits of inquiry are that we can never guarantee that we won't be so surprised'* (Olshewsky, 1983).

In the early stages of this research, I had an intuitive notion that Pragmatism 'felt right' as the philosophy for osteopathy: *'Pragmatism starts with experience and thereafter moves on with the struggle to interpret and control it'* (Wolfe, 2012, p. 3). The focus on meaning emerging from action is important to osteopathy. However, as I have worked through the literature synthesis it has raised issues and new thoughts that go beyond the field. I have come to see Pragmatism in a broader light. It is a philosophy that guides our understanding and the generation of our deepest ideas through experience. It seems that a Pragmatist approach that focuses on practice over time, does allow humans to think, not only about their immediate circumstances, but the world in general. *'Beliefs and systems of*

*beliefs are instruments or mechanisms generated by people for the explicit purpose of adapting successfully to the environment'* (Almeder, 1986, p. 80).

As an educator I have focussed on reflective practice as a clinical practice skill and Pragmatism supports the notion of reflecting on experience and the interaction developing as an object, of the experience becoming objective reality through the meaning ascribed to the experience. These experiences and meanings are then reflected in the broader world and have encouraged me to make connections beyond osteopathy and related topics. It appears that the Pragmatists like Peirce, Mead and James were exceptional observers noting the minutiae of interaction: *'Pragmatism is merely empiricism pushed to its legitimate conclusion'* (Thayer, 1982, p. 31)

> *'The pragmatic method is primarily a method of settling metaphysical disputes that otherwise might be interminable. Is the world one or many? – fated or free? – material or spiritual? – here are notions either of which may or may not hold good of the world; and disputes over such notions are unending'* (James, 1975, p. 28 cited in Brendel, 2003, p. 569)

Pragmatism provides a way to bridge philosophical – metaphysical and epistemological controversies or challenges, for example the schism identified in psychiatry between humanistic and scientific approaches to patient care (Brendel, 2004; Brendel, 2009), or to '*provide a way out of the debate between rationalism and empiricism'* (Hamati-Ataya, 2012, p. 292), by focussing on the consequences of human activity (Wolfe, 2012, p. 3), as the interactions with people and nature - the biopsychosocial. Specifically, to the field of this research,

there are several such arguments in osteopathy outlined earlier with a key epistemological dispute about the role of knowledge in practice, for example: the value of craft knowledge and the RCT.

Pragmatism, as a philosophy of practice, manages the professional dialectics and settles interminable disputes providing a way forward to bring homeostasis in the following fields of practice: International Relations / social science (Hamati-Ataya, 2012) psychiatry (Brendel, 2009), occupational therapy positing Pragmatism as a foundation for their practice (Hooper & Wood, 2002; Ikiugu & Schultz, 2005) and as a framework for research in: nursing (Allmark & Machaczek, 2018); physiotherapy (Clarkson & Adams, 2018); osteopathy (Orrock, 2017) and pharmacy (Morrison, 2016; Winit-Watjana, 2016).

> *'Individuals who can articulate the philosophical grounding of their profession may therefore be clearer about their collective self-definition as professionals, the service they provide to humanity, and their relationship to other professionals who are similarly devoted to the service of humankind'* (Ikiugu & Schultz, 2005, p. 87)

Whilst still not clear to me, I continue to be committed to improving my practice by exploring the field. When thinking about the field and Pragmatism, I do wonder about such matters and it appears to me that Pragmatism as a philosophy describes the interface of ourself – the biopsychosocial conception of "I" and "me", with an other. It defines truth as the meaning, the result arising from this interface. To use Peirce's words from his definition noted earlier in Chapter 3.2: '*Then, our conception of these effects is the whole of our conception of the object'* (Peirce cited in Thayer, 1982, p. 48). Reflecting this notion, my PhD supervisor

once remarked when discussing the nature of pragmatism as the panacea for osteopathy, "*Pragmatism is the philosophy of everything*" (personal discussion). Weiss, in finishing his paper indicates that despite the issues in society of his time in the 1940s, Peirce's philosophy – Pragmatism provided meaning, perhaps for osteopathy it can be too:

> *'We are inclined towards nominalism and mechanism, still over emphasizing facts, experience, and struggle. Peirce's philosophy offers one we can accept this aspect of reality and yet find a place for life and freedom on the one hand, and for value, purpose and meaning on the other'* (Weiss, 1942, p. 191).

# METHODOLOGY and METHOD

# Chapter 4 Strategies for inquiry

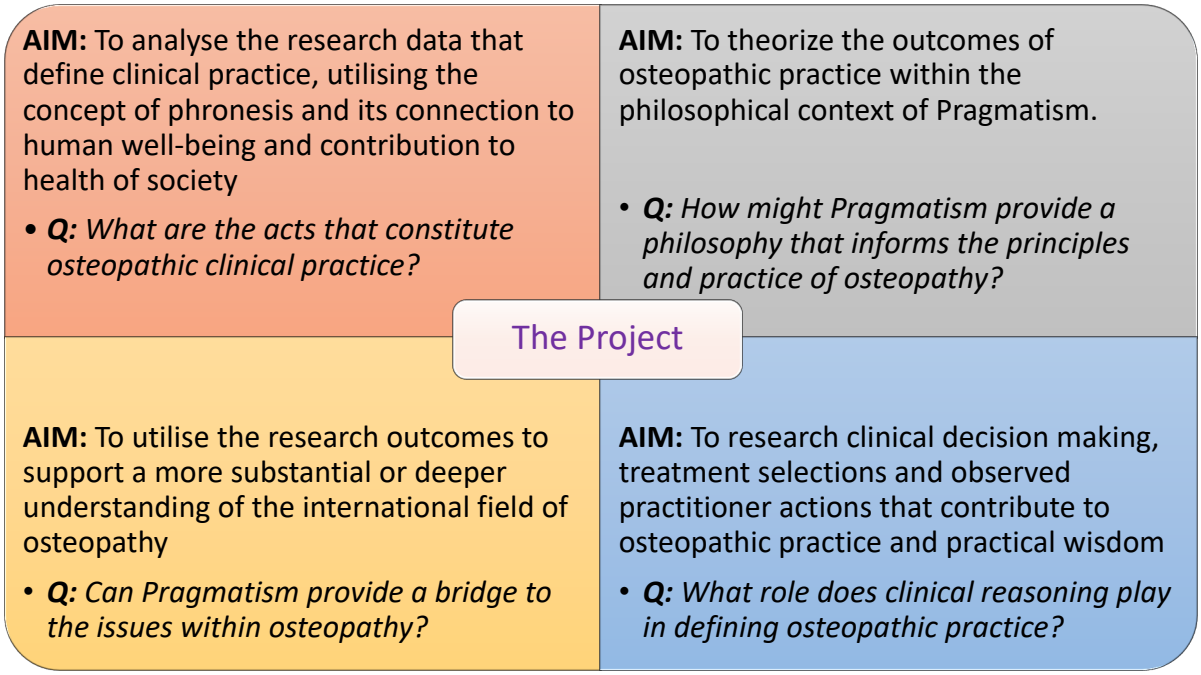



*Figure 4.1 Project aims and research questions*

## 4.1 Introduction

Two primary considerations arise in the journey of this research project. The first consideration is what approach or methodology would answer the research questions and aims (Crotty, 1998; Merriam, 2009, p. 1) outlined in Figure 4.1. Secondly, how could such a methodology be justified (Crotty, 1998). A qualitative approach was chosen to investigate these research aims and respond to these questions. This study interprets osteopathic practice by videoing fifteen patient consultations for use as prompts in semi-structured interviews with the practitioners. The interviews were transcribed and analysed and formed the basis of the data for this research project. Pragmatism was proposed as the overall approach to data analysis and theorizing and formed the basis for both an ontological and epistemological perspective. The philosophical perspective of Pragmatism is that the acts of the practitioner embody or represent what they

know (epistemology) and demonstrate the meaning and the truth assigned to the interaction (ontology). Einstein pointed to the import of the act in the opening of his Herbert Spencer lecture in 1933:

> *'If you want to find out anything from the theoretical physicists about the methods they use, I advise you to stick closely to one principle: don't listen to their words, fix your attention on their deeds'* (Holton, 1981, p. 2).

The *'deeds'* of Einstein's phrase, are synonymous for 'act', and defining of one's practice. The act or deed is central to Pragmatism with James (1995) astonished *'to see how many philosophical disputes collapse into insignificance the moment you subject them to this simple test of tracing a concrete consequence* (p. 20). Mead (1925) defines the act as:

> *'A social act may be defined as one in which the occasion or stimulus which sets free an impulse is found in the character or conduct of a living form that belongs to the proper environment of the living form whose impulse it is'* (Mead, 1925, p. 263).

## 4.2 Pragmatism: Ontology and Epistemology

Addams '*established one of the main pragmatists' precepts, which does not separate philosophy from the rest of the areas of life'* (Morrison, 2016). Pragmatism was founded in part as a response to this thinking and *'rejected dichotomies like mind–body, thought–action, rational–practical, and function–structure that presumed people could be divided into parts'* (Hooper & Wood, 2002, p. 41). Yanovsky (1978) supports this precept: '*the philosophy of medicine*

*is connected with the philosophy of life'* (p. 58). If Yanovsky's (1978) '*medicine'* is a representative code for healthcare, and his '*life'* is code for the sum total of experiences of an individual, then a philosophical perspective, or *'conception of practice is closely associated with practitioners' views on the nature of knowledge associated with their practice'* (Thomson, Petty, & Moore, 2014, p. 37). '*Healthcare professionals also have their personal worldview of clinical practice, which influences their beliefs and assumptions about key areas such as the nature of knowledge, skills, and decision making'* (Thomson & Abbey, 2017, p. 1). 'Philosophical Worldview' incorporates ontology, ideology or metaphysics, into a basic set of beliefs that guide actions or practice, which is where Cresswell (2009) and Winit-Watjana (2016) classify Pragmatism. It is this conception of practice that sets the questions and leads to the method.

Osteopathy, as a field of practice that includes the contested areas discussed, is connected through the literature synthesis to the rigour of philosophical debate. In contributing to the debate, I argue that Pragmatism is not a worldview, it is the worldview, because all perspectives collapse into focus within the act. It is both an ontology and an epistemology focussed in and on the meaning emerging from the act. Pragmatism does not differentiate on the basis of ontology or epistemology, it is tied to the fundamental acceptance that whether the world is real or constructed, measured or interpreted, that it all comes down to what happens when an act occurs. The act enables meaning to be established and all meaning is accessible through the act. For example, action language is included in the aims and title of this research project. From the act you have power, advocacy, evaluation or whatever worldview you need to apply. From the act you

have all the knowing for living. Knowledge itself is a product, a good produced from an act. This concept of act is fundamental to this study, because the epistemological value of the data collected relates directly to meaning related to the profession. This study focuses on the epistemological, because as argued earlier, a profession is first and foremost about the knowledge it applies to society. Pragmatism as a practical outcome settles the arguments that are related to a profession. Pragmatism says that whatever the argument, consider the act and the value of this act to the context. It is for this reason that any outcomes from this research project must have practical value in supporting the acts of the profession, otherwise it will be consigned as another thesis to sit on a shelf gathering dust.

> *'This immediate experience which is reality, and which is the final test of the reality of scientific hypotheses as well as the test of the truth of all of our ideas and suppositions is the experience of what I have called the "biologic individual". The term refers to the individual in an attitude and at a moment in which the impulses sustain an unfractured relation with the objects around him. … I have termed it "biologic" because the term lays emphasis on the living reality which may be distinguished from reflection' (Mead, 1934/2015, pp. 352-353).*

## 4.3 Developing a perspective

The journey of the bricoleur, the perspectives of the investigator are made explicit, expounded to promote ethical practice through an open transparent approach. The journey starts with a broad overview, considering social science, what research is, the perspective of the researcher and methodologies that are relevant to the research aims, and that will address the research questions. My thinking, reading, discussion as an evolving spiral of learning acts, as a bricoleur led me to philosophy. But what philosophy?

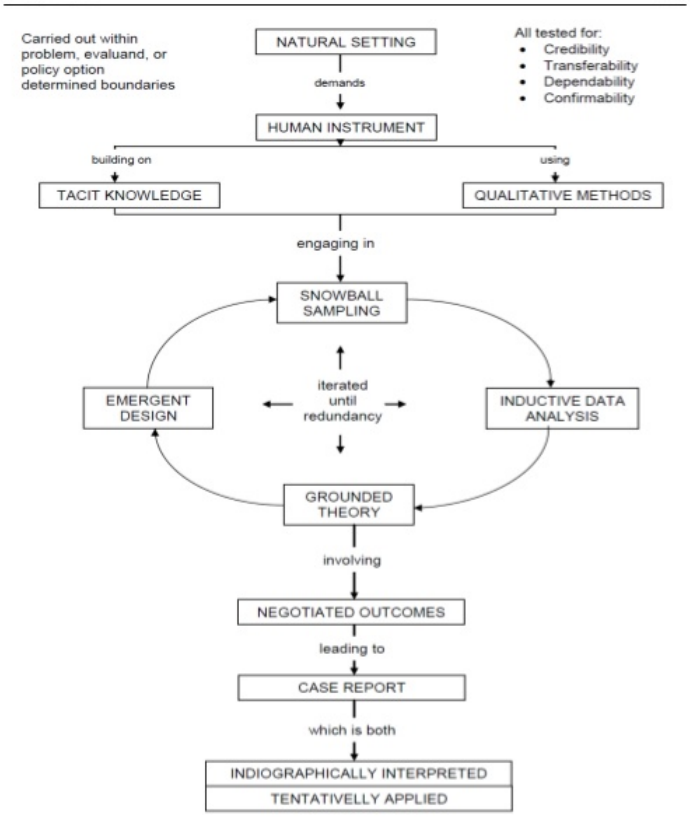



*Figure 4.2 Lincoln, Y & Guba, E 1985. p.188*

In a purposive and snowball approach, 'Naturalistic Inquiry' (Lincoln & Guba, 1985) was the first philosophical perspective to be explored as a potential for osteopathic practice and sits in the background for this project. This book provided an entrée to social science research and naturalistic inquiry generally.

Figure 4.2, underpins the approach to this research project, although somewhat modified by subsequent reading. Naturalistic Inquiry led me to 'The discovery of Grounded Theory' (Glaser & Strauss, 2010). The idea of condensing actions into a few words seemed appropriate to this research project. It seemed like Glaser and Strauss were making a link or a stepping-stone with the positivist quantitative thinking to a qualitative world. The next book was Grounded Theory with Kathy Charmaz (Charmaz, 2006, 2014) took it a step further. It also introduced memo writing to this project, with memo's being made in relation to theory, method and free writing to consolidate and develop ideas including drafts of the key figures and diagrams (Charmaz, 2014, p. 162). Early in the process grounded theory was a method that resonated as potential for this project, there were links to naturalistic inquiry, but it had a more definite methodological approach. The Charmaz books, led me to constructivism and because I had a nascent grasp of philosophy I read The book 'John Dewey between Pragmatism and Constructivism' (Hickman et al., 2009). It came up as a book on Constructivism and introduced Pragmatism. This book written by leaders in their field were not writing for me as a beginner. One particular author, Reich was particularly dense, although her writing did open my eyes to the depth of the scholarship in the field, like the question do we '… as philosophers, claim to have the universal answers that the world "out there"… or do we content ourselves with having only temporary answers' (Reich cited in Hickman et al., 2009, pp. 107-108). At the time of reading, this statement appeared relevant to me, but with reflection it is now viewed as a code for the millennia old argument about an objective reality, truth and the meaning of knowledge. This book started me thinking about the links across different philosophical perspectives, with comments like '… Scheler

preferred to call “metabiology”, because he believed that metaphysical concepts ought to express the world reality of a live creature…’ (Stikkers cited in Hickman et al., 2009, p. 79). This helped me make links to the biological imperative that comes up through this thesis. This next comment also helped me envision the emergent constructed nature of the consultation process: ‘for him [Dewey], natural events have no antecedent essences; instead, essences emerge as the constructed consequences of the process of inquiry’ (Garrison cited in Hickman et al., 2009, p. 85, emphasis in original). Hickman et al. (2009) provided as many questions as it did answers. Questions about truth, generalizability and universalism arose. How and where Pragmatism fitted into the world would take some time to settle in at this early time in the project. In the meantime…

Social science is the organised examination of ‘natural’ practices, those interactions that make up people’s lives: how people live and what they do. Society defines these interactions, what is acceptable or not, through professions, laws, regulations, ethics committees and so forth. Merriam (2009, p. 1) is clear that health is a social activity, which, as an osteopath trained in the biomedical tradition I had not fully grasped. There are those who state that osteopathy straddles the natural sciences (physical and life) and the social sciences, making it science and art (Orenstein, 2019). In today’s language osteopathy in Australia is included as a health science. University awards and subject titles contain the term science (Vaughan et al., 2013), recognizing that it is a science applied in the specialised social interaction of health. Being a social science is fortunate, because it opens the whole social science field to osteopathy in its research and professional endeavours (Brosnan, 2016). Social scientists,

including anthropologists, have sought to define and interpret social phenomena such as CAM (Hans A Baer, 2009; Gale, 2014), and osteopathy, as a member of CAM (Baer, 1987; Hans A. Baer, 2009; Gale, 2011).

The science in 'social science' is defined by The Merriam-Webster dictionary as 'the state of knowing**:** knowledge as distinguished from ignorance or misunderstanding'. Thus, social science is the 'knowing' of, or about social phenomena. Knowing is developed by studious inquiry or examination, which is represented by research as '*self-critical systematic inquiry*' (Stenhouse, 1981, p. 103). Research as a *'systematic basis'* (Winit-Watjana, 2016) to inquiry, with a self-critical component, is extended by Merriam (2009) who adds '*the notion of inquiring into…'* (p. 3). Bradley (2008, p. 302) referring to Dewey's 'theory of inquiry' as a model for research, defines systematic as recursive, stating that '*the steps of inquiry are not linear,'* he then suggests that they are subject to revision, as *'they are also not closed*' (Bradley, 2008, p. 302).

Winit-Watjana (2016) proposing that Pragmatism is the philosophy for research in pharmacy, indicates research can *'increase the knowledge of man, culture and society'* (p. 2). More specifically, research can aim to extend knowledge, or be applied to *'improve the quality of practice of a particular discipline'* (Merriam, 2009, p. 3). Stenhouse (1981) indicates two aspects to social science research: '*In practice, experimental and analytic social science seeks to ride the assumption of high predictability as far as it may'* (Stenhouse, 1981, p. 106). Experimental and analytic approaches favour quantitative methods, which historically dominated the thinking space in medicine and as a subset,

osteopathy. However, this bias has declined and a more pragmatic approach to research developed, as researchers sought answers to questions that were not responsive to 'traditional' methods.

The thinking has moved, the borders are '*blurred'* (Denzin & Lincoln, 2018, p. 3) and today, Denzin and Lincoln (2018) describe research as interpretive communities of practice and research, occurring in *'spaces'* (p. 3). *'Observational and naturalistic social science attempts to work in areas where the assumption of low predictability seems stronger'* (Stenhouse, 1981, p. 106), resonating with qualitative methods. Qualitative inquiry, as a science is changing or moving in several different directions (Denzin & Lincoln, 2018). Qualitative inquiry is *'a situated activity that locates the observer in the world',* with the qualitative researcher studying '*things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them'* (Denzin & Lincoln, 2005, p. 3). Qualitative research *'consists of a set of interpretive, material practices that make the world visible'* using a '*variety of empirical materials – case study, personal experience, introspection, interview, … observational, historical, interactional, and visual texts'* (Denzin & Lincoln, 2005, p. 3), that seek to interpret social actions of people (Winit-Watjana, 2016).

One key difference between the qualitative and quantitative approaches to research is that the researcher is the primary research tool in the qualitative approaches (Lincoln, Lynham & Guba cited in Denzin & Lincoln, 2018, p. 143). That is to say that the degree of separation of the researcher from the data is reduced with the researcher, as the research instrument, directly collecting,

processing and analysing the data (Pezalla et al., 2012). To support transparency, and best practice, it is considered necessary to identify the researcher perspective in the research project. A similar practice occurs in quantitative projects, with survey instruments and equipment being detailed. This is done for the same rationale – so that those whom read the outcome, may make a judgment as to what impact the researcher perspectives may have on the project.

To understand my personal perspective, I considered those put forward by established authors. Bearman and Dawson (2013) describe perspective as: *'at one end of the spectrum is the 'idealist', indicating a researcher who believes that all knowledge is subjective, and at the other end is the 'realist', indicating a researcher who believes that knowledge directly represents an external reality'* (p. 255). Authors I reflected upon included Michael Crotty, who indicates his perspective in the title of his 1998 book: '*The Foundations of Social Research: Meaning and perspective in the research process'.* His view on research being made clear, that it is social, that he interprets truth or 'meaning and perspective' and being found in the research process, not as an end result. Another example is Bruce and Bloch (2013), who point to their perspective in their abstract: '*Community inquiry derives from pragmatist theory'* and the opening paragraph: '*conceiving education as the development and articulation of lived experience*' (p. 27). Considering the other end of the spectrum with Fryer (2011) indicating a more realist stance with language such as '*evidence suggests',* '*high quality evidence'* and *'duration of the stretch phase'*.

The duality of the idealist/realist spectral opposites defined by Bearman and Dawson (2013) above, represent a common metaphor found in society. Dualities abound: Yes or no; heads or tails; in power or in opposition; male or female; homosexual or heterosexual; black or white, are all examples of dualities that exist in society. Even the triune of biomedicine, complementary medicine and alternative medicine has been subsumed into the duality of biomedicine and CAM. An ontological perspective or world view impacts on the sort of knowledge that arises. In the case of the duality noted, realism aligns with positivism or reductionism, where the type of knowledge derived is exact and measured or compared to an external objective fixed reality. In contrast, the epistemological position with the idealist interpretive end of the spectrum leads to knowledge that is fallible, open to interpretation and constructed relative to the context in that it occurs.

Hamati-Ataya (2012) explores an interpretation of Pragmatism, 'Morton Kaplan's Systemic Pragmatism', for her discipline of International Relations. She credits it as being able to oppose '*the positivist/post-positivist antagonism*', indicating that positivists and post-positivists share a common anthropocentrism, with existence tied to being experienced or being spoken and constructivism as the middle ground. She wants to '*move beyond this sterile and debilitating debate*' of the positivist world '*out there'*, the post-positivist world '*all in here'* and constructivism as middle ground (Hamati-Ataya, 2012, p. 292). She indicates that Kaplan utilised Peirce's conception of Pragmatism to bridge this '*debilitating debate'* (Hamati-Ataya, 2012).

Ryan and Sfar-Gandoura (2018), writing as nurse researchers, outline three philosophical paradigms relevant to novice researchers today. These are Positivism, and as an outcome of the critique of positivism: Interpretivism / constructivism and critical theory. Sharing of knowledge can be across any field, healthcare as a function of society regularly utilizes knowledge from all areas that impact on society, for example economics, law and mathematics. This sharing of knowledge and science is represented by the shared 'philosophy of medicine' outlined by philosophers (of medicine) Pellegrino and Thomasma (1981).

> *'What we say of the healing relationship is equally significant for nurses, pharmacists, dentists, clinical psychologists, medical social workers, and allied health professions'* (Pellegrino & Thomasma, 1981, p. 5).

The nature of science and knowledge is contested. Twenty years ago, using language that represents dualities, Keller (2000) declared that '*two decades of critique have sensitized historians and philosophers of science to the inadequacies of conventional dichotomies between theory and practice, between pure and applied, and between representing and intervening'* (p. S72). The ongoing discussion defines positions and establishes relationships to the society of today. As a result, leakage can occur across the boundaries of traditions, and flexibility of methods underscoring the need to make the researcher's perspective transparent. For example, Cresswell (2009) outlines four aspects to a 'philosophical worldview': Postpositive, Social Construction, Pragmatic and Advocacy/participatory. Arguably these four aspects can be collapsed into the realist / idealist duality, as the latter three share epistemological qualities that differ to the positivist realist worldview. In a similar observation to Cresswell

(2009), Winit-Watjana (2016) places positivism, post-positivism, interpretivism and pragmatism as the research paradigms that are relevant to his field of pharmacy (he adds Critical theory and Post-modernism to the realm of social science). A research approach flows from the worldview, represented in the language and the research methodology used within the paradigm. Ryan and Sfar-Gandoura (2018) outline three philosophical paradigms: positivism, constructivism/interpretivism and critical theory (See Figure 4.3 below). Like the others positivism represents the realist side of the spectrum, with the other two associated with the idealist. Figure 4.3 is instructive because it links philosophical paradigms to ontology and to epistemology, which the authors define as a truth.

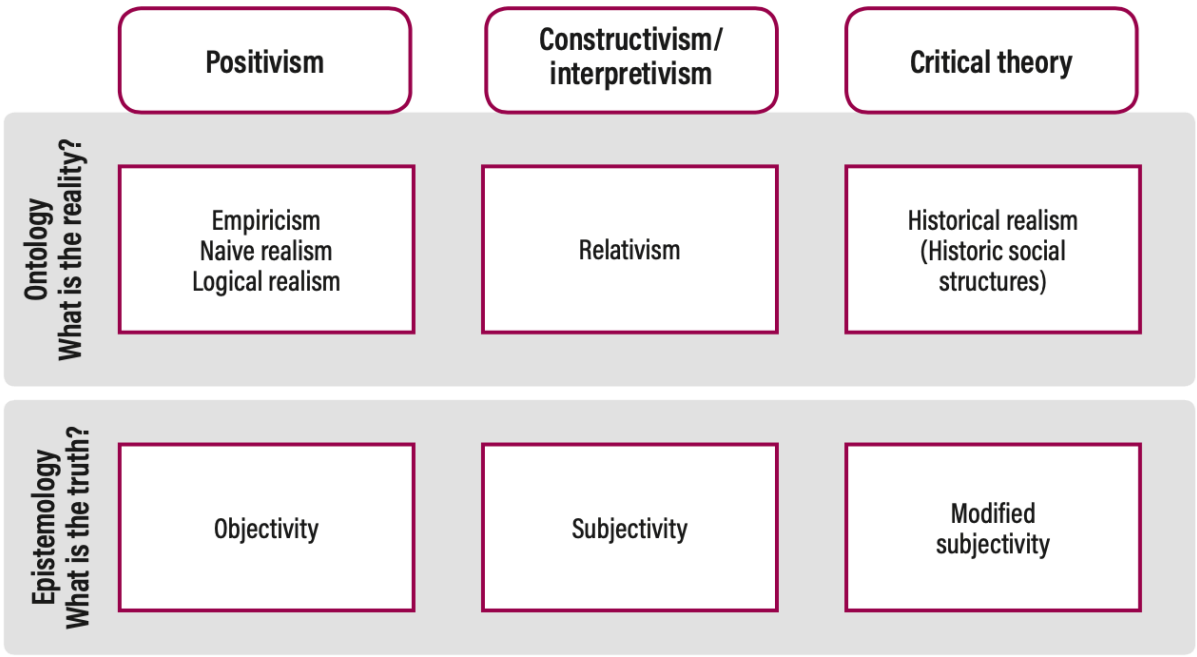



*Figure 4.3 Example of Philosophical Paradigms (Ryan & Sfar-Gandoura, 2018, p. 15).*

Cresswell (2009) describes three research methodologies, strategies of inquiry or research designs arising from his worldview: Quantitative, qualitative and Mixed methods. Quantitative tends to tie into a positivist view, qualitative tends to tie in with the others and mixed methods is essentially a combination of the

former two. Today research focuses on what approach or tools will help best settle the question(s) at hand. Qualitative methods are viewed as strong in the individual, in-depth examination and understanding single or small numbers and supports the explorative nature of this research project, where the questions relate to perspectives and interpretations as the basis of knowledge or understandings. This is in contrast to knowledge that requires exactitude or definitiveness. Mixed methods is applied to the likes of the study, '*to evaluate clinical educator and learner engagement with evidence in the clinical learning environment (CLE)*' (Vaughan et al., 2019). Quantitative survey data was collected to develop representative statistics, and focus groups were used to collect qualitative data to evaluate the EBM workshops. In a similar manner, the Australian census collects quantitative and qualitative data in its role as defining the Australian population. Quantitative and Qualitative projects collect data that produces different knowledge. In a similar vein to the mixed methods studies referred to in the previous sentences, this research project could be seen as partnering with the workforce surveys that use quantitative data to describe the overall profession. This research is not a stand-alone mixed method, it will primarily collect qualitative data, by inquiring into the practice of osteopaths in their natural setting – the clinic. It will ask them to reflect on their practice, and then analyse their responses, with the intent of developing an in-depth understanding of their practice. As such it will develop knowledge of the individual experience in practice that will partner with the broader descriptions provided by the workforce surveys.

Research for this project may be summarised as a self-critical systematic inquiry into natural or social phenomena to explore and improve practice. The qualitative interpretivist stance was deemed best suited to address the aims and questions in my research as outlined in Figure 4.1. It aligns with the 'idealist' end of the spectrum and with Merriam's (2009) definition of qualitative researchers being *'interested in understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences'* (Merriam, 2009, p. 5). It is then the job of the researcher in a systematic manner, to gather these multiple experiences and with an appropriate methodology and analysis, interpret and construct meaning from these experiences. The methods of collection and analysis used for this research are described in Chapter 6 below.

## 4.4 Ethical Practice

Qualitative research arose from a colonial background, where the research was used to ensure domination over people and populations (Denzin & Lincoln, 2018, p. 9). An ethical approach to research practice has been developed to avoid repeating historical errors. Respect for human dignity is a fundamental principle governing ethical practice, and revolves around justice and beneficence. Justice means people need to be able to elect to participate in a research project freely without pressure or coercion. Beneficence is aligned with justice as research needs to demonstrate benefit, not waste time or lead to harm. Victoria University (2020) indicate a values and principles approach to research, that encompass '*safe; respectful; responsible; high quality*' ethical practice. Ethical practice is considered imperative and a robust approach includes selecting methods and practices to support these principles. In turn, a rigorous, trustworthy approach to

research will demonstrate the respect necessary to ensure human beings are viewed as independent, as well as support a beneficial research outcome that has merit and integrity (Victoria University, 2020).

In their qualitative literature synthesis, which shares the criticisms and weaknesses of qualitative research, Bearman and Dawson (2013) indicate an overall approach to ethical practice. They identify two key strategies to support rigour – the researchers stance and transparency (Bearman & Dawson, 2013, p. 259). A rigorous systematic process, backed by transparency, supports justice as the research is open to scrutiny and reproduction. People are giving of their time, experience and knowing for the benefit of the researcher and proposed outcomes. They ought to be seen as participants in the research, be treated equitably and see benefit in some manner from the outcome. Strategies in this project to support the principles of research, and demonstrate justice and beneficence, revolved around a structured open reproducible approach to the research. The aim of this was to support justice by ensuring participants knew what the process was and what their involvement entailed. An example was to empower the practitioner-patient dyad by demonstrating how to use the camera to end the video recording and that the video images could be deleted permanently if required. As well, they were free to participate and to withdraw without prejudice, as they felt necessary. The open approach includes exploring the researcher perspective, describing the project rationale, processes and outcomes in detail. It also includes describing variations, errors, missed data or hitches as concisely and frankly as possible, to make them transparent. In this way readers are free to make informed judgements, to assess whether the

research treated the participants fairly and equitably, and they may deem if the outcomes provide some benefit. Transparency promotes trustworthiness by making all elements of the project obvious or open to those involved, including those who wish to use the outcomes.

Setting up systematic research in itself, does not ensure beneficence. However, setting up a rigorous process that enshrines merit, defined in the dictionary as a praiseworthy quality, a virtue, can support beneficence. This definition suggests a laudable, albeit ill-defined output. Merit becomes an ethical consideration as resources are required for any study, and includes those who contribute time and energy, without any direct or obvious reward. A project must provide meritorious, in contrast to trivial, outcomes, to honour the resources of all who contribute. Beneficence, as an antonym for the term maleficence, is the act of doing or producing good, with methods applied in the minimum outweighing any perceived or proposed negative. A project should have at its centre, aims that are significant and will add to (produce good) or benefit society. This includes the aim to ensure some transfer of the knowledge developed from the project to relevant individuals, groups or a generalization to society.

Non-maleficence for this project this was expressed by the minimisation of risk to the participants. In this research project the respondent osteopath was the primary participant. The osteopath then organised for a patient to be involved. This meant the research project needed to consider both parties in the process. The method was designed around ensuring personal information was not released outside of the agreed parameters and minimising disruption to the

consultation to ensure that there was no impact to the usual benefits accrued from the patient-practitioner interaction.

### *4.4.1 Human ethics approval*

Mead summarising Dewey, notes that *'we find the will, the idea, and the consequences all placed inside of the act'* (Mead, 1930, p. 227). If all consequences are in the act, then it becomes incumbent to conduct the research and maintain appropriate ethical practices from the initiating act, or the first research question. Mead goes on: *'and the act itself placed only within the larger activity of the individual in society'* (Mead, 1930, p. 227). This points out the link between the act and society. In recognition of this link, there is a peak body formed from government and university, to oversee research for society: The National Health and Medical Research Council (NHMRC). The NHMRC produces '*The National Statement on Ethical Conduct in Human Research*', which articulates the responsibilities, the social expectations, for researchers in Australia. In supporting the quote above, the NHMRC suggest research has, *'an ethos that should permeate the way those engaged in human research approach all that they do in their research*' (National Health and Medical Research Council, 2020). Further, the NHMRC suggest the conduct of research '*involves acting in the right spirit, out of an abiding respect and concern for one's fellow creatures'* (National Health and Medical Research Council, 2020). Other expectations that may impact researchers include those codes of practice that a health professional and osteopath is expected to maintain. However, the NHMRC provide the primary oversight for research in Australia and confer responsibility to Victoria University (VU), who through their Human Research and Ethics Committee, ensure that

research conducted through VU meets the nationally designed guidelines. This project sought approval (application number: HRE-18-001) to conduct this research from the Ethics Committee at Victoria University. Approval was granted on the 5th January 2018, for the collection of data from osteopathic practitioners for this project.

## 4.5 Limitations

Whilst I have argued a reasoning and the strengths behind the methodology, there are also limitations. First, to address critique related to the researcher as the primary 'research tool', or '*human as instrument'* (Lincoln, Lynham & Guba cited in Denzin & Lincoln, 2018, p. 143; Pezalla et al., 2012), reflected in the researcher's '*values and interests in research'* (Stenhouse, 1981, p. 109). Personal traits and bias are both strengths in providing skills and perspectives that support the research, but equally they present weaknesses in that they can lead to obstructions and fixed perspectives, that can direct the research and perhaps miss nuances and data that may have provided additional meaning. Stenhouse (1981) states that *'it is commonplace that research is attacked on the grounds that researcher has allowed an intrusion of his values'* (p. 109). Aside from values intruding, Stenhouse (1981) indicates that '*researchers are beset by temptations of interest which may blow them off course'* (p. 109). The approach to manage these issues is described above. Stenhouse (1981) warns that '*the crucial problem is the strength of the critical process which controls such temptations, and such a critical process is essentially social as well as methodological'* (p. 109). Managing this critique incorporates utilising transparency, so that those that come after can develop a critical perspective of

the researcher stance. It is '*common for scholars to advocate for interviewer reflexivity'* (Pezalla et al., 2012), reflexivity is described as '*reflecting critically on the self as a researcher*' (Lincoln, Lynham & Guba cited in Denzin & Lincoln, 2018, p. 143).

Reflecting on myself as a researcher was a central tool in this project. Being reflexive is a continuous process, for example, the literature or 'evidence' synthesis that underpins this project is never really complete. Literature is ever evolving with relevant literature ranging from new to millennia past. Reflection was with myself through the use of memos and comparing my practice with that in texts and articles. Reflection was also with others with Pezalla et al. (2012) highlighting the nature of the '*exchange'* that occurs between parties. This exchange occurred with supervisors, critical friends, the literature and also the respondents. The exchanges helped me to 're-calibrate' as an instrument, to assess if there are shadows to the perspective and what these may mean and to adjust the research process accordingly.

Pragmatism is a contested tradition, with radical edges and central philosophical disputes (Barnett, 2020, p. 277). Critique of Pragmatism as a philosophy, has been consistent with Moore (1905) '*now somewhat more than a year since Professors Royce, Creighton, and Baldwin, at the Princeton meeting of the Philosophical Association, started the American reaction against a philosophical movement variously known as 'pragmatism', 'humanism', 'instrumentalism' and 'radical empiricism'* (Moore, 1905, p. 322). Moore (1905) summarises this early critique of the focus on practice and describes ambiguity with the term '*practical*

*purpose, the necessary subjectivity and relativity of the position'* (Moore, 1905, p. 323), a lack of a principle of which experience can be unified, a dualism between thought and the antecedent experience which arises, and critique to the background ontological system (Moore, 1905). Pragmatism needs to operate in contrast to that which it appeals (Moore, 1905). This critique came at an early time for Pragmatism, which as a discipline was not much more than 25 years old. In a more modern critique the same issues are still apparent: *'If an emphasis on practice is meant to be its defining feature, Pragmatism loses much of its distinctive shape'* (Barnett, 2020, p. 278). Other criticisms relate to a material or superficial consideration on truth based upon James's notion of the cash value, that Pragmatism does not deal well with structural forms of authority and that it might risk '*over-socialising the self*' (Barnett, 2020, p. 280). Time has allowed for a considerable literature to develop around Pragmatism. It has been the intent of this research project to describe the perspectives of the investigator, the processes, the understanding of philosophy that impact knowledge production, to ensure that this produces a transparency that informs the reader. Barnett (2020) writes that *'in fundamental respects, the lesson of this living tradition is that classical Pragmatism needs reappraisal and augmentation if it is to act as an aide to understanding contemporary problems facing social inquiry'* (p. 277). It is the intent of this project to attempt to add to the living Pragmatism and support a reappraisal and augment it, in this case through osteopathic practice.

Research or inquiry is about knowledge and knowing. As a limitation the knowledge that may emerge from this research is derived from data collected from fifteen osteopaths, of the more than 2000 in Australia and more than

130,000 globally in 33 countries (Leach et al., 2019). A stated aim of this research is to contribute to the professional dialectic and professional practice. This aim relies on the generalization and transfer of the knowledge. 'Generalization is an act of reasoning that involves drawing broad conclusions from particular instances' (Polit & Beck, 2010, p. 1451). That is how knowledge developed and constructed by an individual can be utilised by an other(s). Polit and Beck (2010) describe three models of generalizability. The first is statistical generalization which is not relevant to this research. Statistical descriptors were not used and the group of respondents are unlikely to be statistically representative of the population of osteopaths. The other two models are analytic generalization and case-to-case transferability which are both more applicable to qualitative methods (Polit & Beck, 2010). This research is described in detail to support analytic generalization and case-by-case transferability. Simply a reader reads the results and discussion and then theorizes for their field. The data for this project is based upon the collected individual perspectives of fifteen osteopaths and includes their historical perspectives, their experiences and knowing from the past. We can base our knowing of the present and future on this past, but we must be cognizant that at best this project's results are a snapshot of time past, a miniature brick in the collage of the history of scholarship, that I hope contributes to a bricolage that is the osteopathic profession. What knowledge may transfer from this project is unknown, however as I have demonstrated above, the debate about the profession continues to be active and the intent of this project is to contribute to this debate, nothing more can be expected, but more can be hoped.

Generalizing as a topic is subject to intense debate, with it being complicated and controversial in qualitative research (Polit & Beck, 2010). Flyvbjerg (2006, p. 221) commenting on case method research (a qualitative method): '*Misunderstanding 2: One cannot generalize on the basis of an individual case; therefore, the case study cannot contribute to scientific development'.* Science (life and physical), '*aspires to generalizations which are predictive and universal'* (Stenhouse, 1981, p. 104). Universal generalizations and grand theories were seen as the ultimate research outcome, and confined to the realm of quantitative methods – physics, particularly was looking for generalisations (models) that would support the physical nature of the universe. Universal generalizations assist society to function with society itself a generalization.

Research is about new knowledge, and if this knowledge is not translated, then all is for nought. Given the limitations outlined in relation to this research project, it is not the aim to make grand generalizations. The aim is, following the methods indicated, to present the research – the method and results, as clearly as possible, a '*thick description'* (Polit & Beck, 2010, p. 1453; Stake, 2010, p. 48), so that any reader may decide the merit of the research through their perceptions, for their context. Any outcomes will be tentative, because to predict all the scenarios that may be, or will come, is difficult and not warranted. That is to say, this researcher cannot predict when, and in what situation any output from this project will be relevant. However, if the process that is science (itself a generalization) is followed and any output from this study goes out into society, then those who come later can make the judgment as to whether or not it can apply to their scenario. These readers will then critique the research and use it in

the continuing spiral of knowledge, to add to the conception of practice in osteopathy and perhaps elsewhere. The very idea that a profession claims to be one, is a generalization. A profession is stating a shared practice and a shared knowledge, that is generalizable to a defined group, such as osteopathic patients. Bearman and Dawson (2013) speaking through time in their 2013 paper and without knowing it, provide support to this claim in 2020:

> *'… the outcomes of qualitative synthesis provide value through building a collective understanding of the data regarding a particular issue or phenomenon, not by establishing definitive causal links' (p. 258).*

# Chapter 5 Methods of data collection and analysis

## 5.1 Introduction

For the purposes of transparency, this chapter describes the method for this research in detail. It concerns the processes and tools pertaining to the collection, management and analysis of the data produced for this research. The chapter commences by presenting the context in which the study was conducted. It then moves through how the participants were recruited, an outline of the interview process and the tools used to transcribe and analyse the interviews and how the data was managed. The chapter concludes by reviewing variations and issues with the process. Figure 5.1 below illustrates the research process.

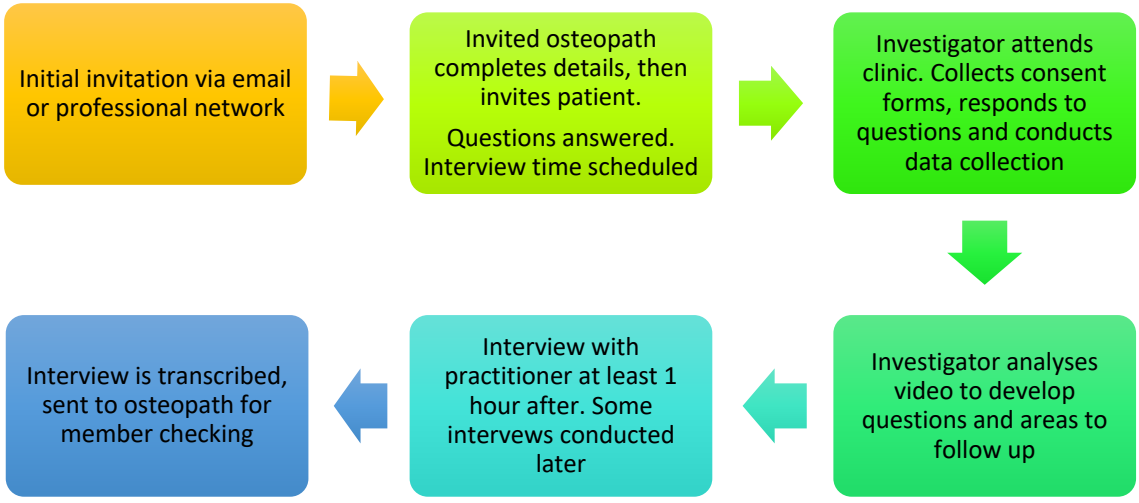



*Figure 5.1 The research invitation and interview process*

## 5.2 Context of the study

The natural setting for osteopathic practice is primarily a private health clinic setting. Typically, it is a standalone structure with public access, space for staff, with patient waiting and treatment areas. Osteopathic practice is conducted autonomously, with the person attending the clinic and the practitioner conducts the interaction in private with this person and any associated others i.e., personal

companion. All observations and most of the interviews (not PHD#2, 3, and 15) were conducted in the respondent's workplace. The clinics visited are described in more detail in Chapter 6.2 and 6.3.

My professional connection to osteopathy has developed over more than thirty years of practice, through varied roles that include a private practice role employing more than 50 practitioners, academic roles managing many staff and tutoring hundreds of students of osteopathy, teaching and management roles with a not-for-profit educational group and the professional association (Osteopathy Australia). These roles provide a gateway into the profession and being an osteopath means the respondents know that the researcher was 'one of them' and could communicate with their professional language providing familiarity and a sense of comfort.

## 5.3 Project Participants

If comment is to be made as to what defines osteopathic practice, then it appears appropriate, logical to ask those involved. There are two primary groups – the practitioners and those seeking osteopathic services. A third group includes government and regulators, educationalists, observers and critics, however it is the profession through the practitioners who generate the professional 'gestures', that sensitise individuals to osteopathy. Because osteopaths initiate the gestures, they were the first group that I invited to participate in this project. Adding the patient group would make the project too large and complex. The initial number of interviews was set at twelve as an achievable number and was the same number of people interviewed by Thomson et al. (2013a), although Thomson

reinterviewed five for a total of 17 transcripts for his data collection. 15 interviews were subsequently completed for this research.

Osteopaths invited were defined by being registered with the Osteopaths Board of Australia administered by AHPRA (AHPRA, 2020b). It has a searchable public register that can establish the registration details of an osteopath. It was initially decided to invite osteopaths only from Victoria for logistical purposes. Osteopaths practising in Victoria comprise 55% of Australian osteopaths (AHPRA, 2020d). They come from a diverse range of demographic and osteopathic training institution backgrounds. Invitation to participate occurred via three routes, with those successful participants coded 'PHD#', with a following numeral indicating the enrolment number:

1. An email (Appendix 1) sent to osteopaths in Victoria via the professional association Osteopathy Australia (OA). OA represent some 90% of Australian osteopaths (Osteopathy Australia, 2020). Two responses were received to this email, with one respondent progressing to an interview (PHD#1).
2. The second group of respondents came from osteopaths in my professional network who offered to participate, following receipt of the general email, by personal association or prior research relationship (PHD#2 - PHD#8, PHD#14 & PHD#15). Five further respondents demonstrated interest, but three did not agree to be interviewed after reading the information form, and two were in agreement, but were postponed.
3. The third group came via direct invitation (Appendix 2) because of a particular practice approach. An osteopath was purposely contacted in

> Canberra to participate, because of a particular approach to practice that is not common in osteopathy. I considered this an outlier and worth observing. This contact led to five interviews in total (PHD#9-13). To be inclusive another large osteopathic practice in Canberra was contacted, but a response was not received.

Once a practitioner had agreed to participate, the 'information to participants' and 'consent' forms for both the practitioner and the patient, were emailed or posted (Appendix 4 & 5) to the potential interviewee. In order for the project to collect data it required the practitioner to conduct a treatment with a patient. This meant that practitioners needed to identify someone, a client, who would be comfortable being part of the research. As such, responsibility for selecting the patient rested with the practitioner. The suggested approach was to invite patients from the clinic patient population by general notice in the waiting area. Practitioners used a variety of strategies to inform patients, and none were recruited by notice in a waiting room. Practitioners invited patients whom they felt were comfortable with the consult and would be suitable for the research. I am unaware of the rate of decline; however, some osteopaths spoke of 2-3 patients declining before finding someone comfortable with participation. Some practitioners who agreed to participate required a considerable amount of time to organise a client for the research. Once identified, the patients were provided with an information form (Appendix 5) supplied by the practitioner and any questions came through the practitioner to the researcher by email, SMS or in-person conversation.

There is an understanding within the profession of the need for research. This sympathy for the process did elucidate good professional support with the majority of the respondents coming from my professional network. I was aware of the links with the profession and the possible pressure on practitioners in a personal network who might feel a requirement to participate. Working colleagues were not asked to participate, however, I felt that it was important to accommodate any offers of help. What I did not consider was the practitioners whom I associated with wishing to participate, because of a personal connection, and wanting to contribute to research in the profession and the success of their colleague. If a colleague did offer, the same process described was followed. To minimise any potential awkwardness, I ensured that I was clear that participation was optional, and that it was understood that it was not always feasible for everyone to participate.

On reflection, there is some potential that practitioners could have pressured their clients to participate, but data was not collected on this. The first interaction between the patient and the researcher was at the time of the appointment. At this time, I as the researcher, would check with the patient if they had any questions about the process. Early on I recognised that often the information to participants form was either not read or the details forgotten in the lead up time to the interview. On this basis I would review the information to participants so that all parties were comfortable to proceed, and I would ensure that both had completed a consent form. The option to not proceed was always emphasised, that video is easily erased and that the researcher could return another time and for another participant. In general, the clients appeared interested in the project with some asking questions about the project. Some were surprised as to the

minimal invasion expecting the researcher to stay for the consult, with many perceiving research as an expected matter-of-course. Overall, there was a spirit of helping, with clients viewing research as positive and being happy to help. The basis of the help was always in context with their practitioner, and the trust put in their practitioner was obvious across the cohort.

## 5.4 Arranging the interview

Once the practitioner had arranged a patient and scheduled an appointment, they notified the researcher. In some cases, the researcher was notified directly by the practitioner, and with PHD#7 and PHD#9-13 it was via the practice manager. The researcher would then attend the clinic at the scheduled time. On arriving, time allowing, the researcher would sit in the assigned waiting area and observe the surroundings. Field notes were made including a diagram of the clinic premises / practice room lay out, any variations to the process, relevant thoughts or insights. The practitioner would be greeted, the consulting room checked for the best place to situate a camera, the signed practitioner consent form collected and any questions determined. The primary risk management concern for this research project was exposure of the data to those outside of the research. To ensure transparency of the research process, participants were assured that the video data was only to be used as a prompt for the practitioners to participate in a semi-structured interview. These videos would not be used in any part of a report or presentation outside of the prompting role. The use of the camera would be demonstrated, so that the practitioner could turn it off if required. Then, with all party consensus the video was started and the researcher left the consult room.

## 5.5 Videography

Videoing for research has developed over the last 50 years as a research tool in fields like time and motion study, engineering to slow down mechanical activities for assessment and improvement, and in health assessing speech and motion in autism cases (Condon, 1970). Video opens up *'the minutiae of social interactions in real time'* (Knoblauch & Schnettler, 2012, p. 335) to the researcher. Condon (1985) reports that the micro motions of human action in relation to speech or other movements can be observed in normal and abnormal conditions, such as children with autism. The mental effects on the physical are described as ideomotion, the '*instinctive automatic expressions directly coupling dominant mental representations to action without any intermediary volition'* (McCarthy et al., 2007, p. 105). Ideomotion describes the musculoskeletal responses to those sensations, many of which are minute, that arise from stress and other emotional reactions and may lead to patient presentations (Dorko, 2003) and are captured by video. Hans Selye, the 'father of stress', described the organism's physiological response to stress, outlining the physical, mental and spiritual impacts which he named the General Adaptation Syndrome using a mechanical term: 'stress' (Tan & Yip, 2018). For osteopathy these physiological responses to stress are interpreted through a biomechanical lens as muscular, postural and motion changes resulting from the of the stress response. Shin et al. (2010) provide an extensive examination of ideomotion noting its use in conditioning motor activity:

> *'Anticipatory images are conditioned to each contingent forthcoming effect and then finally acquire discriminative control over their corresponding responses even without the original stimulus to trigger the responses.*

> *Anticipatory associations are chained between the consecutive elements of the effect sequence so that activation of the anticipatory image triggers the anticipation of the next effect to be produced, which in turn triggers the respective serial response. In the ideomotor mechanism, a motor command is exhaustively coded with the intrinsic feedback that it aims to generate'* (Shin et al., 2010, p. 945).

Video has emerged as a powerful tool for the interpretive method in qualitative research (Knoblauch & Schnettler, 2012), because it captures and preserves the observation for evaluation. Observation *'is an accepted, even essential, scientific habit that is easily understood within the medical culture'* (Wellbery & McAteer, 2015, p. 1). Wellbery and McAteer (2015, p. 4) remind us that '*all observation is filtered through a particular lens*'. In this research describing my perspective and the context of the research, is done to make transparent the 'filters' and the 'lens', to support ethical practice. One of these filters relates to how the recoded video is used or chosen for the research. Heath et al. (2010) observed an emergency situation in the London underground operations room and suggest using fragments or small segments of video for analysis, because video provides a rich or large bandwidth of data (Heath et al., 2010, p. 66). Video is not just voice by turn, but includes all the complexity of voice interaction with the social cues of interacting with each person and the environment, such as tools, instruments, and the non-verbal cues that can now be seen. The key assumption underlying video for research is *'the sense and significance of an activity is embedded within the situation and circumstances in which it is produced'* (Heath et al., 2007, p. 111). '*Meaning is not only produced in the temporal sequence of events – it is co-*

*produced and orchestrated by the narrative construction'* (Knoblauch & Schnettler, 2012, p. 342).

The notion is that meaning can be developed from the observation of the video image to the practice. Making meaning from observation has been accepted well before video was used for research. Scientific writing, for example, makes use of metaphors from observations in nature to use in medicine, such as '*bamboo spine'* (Wellbery & McAteer, 2015, p. 2). This term is used to describe the x-ray image of a human spine subject to longer term ankylosing spondylitis, a rheumatological arthritic disease. This historical metaphor demonstrates the transfer of observations from nature to written descriptions in medical practice. Wellbery and McAteer (2015) are describing metaphors as carriers of knowledge from observations to practice. This project relies on this notion that meaning can transfer from observation through written language to practice. Wellbery and McAteer (2015) describe detailed biological writing that expresses emotion with these writers showing *'the path that leads one from objective observation to subjective engagement, an essential practice in clinical settings'* (p. 3).

In the case of this research the video was used instead of direct observation, and then video segments of the practitioners in their consultation were selected, as interview prompts in their semi-structured interviews. Because the videoed act is available for re-evaluation over and over, small movements or acts can be reviewed at slow speed to see when they stop or start. Equally times when a practitioner appears quite motionless, or quiescent, can be sped up, demonstrating small movements that were present. It was noted that these small

movements related to underlying thinking, including decisions made, and preparation to move to another technique or action, and as such were included in the video segments for the respondents. It seems remiss that few researchers appear to have reported in detail on the experience in a treatment room (Banton, 2019). The only other reference I came across to use video was Thomson et al. (2013a); Thomson, Petty, Ramage, et al. (2011) also used video as an interview prompt to support osteopathic practitioner interviews on the reflective thinking of the practitioners. The research in osteopathy is primarily from surveys about the professions practice (Adams et al., 2018; American Osteopathic Association, 2015; Burke et al., 2013; Orrock, 2009a), with Steel et al. (2017) summarising*,' the role and relevance of osteopaths and the integration of osteopathy in the delivery of health care services generally remain unclear'* (p. 32). Workforce surveys provide a broad-brush picture of the profession; however, this broad view needs finer detail and this can be done by observing what goes on in the clinic room. As Gevitz states that '*from a sociological perspective, it is less important to study what a profession believes and more important to examine what it actually does'* (Gevitz, 2006, p. 123).

The concept of using the video as a prompt, or as a tool to review practice is discussed by Knoblauch and Schnettler (2012). They review their video analysis practice, by videoing their analysis sessions for review. This second order video practice is aligned with the method of this project, where the video is used as a prompt to support a semi-structured recorded interview. This project does not use the acts in the video as the primary data. The videos represent the acts of practitioners in a professional interaction (the consultation) with clients, for the

practitioners to reflect and respond to. The recorded reflective transcribed responses to questions asked in reference to the video, are the primary data for analysis.

> *'It [video] enables the detailed scrutiny of activities and events as they arise within actual, practical situations and provides the opportunity to explore the ways in which health care is accomplished within everyday organisational environments'* (Heath et al., 2007, p. 114).

An ethnography is defined as *'the study of social interactions, behaviours, and perceptions that occur within groups, teams, organisations, and communities'* (Reeves et al., 2008, p. 512). Reeves et al. (2008) go on that an ethnography aims *'to provide rich, holistic insights into people's views and actions, as well as the nature (that is, sights, sounds) of the location they inhabit…'* (p. 512). Knoblauch and Schnettler (2012) add that the methods applicable are *'participant observation, interviewing and video – or photo-elicitation and document analysis'* (pp. 348-349). These aims resonate with this research project, where the holistic social interactions of the participants in the form of a consultation were the researcher's interest. There is much that is similar, as both studies are interested in social phenomena. The technical considerations are related and the tools for collecting data are similar. Fortunately Knoblauch and Schnettler (2012) state that analysing video *'is a basically hermeneutic activity' (p. 349)* or literally interpretation of the video. This opens up the field of interpretation which is where this study deviates from an ethnomethodology. This inquirer's view or lens is focussed to the acts within the dyad in a professional practice context not a social interaction context. That is the meaning that emerges for the participants in the

video interpreted through the practitioner within the framework described as osteopathy.

Video cameras have changed as much as videography. They have become useful to a field of research that previously relied on hand written notes, memory of the exchanges and tape recording of interviews. In the past to capture video of practice required specially equipped rooms which meant practice was not in its natural setting or 'portable' video cameras were larger, mostly of lesser quality picture, required focussing and a special lens attachment for wide angled pictures. The use of videography for research similar to this project is relatively new. I am only aware of one paper published in osteopathy, to date, that uses video as a research tool where Thomson et al. (2013a), a British osteopath utilised video prompted interviews in his PhD study. Heath et al. (2007) echo this observation, noting that video as a research tool in medicine '*… has proved less pervasive'*. (p. 109)

The camera used in this project was a 'Go Pro', a leading brand in the 'action' camera genre. These small (6cm x 4cm x 2cm) matchbox sized video cameras have a sensitive microphone to capture speech and a good battery reserve. Their wide-angle lens does not require focussing. The infinite autofocus is designed for use in physical action scenarios such as surfing, cycling and parachuting allows capture of the whole treatment room, so they do not require an operator present. Throughout the project the camera was upgraded from a 'Go Pro 4', sequentially to a 'Go Pro 7'. The primary difference was increased video quality from 1080 pixels to 4k and ease of use, with a touch screen and improved menus for

downloading video content. The camera updates facilitated the camera use, but did not directly impact the data collected. The camera features, plus the need for little training to use, make a video approach to data collection very much easier and support the ethical practice of this project:

- Ease of use means it was easy to empower the practitioner and patient in controlling the video supporting justice in the research.
- The unobtrusiveness makes action cameras ideal to minimize disruption and maintain a normal, or close as possible, business-as-usual approach respecting the patient-practitioner interaction, and ideally preserve the natural practices as much as possible.

## 5.6 The Interview

At the end of the consultation the practitioner and client would emerge to finalise the appointment and move to their next task. Clinic booking schedules dictated the interview schedules and, in most cases, either a one-hour lunch break or a double 30-minute appointment time was allocated for the interview. Most interviews followed the video with a maximum time two days later (PHD#3), and for PHD#4 a second half of the interview occurred one week later. To prepare for the interview, I collected the video camera and moved to a pre-determined allocated private space to download and review the video on a computer or iPad. The minimum time needed between a 30-minute treatment and related interview was one hour. This preparation time comprised watching the treatment video whilst making notes relating to the video segment timings selected for the interview.

The interview started with a brief introduction about the process to establish an interviewer rapport. The relationship was essentially one of a partnership in osteopathy with me as a researcher doing something that was to help better our profession (Pezalla et al., 2012). In most cases time was quite limited so the introduction was concise. A prompt was developed to ensure all question areas were covered (Appendix 6). Questions about practitioner context and patient diagnosis followed the introduction. Questioning about the consultation process, followed starting at the case history. The first question was why the practitioner chose to start with the case as they demonstrated on the video. This became the standard opening, as it seemed appropriate to start with a question about the start of the consultation framework. The video segment would be played on the computer or iPad screen for the practitioner to watch. The practitioners were then asked about the segment: what they were thinking and what was going on. The segment would be replayed as many times as the practitioner wanted. Sometimes the practitioner would respond immediately and start referring to the segment, almost as if they knew this part would be asked about. Other times they were not aware of why a particular segment or question was asked and the question required rephrasing to elucidate a response. The researcher needed to elucidate the practitioner's thoughts on what was occurring.

The process continued with the practitioner viewing the video segments that the researcher had highlighted and responding to questions and making comments about the act(s) identified in the video. If the practitioner expanded an answer they were left to continue and then overlapping of later video segments were identified and skipped over. At the same time comments, statements and points-of-note were picked up and addressed as they arose. Once the sections of video

identified by the interviewer for the interview had been covered, the final question allowed the interviewee to ask any questions or make comments. At this time the interview was ended. In most cases the practitioners had clients to follow up, so an eye was kept on the time to ensure that what was necessary to be covered was, and that the interviews were timely.

The interviews are an exchange between two parties and there was a feeling of partnership for the osteopathic profession (Pezalla et al., 2012). In a form of self-reflection it was unavoidable to reflect on my performance as an interviewer in both each individual interview and across the interviews. Being self-reflexive is a form of quality control. I was able to compare and contrast my practice with the expert standard described in texts and journal articles. I was attempting to create a space in which the respondent could tell me about their practice. I did not need to be involved, I needed to be neutral and facilitate the situation to hear the respondent. Listening to the interviews over and over I found my interviewing technique wanting, despite reading multiple texts by leading authors: '*learning about interviewing and doing interviews are different tasks'* (Pezalla et al., 2012, p. 18). I was able to hear my interruptions, unclear questions multiple questions and other poor examples of interviewing over and over. I made an effort to improve my interviewing practice over the interviews. Secondly, I was able to implement some process changes to facilitate the interviews and I think the interviews improved in flow and efficiency over the time. It was appropriate to exceed the initial number of twelve and achieve fifteen as the first one or two could be viewed as preliminary. Patterns did emerge across the first interviews and small adaptions were implemented including asking each interviewee about

how they came to be an osteopath was included from PHD#3 to provide additional context for each respondent. A variation was trialled for the PHD#3 interview that allowed the video to run on and having the practitioner respond to questions as the video ran. The concept being examined was that although there were specific segments to prompt questions, the video might prompt further comments from the practitioner. The outcome provided for a lot of discussion, but did not add to the depth of the data. Also, the interview went for two hours, which was not the sort of time that practitioners were able to commit. It also made managing the transcript more difficult. Thus, identifying acts and asking related questions was more time efficient and focussed. In addition to the adaptions, I developed a conception that targeting specific practice approaches would help provide depth to the data collection. I had heard about the practice of an osteopath in Canberra from a student who had undertaken a field visit. It was this realisation that triggered me to directly approach this osteopath (Appendix 2). I paused at fifteen interviews to gather the emerging concepts and to evaluate for saturation. Further interviews were available if I needed to extend the data set.

My roles in education and leadership did lead to some interviewees voicing questions that indicated a concern that their practice may be subject to judgment. This was a reasonable assumption given that the interview sessions were a social process (Knoblauch & Schnettler, 2012) encompassing not just the immediate context of the interview, but all that has transpired previously in their relationship with osteopathy and might in the future. The initial interview opening statement aimed to address questions, quell concerns and assure the participants that their thoughts, practices and descriptions were key data for the project. It was

important to reiterate that these were semi-structured interviews, with the video segments as prompts, to encourage the practitioners to talk about their osteopathic practice and that perspectives would be coalesced to provide general descriptions and broad meaning.

The interviews were recorded on an Olympus digital voice recorder as WMA files, which at the conclusion of the interview, were downloaded and converted to MP3 files with free Shedworx (https://www.shedworx.com/musicconverter) 'music converter' software. The interviews were saved to an encrypted iCloud storage service for transcription. While the interview is taking place, the interviewer is listening to the responses of the interviewee and looking for points to clarify, follow up, respond to, and making sure that all areas are covered. It was therefore my preference to personally transcribe the interviews, as it refreshes the experience of the original interview, providing an in-depth immersive word-by-word experience of the interview. This laborious, but vitally important task is open to exploration for the most time effective approach. Advice abounded: paying for a professional transcription service, using voice recognition software and other software packages. To improve my typing skills and speed up the transcription process I used online typing training (https://www.typingclub.com/), from PHD#3 onward interviews were transcribed using 'F5 transcription software' (https://www.audiotranskription.de/english), a transcription foot pedal was added from PHD#6. When completed all the transcripts were saved into Microsoft Word (for MAC) to set out for analysis. To support transparency, the transcripts as Microsoft Word documents were emailed to the participants for member checking and feedback. All but PHD#6 & 7 responded to the email. These were followed

up, with no issues reported. Overall, the feedback amounted to acknowledging the emailed transcript as representing the interview, some grammar corrections and word clarifications.

## 5.7 Data & Data Management

The transcripts form the primary data set for this research, with all the data relevant to this research identified in Table 5.1 below: *'perspectives are not "subjective" for Mead. They are "objective" in the sense that they provide frames of reference and shared patterns of behavior for members of communities'* (Aboulafia, 2016a).

| Description of data | Source for data | Found in thesis |
|---|---|---|
| The context of the participants including clinic workplace set out. | Hand written field notes in workbook<br>Recorded interview responses to specific questions | Clinician group Chapter 6.2 & 6.3<br>Patient group Chapter 6.4. |
| Osteopath participants' thoughts, descriptions and acts of practice.<br>These data provide the basis for the development of the themes of practice | Video and subsequent interview recordings.<br>Related handwritten notes from 'pass zero' analysis process. Transcriptions and related notes. | Resulting themes Chapter 6.5 |
| Reflections of the researcher on the research process | Memos and handwritten notes in workbooks and electronic literature review notes, relating to thoughts, ideas and variations. | Throughout the thesis |

*Table 5.1 The data for this research*

The analysis process is described in detail to provide transparency to underpin ethical practice and support the merit and integrity of the research by demonstrating where the data originated and how it was managed. Three areas,

including the transcripts, emerged from the research to comprise the data. These are described in Table 5.1 above with a description of how the data is analysed and interpreted to follow. In preparation for analysis, the 'Microsoft Word' transcript was organised into a three-column landscape format (Figure 5.2). to support a three-stage process of an initial purposeful open coding stage, a second more systematic structured axial coding and a final selective coding process (Fram, 2013; Kolb, 2012).

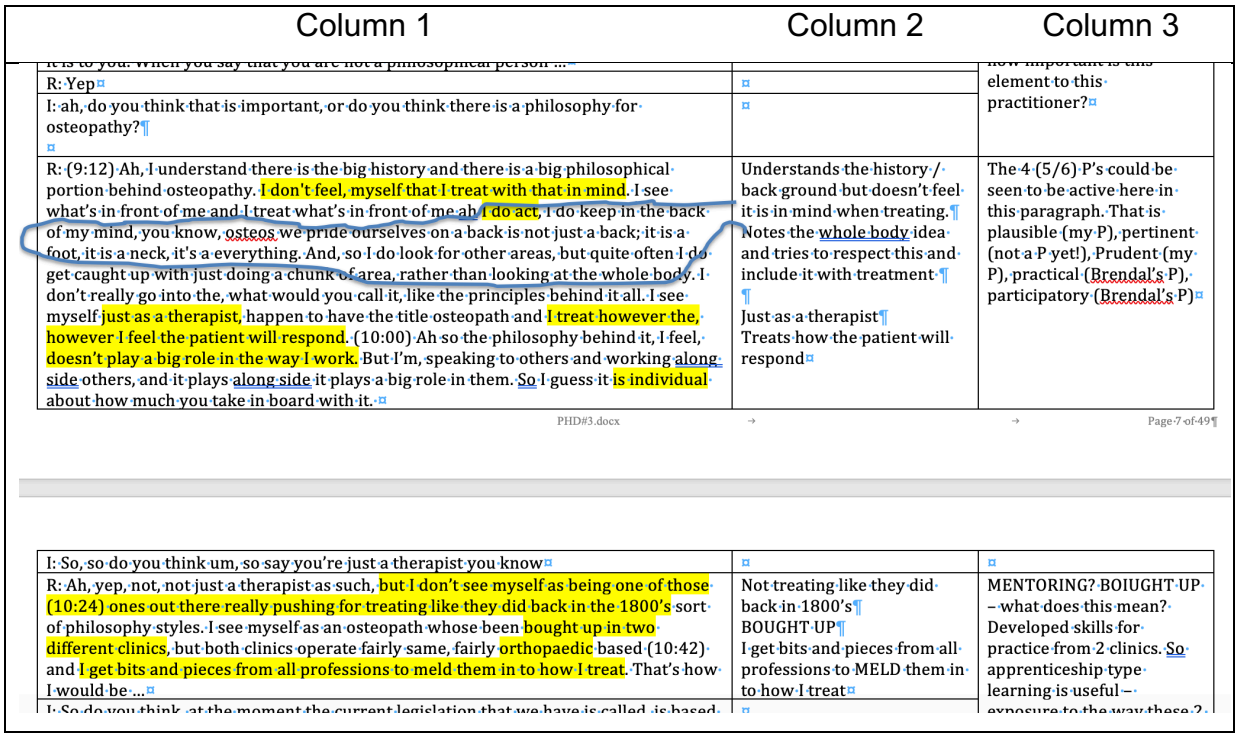
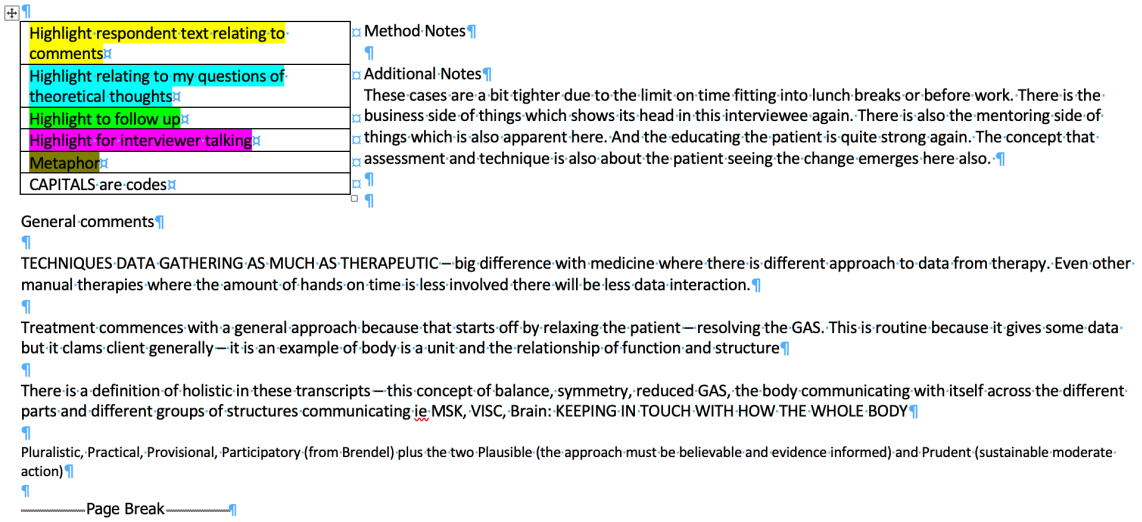



*Figure 5.2 Transcript set up and sample with coding*

An alternate approach using qualitative data analysis software was trialled with PHD#3. nVivo software was selected as it was applicable to Apple Mac computers and consistently rated well and was available through the VU library. The nVivo software is powerful and does provide the potential for managing large volumes of data of all types and the visual enhancement demonstrating links and codes was interesting. However, the process was time consuming and did not appear to provide significant additional value for the effort, so it was discontinued.

In the process for this research the interview transcript was copied into the left column on the page (column 1) and set out in separate rows for each turn of conversation. The recording timings were included and larger responses were further divided into additional rows. Names of the interviewer and patient were removed (anonymised) and each line was prefaced with an 'R' for respondent or 'I' for interviewer to be sure of who was speaking.



| |
|---|
| Highlight respondent text relating to comments |
| Highlight relating to my questions of theoretical thoughts |
| Highlight to follow up |
| Highlight for interviewer talking |
| Metaphor |
| CAPITALS are codes |

Method Notes

Additional Notes

These cases are a bit tighter due to the limit on time fitting into lunch breaks or before work. There is the business side of things which shows its head in this interviewee again. There is also the mentoring side of things which is also apparent here. And the educating the patient is quite strong again. The concept that assessment and technique is also about the patient seeing the change emerges here also.

General comments

TECHNIQUES DATA GATHERING AS MUCH AS THERAPEUTIC – big difference with medicine where there is different approach to data from therapy. Even other manual therapies where the amount of hands on time is less involved there will be less data interaction.

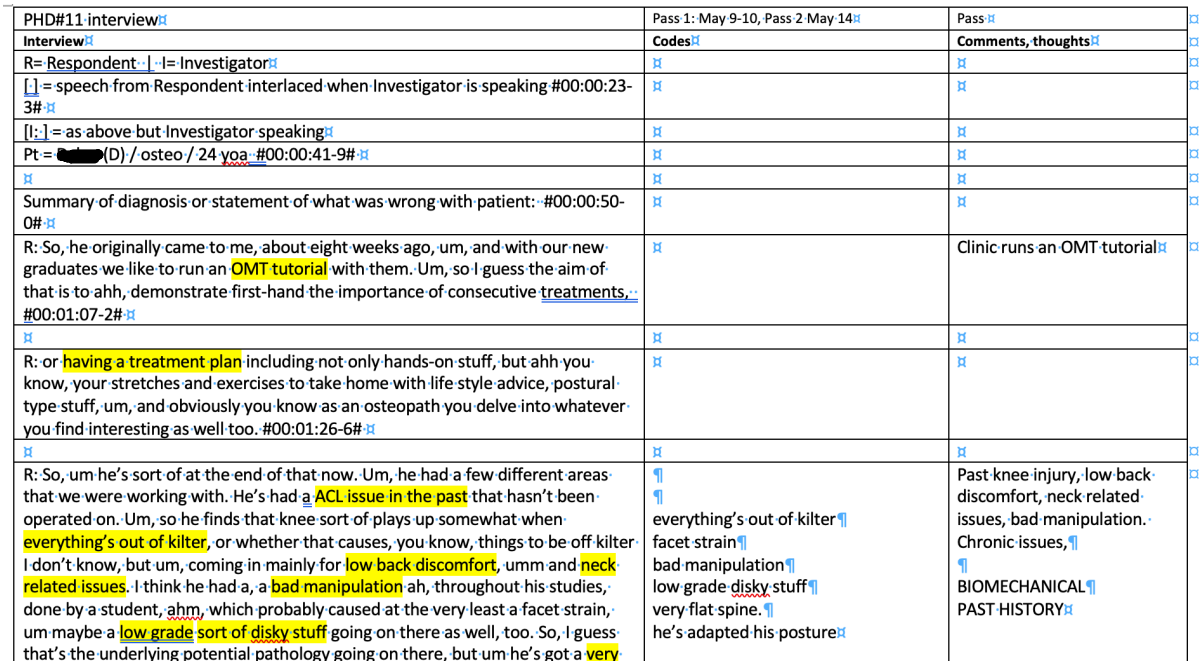
Treatment commences with a general approach because that starts off by relaxing the patient – resolving the GAS. This is routine because it gives some data but it clams client generally – it is an example of body is a unit and the relationship of function and structure

There is a definition of holistic in these transcripts – this concept of balance, symmetry, reduced GAS, the body communicating with itself across the different parts and different groups of structures communicating ie MSK, VISC, Brain: KEEPING IN TOUCH WITH HOW THE WHOLE BODY

Pluralistic, Practical, Provisional, Participatory (from Brendel) plus the two Plausible (the approach must be believable and evidence informed) and Prudent (sustainable moderate action)

Page Break

*Figure 5.3 Transcript file page set out*



| PHD#11 interview | Pass 1: May 9-10, Pass 2 May 14 | Pass |
|---|---|---|
| **Interview** | **Codes** | **Comments, thoughts** |
| R= Respondent . \| . I= Investigator | | |
| [.] = speech from Respondent interlaced when Investigator is speaking #00:00:23-3# | | |
| [I: .] = as above but Investigator speaking | | |
| Pt = [redacted](D) / osteo / 24 yoa #00:00:41-9# | | |
| | | |
| Summary of diagnosis or statement of what was wrong with patient: #00:00:50-0# | | |
| R: So, he originally came to me, about eight weeks ago, um, and with our new graduates we like to run an OMT tutorial with them. Um, so I guess the aim of that is to ahh, demonstrate first-hand the importance of consecutive treatments, #00:01:07-2# | | Clinic runs an OMT tutorial |
| | | |
| R: or having a treatment plan including not only hands-on stuff, but ahh you know, your stretches and exercises to take home with life style advice, postural type stuff, um, and obviously you know as an osteopath you delve into whatever you find interesting as well too. #00:01:26-6# | | |
| | | |
| R: So, um he's sort of at the end of that now. Um, he had a few different areas that we were working with. He's had a ACL issue in the past that hasn't been operated on. Um, so he finds that knee sort of plays up somewhat when everything's out of kilter, or whether that causes, you know, things to be off kilter I don't know, but um, coming in mainly for low back discomfort, umm and neck related issues. I think he had a, a bad manipulation ah, throughout his studies, done by a student, ahm, which probably caused at the very least a facet strain, um maybe a low grade sort of disky stuff going on there as well, too. So, I guess that's the underlying potential pathology going on there, but um he's got a very | everything's out of kilter<br>facet strain<br>bad manipulation<br>low grade disky stuff<br>very flat spine.<br>he's adapted his posture | Past knee injury, low back discomfort, neck related issues, bad manipulation. Chronic issues,<br>BIOMECHANICAL<br>PAST HISTORY |

*Figure 5.4 Set up of transcript*

With the top of the transcript file having a place for memos and comments, see Figure 5.3 above (also appendix 10). The transcript was headed with a key, details of the interview, relevant notes and were divided up to identify details about the patient diagnosis and details about the osteopaths training, see Figure 5.4 above. Using this structured approach in implementing transcription and the analysis provides integrity, and describing it provides transparency and it goes hand-in-glove with an organised approach to data management and storage:

- Electronic documents and resources including video, audio, transcripts, analysis and reports stored in electronic folders on a secured hard-drive accessible to the researcher.
- Paper documents including the signed consent forms are stored in a filing cabinet.

An organised reflexive process was also applied to the data. Triangulation is noted as a strategy to support integrity and merit of a project (Heale & Forbes, 2013; Reeves et al., 2008). This term from navigation refers to the meeting point of different bearings to confirm a location and is used as a metaphor to represent a strategy in research to minimise bias from a single methodology (Heale & Forbes, 2013). The strategies include using methodological, data, investigator and theory approaches to triangulation (Reeves et al., 2008). For completeness, Heale and Forbes (2013) add another form not used in this research, using mixed methods to respond to a research question and then determine if the results converge or diverge. In this research an example of structured self-reflection and a compare contrast approach to the data in a sense a triangulation was utilised.

- Interviews relied on practitioner memory and were supported by a video prompt of the treatment
- The comparison of emerging codes across interviews. For example, time emerged early on as a potential code across interviews and it could be specifically asked about in subsequent interviews.
- The coding process is recorded so that the text that contributed to a code and hence a sub-theme and theme, can be tracked.
- The numbers of contributors to each theme is reported to demonstrate how repeated it was in the respondent cohort.

In his overview of data analysis Belotto (2018) defines his quality assurance of his data around being reflexive in his practice. Pillow (2003) citing Elizabeth Chiseri-Strater (1996), defines a difference between reflection and reflexivity. Reflection is done alone, whereas *'to be reflexive demands both an other and some self- conscious awareness of the process of self-scrutiny* (Pillow, 2003, p. 177). To support merit and integrity of this project reflection was used extensively, both in an unstructured and structured form through hand-written journals for notes and thoughts about the project, a literature review template was developed and used in the review of books and some journal articles and the referencing software 'EndNote' was used to mark-up and store journal articles for the project. Reflexivity was also utilised in the sense of compare and contrast practices with the expert literature, the supervisors provided with the doctoral process, discussions with 'others' as interested patients, including some who have completed their doctoral thesis, other academics and osteopathic colleagues providing points of reflection and input.

Reporting hiccoughs and variations also provides transparency to the research process. As was to be expected, not everything went smoothly, for example following some early technical issues the interviews were recorded on two devices, consisting of the voice recorder, an iPhone or video 'Go Pro' camera. Scheduling was a significant cause of disruption. Below is a summary of the hiccoughs and minor variations.

1. PHD#2 for the first interview the camera didn't work. The research was reconvened a week later with an alternate client.
2. PHD#4 had to cut short the interview time due to an unscheduled event, so a second continuing interview was rescheduled one week later.
3. I confused the appointment time with PHD#5. The patient attended for regular consultations, so the interview was rescheduled at the next appointment, one month later.
4. PHD#5 had a student observer present in the clinic that day. The observer was not present in the consultation, but sat in for the interview.
5. PHD#6 patient was held up due to road works. The interview was rescheduled to the next day.
6. PHD#8 turned the camera off and forgot to restart it, so a second interview occurred later with a different client.
7. PHD#9 – camera placed on computer picked up hard-drive sound and made use of voice component impossible. Second camera video utilised.
8. PHD#9 – PHD#13 had busy booking schedules. 1 hour was provided for the interview, scheduled between patient appointments. The consult videos of the thirty-minute appointments were completed back-to-back,

using multiple cameras. Two interviews were completed on the same day and final three interviews the following day.

9. PHD#14 had an interruption from reception due to a client needing to speak to the osteopath. PHD#14 use the lunch break to complete the interview.
10. PHD#15 had to leave at short notice after the consultation phase. The interview was held some hours later at the hotel.
11. Some angles of the consult were obscured by operator's back to camera. Other technical deficiencies relating to a camera include what is not videoed directly, such as smell and temperature (Knoblauch & Schnettler, 2012, pp. 342-343)

## 5.8 Analysis and Codes

The analysis of the data is the thinking power of the researcher about the data to make sense of it in context of the research project – the questions and aims. The analysis of the interview transcripts was *'underpinned by an epistemology of constructionism and an interpretive perspective'* (Macfarlane & Cornall, 2019, p. 39). The initial method proposed a 3-stage approach to analysis; however, it was apparent that the process of selecting video sections for the interview was actually the first phase of the analysis. As this realisation occurred after the method was developed it was labelled 'pass zero' making 4-stages. Pass zero was the researchers first view of the treatment and where the selection of representative video portions occurred for the prompts for the semi-structured interviews. Knoblauch and Schnettler (2012) describe sequential analysis as the cornerstone to video analysis from an '*ethnomethodological tradition*'

underpinning what they are calling '*video interaction analysis'.* The analysis of the video in this project was about sourcing acts, involving the '*simplest case'*, that is '*two actors'* (Knoblauch & Schnettler, 2012, p. 335), the patient-practitioner dyad for this project. Acts were analysed with one of the actors from this basic unit – the practitioner, to elucidate what was going on for the dyad. Ideally, analysing each act with all the actors would provide for a fuller evaluation. As this research focused on the acts of treatment, segments were selected on the basis of actions or things done in the process of the treatment. This meant that the video was assessed for the physical actions and behaviours of the practitioner and the patient. Segments ranged from a few seconds to 1-2 minutes and included the start and or finish of a particular act, apparent changes in thinking, moving the client, conversation changes, extended period of quiet or inaction, actions that did not appear clear and areas of the conversation that were unclear. The segments were handwritten in a workbook with timings and supporting notes. Pass zero used an open coding approach to the initial watching of the video followed by a review the selection list to reflect, condense and concentrate the selected segments and edit the associated notes, into fewer representative areas as questions and prompts for the interview. Where time was short for pass zero this condensing could occur in the interview, with some prompts dropped from the questioning to which the interviewee had already responded.

To analyse the transcripts from the semi-structured interviews, I read the transcript line-by-line and through an open coding process (Fram, 2013; Ikiugu & Schultz, 2005, p. 90) interpreted, defined as deconstructing, reducing or boiling down larger sections of text to individual words, a sentence or short statement

that represented the meaning of the text. The relevant text was highlighted with yellow or underlined, denoted in the left column of the page – column 1, see figures 5.2, 5.4. above, 5.5 below and Appendix 3. The open coding is supported by recording memos and ideas in the third column.

| | | |
|---|---|---|
| R: (P3 4:11) Um that, that shaky technique, I guess is a little bit of a joint play, a little bit of a tissue texture, a bit of a fascial indicator. And the regions that I've adapted over the years tend to be the junctional areas of the body. So again, sometimes I start, with Bob I started at the top, work down. Other people I'll start at the feet, you know, and work up, but ahh, always looking for that complete entirety of assessment through the body, um, where again I usually, like, other motion testing looking for asymmetry or any area that is resistant to that, you know, rhythmic wobble ahh, and would instore that into my brain for, you know, something that would, could benefit from, you know, treatment some kind to try to restore, ahh, that even elastic feeling. | JOINT PLAY<br>FASCIAL INDICATOR<br>JUNCTIONAL AREAS<br>The framework is variable<br>MOTION TESTING<br>ASYMMETRY<br>RHYTHMIC WOBBLE / ELASTIC<br>RESTORE | Junctional might be a nice code: means change, is an area of transition, an area of focus biomechanically that generates actions (thinking, technique) |
| I: So I think there, there, there's some interesting points there. You said about transitional areas | | Elastic as a measure of the rhythmic wobble |
| R: Mm hmm (P3 5:08) | | |
| I: You've called it a rhythmic wobble... | | |
| R: Mmm hmm | | |

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| | | |
|---|---|---|
| I: ... and you've indicated elastic as a sort of ... | | |
| R: Yes | | A lot of biomechanical / anatomical speak here:<br>Loss of range<br>Junctional / transitional<br>Horizontal diaphragm<br>Postural curves<br>Change direction<br>engineering<br>directional forces |
| I: ... measurement or. So why transitional areas? | | |
| R: Ahh, again probably biomechanically and experientially over the years I've tended to find that the history of pre, of when people have loss of range of motion in key areas I find it's often in those, you know, junctional and transitional areas (P3 5:37) umm it's also because anatomically there's, there's often, you know a horizontal diaphragm a lot of those areas, ah, which is important to me for the fluid dynamics through the body. And um, in the spinal levels it's where the natural postural curves meet and change direction and there just naturally engineering-wise going to be more likelihood of there, you know, more forces go through that area and a combination of different directional forces, you know, I just want to check for those (P3 6:10) and make sure that they are moving well. | BIOMECHANICALLY<br>EXPERIENCE<br>Loss of range in key areas<br>Horizontal diaphragms<br>Fluid dynamics<br>NATURAL postural curves<br>Moving well | |
| I: I wonder how you describe that to someone who didn't know osteopathy? | | |

*Figure 5.5 Coding sample*

Open coding supports the free development of many potential codes. The second coding pass, axial coding (Ikiugu & Schultz, 2005, p. 90), is to review and consolidate the initial codes. Axial coding is not line-by-line but up and down the transcript assessing codes for repetition and similar meanings. Axial coding looks for connections across the transcript. It condenses similar codes with words that have meaning closer to the key essence to develop meaning within a section relating to a question. If codes were viewed as considerably different or not representative, they were recoded to resolve the differences. This included coalescing reiterations and up or down grading existing codes. The iterative nature of the analytical process is encapsulated in the code-recoding (Ikiugu & Schultz, 2005), and may also be described as constant comparative analysis

(CCA). The results of this process are recorded in the middle column (Figure & 5.5) as one or a few CAPITALISED words. These words may be 'in vivo' (Saldaña, 2013) or direct quotes, such as repetitious words or key terms. Some links and repetitions were noted across the whole transcript and recorded in column 2 or 3. The third pass, recorded in the right-hand column, follows a similar axial process and aims to bring the codes to broader categories that can then be used to code with other interviews (appendix 8). Although the analysis process is described as the three sequential stages, the stages overlap and should be viewed as a spiral and iterative process.

Kolb (2012) citing Glaser & Strauss describes the four stages of CCA*: '"(1) comparing incidents applicable to each category, (2) integrating categories and their properties, (3) delimiting the theory, and (4) writing the theory"'.* This description is in relation to Grounded Theory (GT), however Fram (2013) reviews the use of CCA outside of GT stating that: *'My model shows how the CCA method can be adapted and supported by using a naturalistic inquiry'* (p. 2). Further demonstrating the flexibility of analysis methods within the qualitative paradigm is Constructivist Grounded Theory (CGT), as a variant of GT, which draws on strategies and approaches of the GT of the founders Glaser and Strauss (Matney et al., 2016). CGT *'shifts its epistemological foundations to an interpretive/constructivist paradigm'* (Matney et al., 2016, p. 2).

The smaller units or codes are representative or condensed meaning of the answers to questions. There is a pattern to the transcript structured around the interview questions and these form the overarching context of meaning in smaller

units. The notion is that the codes can be constructed into a representative meaning of the transcript. Codes have meaning represented as 'properties', these properties contain the meaning or value of the code. It is essential that this property as the essence of the code represents the general meaning of the transcript (itself a code or representation of the consultation) and that should the respondent read the codes, they would see their perspective or meaning represented in the coding. This project does not claim to utilise grounded theory. However, the word 'grounded' is used deliberately, in an intermingling of terms and actions that reach across the qualitative research paradigm, to represent the linking of the codes to the text from which they emerge.

| Term | Description | |
|---|---|---|
| | *Single transcript* | *Pooled results* |
| **Code** | Condensation, representation, contraction of interview text. | Transcript themes from each single interview were pooled for analysis |
| **Sub-Theme** | | A code emerging from axial coding of the pooled themes |
| **Theme** | The final summative essence emerging from the coalescence of codes from a single transcript. | The final essence of the pooled themes emerged from the analysis, used to develop the conception of practice |

*Table 5.2 Description of codes*

When the coding was completed for all the interviews, the final summative codes for each transcript were lifted into a separate document, see Appendix 8 & 10. This reflexive process was started after the initial coding was left to percolate. These codes were reviewed and linked back to the original coding and text, to ensure that the links that ground or tie each to the transcript were recognisable and relevant. The final summative codes representing the key outcomes, the essences of each interview transcripts were called themes (Morse, 2008). There were 107 themes in total from the fifteen interviews (appendix 10). These were

then used as codes for a 4th phase – the linking pass. These themes as codes were then axially coded to 32 ‘sub-themes’, which were then re-coded, condensed and categorized into the final representative themes or results of the project (appendix 11).

These four steps represent the core stages of the analysis, they are bracketed by ‘pass zero’ and a final ‘Review’ phase (Table 5.2). Pass Zero represents the first coding phase which selects the parts of the video as prompts for the interview. The final ‘Review’ phase demonstrated in appendix 11 was to ensure that the final themes are traceable and represented in the initial codes and recordings. The linking pass is a central plank to the analytic phase. In this phase the themes representing each transcript are retitled codes and pooled with all the themes and analysed to develop the themes that represent the results of the project. These results will then be used to provide insights relevant to the interview cohort (appendix 9) and form the basis for the discussion and theorizing of this reseach.

| Phase | Description |
|---|---|
| **Pass zero** | Initial analysis to set up the video segments for interview questions. |
| **Pass 1** | Set out the transcript, first codes generated, make anonymous |
| **Pass 2** | Generate additional codes, condense codes, make comments |
| **Pass 3** | Coalesce codes, colour link, assess memo’s and comments. |
| **Linking pass** | Set out final code grouping in colour with condensations of codes to link across transcripts |
| **Review** | Prior to the final analytic phase, a reconsideration of the linkages across codes to ensure links were robust |

*Table 5.3 Summary of analytic phases*

# FINDINGS & RESULTS

# Chapter 6 Results of the study: an overview

## 6.1 Introduction

In this chapter the results from the research are introduced. The first sections address the context of the research, starting with a comment on the professional context using data from the research. Following this are some characteristics of the fifteen participant osteopathic practitioners (Table 6.3) and then the patients that were treated in the consult (Table 6.5). Painting a picture of the respondents to the research by identifying some characteristics was completed to support transparency. Successive research is building an increasingly extensive picture of Australian osteopathy practitioners in practice is being built upon with successive research and includes the workforce data regularly published on the OBA website (AHPRA, 2020d), demographic data collected by the fee-for-membership professional association (the Australian Osteopathic Association, precursor to Osteopathy Australia, (Orrock, 2009a)), research by Burke and colleagues (Burke et al., 2013) that collected further data and extended the Orrock (2009) study. Most recently a liaison in Australia with the professional association, Osteopathy Australia, and ORION (ORION, 2020) has resulted in publications from Adams et al. (2018); Steel et al. (2018).

Following these initial chapter sections (6.2-6.4), the resulting themes from the analysis of the interviews from the current thesis are presented in table 6.1 (chapter 6.5). A definition of each theme is provided below and will be followed with an in-depth discussion in subsequent chapters. The themes as theorized outcomes represent new knowledge claims for osteopathy as a field of practice. They are the direct result of the researcher applying analytic power in the context

of the research aims and questions to the perspectives recorded in the respondents' interviews and integrating these with the literature and the context of the researcher.

| Theme | Summative descriptor |
|---|---|
| Practitionership: The Professional Practitioner Context is Intrinsic to the Consult | **Practitionership** |
| Manual Technique Proficiency and Delivery | **Manual** |
| Communicating: Connecting to the Wonder, the Passion, the Nature of the Whole Person | **Communicating** |
| The Foundation of the Consult: Individualized Interaction with the Patient Develops Comfort, which Leads to Trust | **Individualizing** |
| Clinical Reasoning and Judgment are Critical to Practice: They are Continuous integrated and transformative | **Clinical Reasoning** |
| Verification: Knowing of the Case in the Present | **Verification** |
| The Plan: An Outcome Is Expected, Negotiated and Enacted | **Outcome** |
| Holistic Biomechanics**:** Thinking of the Body as a Unit | **Biomechanics** |

*Table 6.1 Draft knowledge claims as the Resultant Themes*

## 6.2 Osteopathy - the profession

Argument and discussion about the nature of professions in general and osteopathy in particular are discussed in Chapter 2. In this section data from the fifteen osteopaths as representatives of the osteopathic profession are presented. It has been noted earlier that Pragmatism does away with metaphysical issues by focussing on the meaning that emerges from the acts.

Professions describe themselves through workforce and other data, and importantly they describe their knowledge through case reports, conferences and other literature to support their professional status. A focussed definition for a health profession is:

> *'An occupation whose core element is work based upon the mastery of a complex body of knowledge and skills. It is a vocation in which knowledge of some department of science or learning or the practice of an art founded upon it is used in the service of others. Its members are governed by codes of ethics and profess a commitment to competence, integrity and morality, altruism, and the promotion of the public good within their domain. These commitments form the basis of a social contract between a profession and society, which in return grants the profession a monopoly over the use of its knowledge base, the right to considerable autonomy in practice and the privilege of self-regulation. Professions and their members are accountable to those served and to society'* (Cruess et al., 2003, p. 74).

Osteopathy meets the requirements of a health profession defined in the quote above. The body of knowledge and skills that osteopaths apply to practice has been discussed in Chapter 2. Before moving onto the rest of the results, I will refer to the term used in the quote above and the idea that osteopathy is a vocation. Vocation commonly, in the vernacular, refers to an occupation. However, a vocation also refers to a calling to serve, along the lines of the divine call to a religious life. The respondents from PHD#3 onwards were asked about what brought them to osteopathy. There were two key reasons identified, the first was down to a job that represented personal experience and interest, particularly

sporting, for respondents PHD#3, 5, 6, 7, 10, 12, 14 and 15. The second was the notion of a job that helped people as a higher calling emerged overall for respondents PHD#4, 8, 9, 11 and 13. A sample of the responses:

*"All I knew was that I needed to do a profession where I helped people. And I needed to do a profession where I was active and involved"* PHD#4

*"when I was 8 years old and wanted to be a physiotherapist when I went to asthma camp. … Watched a treatment from an osteopath and just went that is exactly what I want to do"* PHD#6

*"It started from me as a teenager, I was still quite sporty. Started getting some knee and lower leg issues … after a few years of going to practitioners, I ended up going to an osteo, they really helped with that recovery. From there I was always interested in rehab, human movement, and how the body works and anatomy in that sense"* PHD#7

*"I always thought when I was younger, I was going to be a doctor, it sounds dumb like I always knew what I wanted to do. I just didn't know what it was called."* PHD#8

*"Whilst I'd never seen an osteopath before, reading up about the philosophy behind it and the holistic way they sort of look at the patient appealed to me much more than physio and … I wanted to be in private practice. … my grandma had that sort of healing nature to her as well to which I think I've adopted. She actually got really sick and watching her go through that inspired are to get into that sort of line of work to help people like her"* PHD#11.

| Respondent | Overall video consult (mins) | Total hands-on time (mins) | % | NOTES: |
|---|---|---|---|---|
| PHD#1 | 50 | 43 | 84 | |
| PHD#2 | 32 | 28 | 91 | |
| PHD#3 | 32 | 28 | 88 | |
| PHD#4 | 40 | 35 | 88 | |
| PHD#5 | 35 | 26 | 74 | |
| PHD#6 | 39 | 36 | 92 | |
| PHD#7 (1) | 40 | 29 | 72.5 | |
| PHD#8 | 36 | 27.5 | 76 | (1) Return client with new condition |
| PHD#9 | 27 | 21 | 78 | (2) Practitioner used massage |
| PHD#10 (2) | 47 | 40 | 85 | therapist |
| PHD#11 | 31 | 27.5 | 87 | (3) Practitioner ended video at 4m |
| PHD#12 (3) | 30 | 27 | 90 | 24s and then had client change. He |
| PHD#13 (4) | 35.5 | 21.5 | 61 | also gave some exercises. |
| PHD#14 | 30.5 | 28 | 92 | (4) Practitioner gave exercise and |
| PHD#15 | 38 | 30.5 | 80 | explained with skeleton model |

*Table 6.2 Time with hand-on contact*

Shulman (1998) summarizes *'the core meaning of a profession is the organized practice of complex knowledge and skills in the service of others'* (Shulman, 1998, p. 516) a task easily met by the osteopaths viewed in this cohort. The fifteen respondents were reviewed for evidence of skilful use of the hands. A broad interpretation of manual and therapeutic includes examinations, therapy procedures and other activities that used the hands or arms to touch or otherwise physically engage the patient's person in the therapeutic relationship. As can be seen from the video times in Table 6.2 above, the participants in this project spent a majority of their time in the consultation engaged in manual activity. This was either in concert with other relevant clinical activities or quietly listening, that is

paying specific focussed attention in evaluating the tissues of the patient's body. It is appropriate to class the respondent osteopaths as meeting the classification of manual therapists given the significant portion of a consultation where there was application of manual force in a skilful manner, which included specifically defined techniques as well as placing the hands in communication and to demonstrated a caring connection with the client.

## 6.3 The Osteopath Participants

An osteopath in Australia is a person who undertakes all the things that the theme *Practitionership* entails. This includes, but is not limited to, trained, regulated and practicing in a manner that defines them as an osteopath within their jurisdiction, meeting professional association and regulatory requirements, such as ethical values, current insurance and professional development. The results of the current research are distilled from fifteen interviews, nine from osteopaths who worked in three multi-practitioner clinics, and of the six osteopaths left, four worked in multi-practitioner clinics and two were sole practitioners. PHD#7, 9, 11-13 were employed, the other practitioners were subcontractors, sole traders or incorporated.

Each interview had its own characteristics, with some interviewees having a natural disposition to speak, whilst others required strategies of engagement including silence by the interviewer and lead in questions that encouraged them to speak. Most practitioners mentioned the research project with their clients during the consult or conducted acts to manage impacts of study, for example PHD#5 and PHD#12 moved their patients to other rooms to change into a patient

gown to avoid being videoed whilst changing. Other examples include comments from PHD#8 and PHD#13 asking about their practice and suggesting this process could be used to review their practice, a notion supported by Wellbery and McAteer (2015):

> *'In weighing multiple perspectives, observation applied to practice helps learners understand the nuances of the role of witness, activating reflection consonant with the viewer's professional identity'* (Wellbery & McAteer, 2015, p. 1)

| Respondent | Gender[1] | Institute[2] | Qual[3] | Grad (years)[4] | Further Quals[5] | State[6] | Building[7] | Practitioners[8] | Reception[9] |
|---|---|---|---|---|---|---|---|---|---|
| **PHD#1** | M | RM | B | 20+ | Y | V / S | H | S | N |
| **PHD#2** | F | RM | 2B | 16-20 | N* | V / S | O | Mu | N |
| **PHD#3** | M | VU | BM | 1-5 | N | V / S | O | Mu | Y |
| **PHD#4** | F | BS | D | 20+ | Y | V / R | HO | S | Y |
| **PHD#5** | F | VU | BM | 16-20 | Y | V / S | O | Mu | N |
| **PHD#6** | F | VU | BM | 16-20 | Y | T / C | O | Mu | N |
| **PHD#7** | M | RM | 2B | 1-5 | N | T / C | O | Mu | N |
| **PHD#8** | F | RM | BM | 11-15 | Y | V / S | O | Mu | N |
| **PHD#9** | M | RM | BM | 11-15 | N | A / C | O | Mu | Y |
| **PHD#10** | M | RM | 2B | 16-20 | Y | A / C | O | Mu | Y |
| **PHD#11** | M | RM | BM | 1-5 | Y | A / C | O | Mu | Y |
| **PHD#12** | M | RM | 2B | 1-5 | N | A / C | O | Mu | Y |
| **PHD#13** | M | VU | BM | 1-5 | N | A / C | O | Mu | Y |
| **PHD#14** | F | RM | 2B | 20+ | Y | A / S | O | Mu | Y |
| **PHD#15** | F | VU | BM | 11-15 | Y | A / S | O | Mu | Y |
| **Legend** | B=Bachelor degree; BM= Bachelor / Master combined degree; BS=BSO; D = Diploma; F=Female; H = Home practice; M = Male; Mu = multi practitioner; O = Office building; S = Suburban; R = Rural; RM=RMIT; S = single practitioner; T = Tasmania V = Victoria; VU =Victoria University; | | | | | | | | |

*Table 6.3 Characteristics of the Respondents*

### *6.3.1 Gender* [1]

Gender was distributed slightly greater toward male (M) with eight respondents compared to seven females (F). This is not representative of the national gender breakdown for the osteopathic profession with female 54% and male 46% (OBA registration data table – 31 March 2020).

### *6.3.2 Institute* [2]

Institute refers to the educational establishment that the respondent trained at for their osteopathic qualification. The coding is:

- RMIT (RM) = RMIT University (Melbourne);
- VU = Victoria University (Melbourne);
- BSO (BS) = British School of Osteopathy (London, renamed University College of Osteopathy).

The majority of respondents graduated from RMIT or VU. Burke et al. (2013) provide figures of 97.2% or 85% osteopaths trained in Australia. Only one osteopath from the respondents was trained overseas, reflecting the national profile. The researcher was also trained overseas. Most osteopaths practising in Australia trained at RMIT or VU. There are an unknown number from other establishments, primarily private colleges from Australia or overseas now not operating. One university, the University of Western Sydney, graduated osteopaths in Australia for about a decade. A third university, Southern Cross University, Lismore NSW (SCU), has been training osteopaths for about ten years. Graduates tend to stay in the region of graduation, which for SCU is northern NSW and south eastern Queensland.

### *6.3.3 Qual [3]*

Qual as a contraction of qualification refers to the qualification attained by the osteopath for registration. The abbreviations are: D = Diploma B; = Single Bachelor degree; 2B = double bachelor degree or BM = Bachelor and Masters degrees. These awards relate to historical funding and educational rationales. All were or are currently accepted for registration as an osteopath in Australia.

### *6.3.4 Grad (years) [4]*

'Grad' is a contraction of graduation. It refers to the length of time in years since a respondent graduated. The time bands (Table 6.3 above) replicate those from Burke et al. (2013). Data was collected for this research in 5-year bands up to 35 years. Table 6.4 below compares the years graduated with the literature. The results of 21+ years in practice were placed in a single group to reduce the potential for cross-matching results to identify respondents. The figures in the bottom ($4^{th}$) row of Table 6.4 are referenced in Burke et al. (2013), with the first number (%) reported from the data collected by Burke et al. (2013) in their research and the second number (%) reported by them from the literature. The 'years-in-practice' figures of the cohort in this project do not correspond to figures from Burke et al. (2013). It is noteworthy that the number of respondents in this project with more than 10 years practice – 67% is close to double the rate from Burke et al. (2013) of 29.1 and 36.9%. This may reflect the confidence experienced practitioners have to expose their practice to observation. Ericsson (2008), in his overview on deliberate practice, comments on the link between years of practice and development of expertise. He indicates that around 10

years of practice is requisite to achieve an international level of performance. This amount of time would bring a level of self-confidence in practice, which may explain the high level of 11+ years respondents to this research.

| Years in practice | 1-5 | 6-10 | 11-15 | 16-20 | 21+ | Totals |
|---|---|---|---|---|---|---|
| Research cohort | 5 | 0 | 3 | 4 | 3 | 15 |
| | 33% | 0% | 20% | 27% | 20% | 100% |
| Figures from data in Burke et al. (2013) | 33.3% | 30.6% | 25% | 2.8/% | 8.3% | 100% |
| Literature cited in Burke et al. (2013) | 44.1% | 19% | 13.8% | 10.7% | 12.4% | 100% |

*Table 6.4 Comparison of years in practice*

### *6.3.5 Further quals* [5]

Further qualifications in Table 6.3, relate to the respondents participating in further university-based education. Nine respondents had achieved a further university award. Somewhat expectedly four of the five newest graduates (1-5 years) had not achieved a further university qualification. Of all the rest, who have been in practice for more than 10 years, eight had achieved a further university qualification and one was in study (N*). All participants undertook continued professional development noting they met the OBA requirements for registration.

### *6.3.6 State* [6]

The first letter in Table 6.3 above, refers to the state or territory in which the participant practices: V = Victoria; T = Tasmania; A = Australian Capital Territory. From a geographical perspective these Australian osteopaths worked in two states and a territory. This geographical representation of the participant osteopaths is not representative of the Australian national total of 2546 osteopaths (Osteopathy Board of Australia, 2020a)

- 46.7% total (7) interviews from ACT which has 42 osteopaths (>2% national total).
- 40% total (6) interviews from Victoria, which has 1489 (58% national total).
- 13.3% total (2) interviews from Tasmania, which has 48 osteopaths (>2% national total).

The second letter refers to whether the clinic is C located in a central business district, S = suburban location or R = rural location. These participants were consistent with most (80%) osteopaths practicing in an urban location (Blaich et al., 2018).

### *6.3.7 Building [7]*

'Building' in Table 6.3, refers to the clinic physical structure as H = home, O = office type building and can be multistorey. HO was a separate building on the home property. There was no literature found relating to the situation of the osteopathic clinic building. All premises, although in different situations ranging from a loungeroom and bedroom in a home to a multistorey office block shared similar characteristics. There was some form of car parking, a waiting area, a desk to conduct bookings and payments. The treatment areas were private, lighted externally, ranged from a smaller bedroom size to a larger office room, contained a specific bench for examination and treatments. PHD#3 comments on the requirement for physical space to be adequate for the physical nature of the patient practitioner interaction.

> *"I call this room the shoebox because there's no space. The space is vital to me … For me, other than treatment table, a chair and some linen, the most important thing in a treatment space, is space! … I find, it helpful to have space when you're assessing a patient. In a room like this, there is*

*no room to get them to do things, they can't swing without knocking something off the bench!"* PHD#3.

### *6.3.8 Practitioners* [8]

Practitioners, in Table 6.3 refers to the clinic as being either S = single (2/13%) or Mu = multiple (13/ 87%) practitioner clinic. Consistent with the literature, most osteopaths (over 83%) practice in a multi-practitioner clinic (Adams et al., 2018).

### *6.3.9 Reception* [9]

Reception in Table 6.3, refers to regular paid reception staff with Y = yes (9) and N = no (6). There was no literature found relating to reception staffing or what impact this might have. In the recruiting and responding phase of this project the researcher dealt with either the individual practitioner or the practice manager in relation to organisational matters. Neither approach appeared to impact the process.

## 6.4 The Patient Participants

Moving on from the practitioner participants (respondents) to the patient participants recruited by the practitioner respondents. All the videoed treatment sessions, with the exception of PHD#15, were conducted with a single practitioner and single patient to constitute the patient-practitioner dyad. The patients comprised 14 adults with 11 females and 3 males, and one six-year-old male (PHD#15), with PHD#15 also having a younger sibling and a parent present. For the purposes of transparency, the patient group appears to

approximate a range of patients expected for a clinic. See Table 6.5 below and a description follows.

| Respondent | Gender[1] | Complaint[2] | Type[3] |
|---|---|---|---|
| **PHD#1** | F | Chronic neck, back pain | R |
| **PHD#2** | F | Postural compensation to a serious injury | R |
| **PHD#3** | M | Work related muscular tension | R |
| **PHD#4** | F | Chronic musculoskeletal rib problems | R |
| **PHD#5** | F | Chronic rib and thoracic vertebral dysfunction | R |
| **PHD#6** | F | Plantar fasciitis and chronic postural strain | R |
| **PHD#7** | F | Sacroiliac sprain | R |
| **PHD#8** | F | Sacroiliac sprain | RN |
| **PHD#9** | M | Biomechanical back pain and anxiety | R |
| **PHD#10** | F | Neck and shoulder discomfort | R |
| **PHD#11** | M | Chronic postural based musculoskeletal issues | R |
| **PHD#12** | F | Hip & shoulder neck stiffness | RN |
| **PHD#13** | F | Sprain to neck | RN |
| **PHD#14** | F | Chronic headache | R |
| **PHD#15** | M | Musculoskeletal dysfunction contributing to headache | R |

*Table 6.5 Patient Participant complaints summarised by the osteopath*

Patients as individuals of the abstract social class of patients have a tenuous or intermittent membership to the social-subgroup-of-patients-of-osteopaths, which outlines the class. This tenuous membership makes this group more difficult to describe, perhaps reflecting the very limited literature attempting this task. This task for osteopathy in Australia has been addressed by osteopath Paul Orrock (Orrock, 2009b, 2015). Understanding this group helps provide a context to the profession of osteopathy and supports transparency in this research project. These publications and the data from this project can all contribute to building a

picture of osteopathic practice. Each geographical or legislative region can foster an understanding of its osteopathic practice by illuminating the social groups, which overall can support a global perspective of the practice. Mead describes this group as:

> '*individual members related to one another only more or less indirectly, and which only more or less indirectly function as social units, but which afford or represent unlimited possibilities for the widening and ramifying and enriching of the social relations among all the individual members of the given society as an organized and unified whole'* (Mead, 1934/2015, p. 157).

### *6.4.1 Gender [1]*

Table 6.5 refers to the gender of the patient participants recruited. There were 11 female patients (F) (73%) and 4 male (M) (27%) patients. Burke et al. (2013) report a female patient ratio of 67.6% from their data and 62.4% for the data reported by others. This two-thirds female to one-third male ratio from Burke et al. (2013) was different to the three-quarters female present in this study.

### *6.4.2 Complaint [2]*

The 'complaint' column refers to the type of complaint defined by a summative diagnosis provided by the practitioner and condensed into a few key words by the researcher. Consistent with the literature and discussion in Chapter two, 14/15 clients presented with chronic problems that required long term management or were in the midst of a shorter ongoing treatment plan for an exacerbation. The single exception was PHD#8, where the client was known to the clinic, but attended with a new (acute) condition.

### *6.4.3 Type [3]*

The ‘type’ of patient uses ‘R’ for return client, ‘N’ for new client and ‘RN’ was a client known to the practitioner, but new to the clinic. Most patients were not new to the clinic, they were return patients known to the practitioner or clinic, which comprise the largest group in a clinic. The only partial exception was PHD#8 who had a return patient with a new complaint. The nature of this project preferences the recruitment of return patients for the treatment video. This is because the method requires that the practitioner and researcher set a time to meet and discuss the videoed treatment. To include new patients in the mix would require asking all new patients when they contact the clinic and selecting a day to be at the clinic and ask all the patients who attend if they wish to be a part of the project, an approach used by Lee-Treweek (2002) to interview patients in the UK about their experience. As this project was focussed on the practitioner this method was not used, instead the practitioner recruited a patient whom they felt was appropriate. Return patients know and trust the practitioner and the patients are less likely to present in a way that is complex or unexpected. This is reflected in the high level of return patients and the chronic or ongoing nature of the presenting complaints for this research.

## 6.5 Resultant themes

The draft knowledge themes that emerged from the analysis, are listed below with a single sentence summary. A more detailed definition follows.

| **Theme and** Summary Definition |
| --- |
| **Practitionership: The professional practitioner context is Intrinsic to the consult** |
| That the professional practitioner context is intrinsic to all that the practitioner does to facilitate their profession and professional role. |
| **Holistic Biomechanics: Thinking of the body as a unit** |
| That biomechanics underpins the thesis of osteopathy, linking reported sensations and clinical findings to the function of the patient's life |
| **Communicating: Connecting to the wonder, the passion, the nature of the whole person** |
| That communication between the practitioner and the patient is of a deep and broad nature, underpinning a multilevel connection to the whole person. |
| **The Foundation of the Consult: Individualized interaction with the patient develops comfort, which leads to trust** |
| That utilising flexible and adaptive acts allows the clinician to make the patient the focus of the consult developing trust, which is the foundation of the consult. |
| **Clinical Reasoning and Judgment are Critical to Practice: They are continuous, integrated and transformative** |
| That clinical decision-making occurs as soon as the clinician and client interact, being intrinsic to clinical practice by providing the basis to all actions undertaken in the consult. |

| Verification: Knowing of the case in the present |
| --- |
| That the act of verifying is used to establish and monitor truths that comprise a case derived from clinical thinking. |
| **The Plan: An outcome is expected, negotiated and enacted** |
| That the negotiated outcome enacted as a treatment plan involves a mix of actions, that derive from meaning that emerges from actions of the patient-practitioner dyad. |
| **Manual Technique: Proficiency and delivery** |
| That the proficiency and delivery of manual techniques chosen to execute the plan are acts that are utilised to best meet the needs of the patient-practitioner dyad. |

*Table 6.6 Summary of the draft knowledge themes*

To develop the draft knowledge themes, the resulting analysis from each interview transcript – the themes, were pooled as representative of the practice of osteopathy. These pooled themes were then coded with an iterative coding process of open coding that grouped codes with similar meaning. The terms used are outlined in Table 6.7 below (reproduced from Chapter 5.8). When meaning was unclear the original transcript was re-examined. An initial grouping of about twenty sub-themes was developed and axial coding was utilised to firm up the sub-themes and condense them with an aim for identifying 6-12 themes without forcing the process. Sub-themes that appeared not to fit were re-examined through their construction back to the original transcript to assess their meaning, their properties, to help place them. Through the axial process sub-themes were reviewed, condensed, collapsed, re-expanded to develop and test meaning, to

establish the draft knowledge themes presented in Table 6.6. This process was repeated multiple times until satisfaction with the outcome was achieved. Once established each theme was reviewed tracing each aspect to the transcript and adjustments made to ensure that the spirit or intended meaning was represented in the properties of each theme. An example of the development of the draft knowledge theme 'Biomechanics' is described below in Table 6.8

| Term | Description | |
|---|---|---|
| | *Single transcript* | *Pooled results* |
| **Code** | Condensation, representation, contraction of interview text. | Transcript themes from each single interview were pooled for analysis |
| **Sub-Theme** | | A code emerging from axial coding of the pooled themes |
| **Theme** | The final summative essence emerging from the coalescence of codes from a single transcript. | The final essence of the pooled themes emerged from the analysis, used to develop the conception of practice |

*Table 6.7 Description of codes*

In Table 6.8 below the left-hand column titled 'Related codes (codes from each participant)', contains the codes that emerged from each respondent related to this theme. A vertical line ( | ) separates each code and the **|^|** (a bold vertical line either side of a bold caret symbol) separates each participant. The second column titled: 'Themes from each participant as codes', contains the resultant theme from each participant with the relevant respondent interview number in brackets for example 'Mechanical (1)' refers to the coded outcome from PHD#1. In the case of Judgment (6a), the added letter refers to this coded outcome from PHD#6 being split across two final themes. These resultant themes were then themselves coded, forming the basis for the third column titled: 'Sub-theme' and it is these sub-themes that were then analysed using the processes described above to form the basis of the 'Final theme' (column 4 or the right-hand column) which are summarised above and discussed in detail below.

| Related codes (codes from each participant) | Themes from each participant as codes | Sub-theme | Final theme |
|---|---|---|---|
| Mechanical \| Biomechanics \| Location **\|^\|** Anatomy \| curves \| posture **\|^\|** MUSCULOSKELETAL MODEL \| BIOMECHANICAL THINKING \| BIOMECHANICAL / ANATOMICAL (10) **\|^\|** BIOMECHANICAL THINKING AND LANGUAGE | Mechanical (1) Biomechanical (2) Musculoskeletal Model (10) Clinical Thinking Underpins Judgment (6a) | BIOMECHANICAL THINKING (4 sub codes) | HOLISTIC BIOMEHANICS |
| PHYSICAL METAPHOR: PIVOT POINT & TENSION (BIOMECHANICAL) \| GIVING SPACE TO THE PATIENT PRAC INTERACTION \| JUST FELT THE TENSION BETWEEN THE TWO **\|^\|** CENTRAL PEAK / WHAT THE PRIMARY IS \| KEY TO HOW SHE IS FEELING OVERALL \| THEY'RE WORKING WELL TOGETHER \| THINGS MECHANICAL \| FELT MORE MECHANICAL | Tension Is the Sensation & I'm Always Doing Mechanical Things (14) Biomechanics Impact the Whole Person (5) | TENSION THE SENSATION IS BIOMECHANICS OF THE WHOLE PERSON (2 sub codes) | |
| WHAT'S IMPACTING HER LIFE AT THE MOMENT \| FUNCTION IN LIFE \| What's GOING on? \| SOCIAL – PURPOSE \| HOW WELL SHE'S COPING \| Put the pieces together in her body **\|^\|** SOCIAL CONTEXTUAL PRACTICE /SOCIAL ACT / SOCIAL SHARING \| correlation with the rest of the body **\|^\|** holism, Whole person, interrelated \| General Sweep \| Judgment **\|^\|** HOLISM / HOLISTIC x2 WHOLE MECHANISM \| QUALITY OF THE WHOLE PERSON CLINICAL INTUITION AND EXPERIENCE \| MY MIND OUTSIDE **\|^\|** PROFESSIONAL GAZE \| PROFESSIONAL LOOKING \| READING OF THE WHOLE SITUATION \| ADAPTING TECHNICAL \| NORMAL FAMILIAR ACTS | Function in Life (4) Holistic (7) General Sweep (1) Quality of The Whole Person (10) Reading of the whole situation (8) | FUNCTION IN LIFE (holistic thinking) Structure & function are interrelated!! (5 sub codes) | |

*Table 6.8 Consolidation of data into resultant themes*

Thus far the process of arriving at these themes has been described in detail. These themes represent new knowledge about the field of osteopathy, they are what I made of the data. The next part of the thesis will take these knowledge themes and theorize them. The rest of this chapter, with the emergence of these summative themes, will propose draft definitions for each knowledge theme and to make initial connections with key principles from the literature synthesis. From these definitions, further understandings and perceptions of the field can be drawn and these are presented in the following chapter. Chapter 7 will discuss a theorizing of the knowledge themes to describe a conception of osteopathic practice.

## *Theme 1. Practitionership: The Professional Practitioner Context is Intrinsic to the Consult*

**That the professional practitioner context is intrinsic to all that the practitioner does to facilitate their profession and professional role**.

This knowledge theme emerged from twelve participants contributing 18 codes constructed into five sub-themes. Summarised as *Practitionership*, it represents all the elements that are necessary and appropriate to facilitate professional practice. *Practitionership* is not readily found in a dictionary, located only in 'Wiktionary', the Wikipedia dictionary, where it was defined as: '*The role or status of* practitioner'. Practitioner is defined in the Meriam-Webster dictionary as 'one who practices especially: one who practices a profession'. This definition indicates that a practitioner has both a job to do and some sort of standing in society. This compound word, *Practitionership,* refers directly to professionalism and the suffix –*ship* clarifies what a practitioner is, denoting: i) a *quality or condition*; ii) *status, office or honour;* iii) *a skill in a certain capacity* and iv) *the collective individuals of a group*.

First, -ship identifies the quality or rank of practitioner that differs from a usual social interaction. A practitioner acts in a manner that demonstrates rank and quality relevant to the position of a trusted person in society, one that hears the personal stories of people and uses them for the benefit of the person. Secondly, -ship indicates the status or position of a practitioner, an osteopath, one that is expected to act in a role that incorporates the status of a primary health care practitioner, 'doctor' and professional. The title 'osteopath' is regulated by the government and requires certain practices that are relevant to such status. This

includes doing things that may not seem like friendship, in contrast to the first element of this definition, where friends and neighbours may listen to each other's woes. Thirdly, a practitioner is expected to demonstrate the capacity of certain skills. For an osteopath, relevant skills pertain to medicine, manipulation, certain business and social skills that all contribute to an overall ability to meet membership of the profession. The fourth and final defining element of -ship relates to a collective or relationship. A person using the title osteopath is claiming to belong to a group called 'osteopaths'. This belonging is to all that the national profession is, has been and will be. This belonging includes a more nebulous membership to an international collective that share a history and who recognise and welcome each other individually, through fee-based member organisations, participation in courses and by other means.

*Practitionership* empowers the professional practitioner to address the abstract social group. As a professional practitioner, principles of practice can be conceptualised as forms of knowledge that enable humans to not only interact in their daily lives but embrace broader forms of understanding regarding their existence as humans. Taking a general attitude derived from the generalized other and recognising it in an individual and the self is the role of the professional and *Practitionership* enables this conduct.

> *'The very universality and impersonality of thought and reasons is from the behavioristic standpoint the result of the given individual taking the attitudes of others toward himself, and of his finally crystallizing all these particular attitudes into a single attitude or standpoint which may be called that of the "generalized other"' (Mead, 1934/2015, p. 90).*

### *Theme 2. Holistic Biomechanics: Thinking of the Body as a Unit*

**That the palpatory findings of the clinician link to the sensations reported by patients in their body and to the function of the patient's life**

This knowledge theme summarised as: *Holistic Biomechanics,* was developed from nine respondents contributing eleven codes and three sub-themes (Table 6.8 above). It derives from the science of biomechanics: the study of mechanical laws on biological systems. All structures in the physical body are subject to relevant natural laws, such as gravity, in their interaction with the environment. This interaction has influenced the thinking of osteopathy from the beginning with Still penning '*The philosophy and mechanical principles of osteopathy'* in 1902. This influence continues today with biomechanics present in the tenets of osteopathy: '*Structure and function are interrelated at all levels' (Educational Council on Osteopathic Principles, 2017)* and in the curricula of osteopathic programs in anatomy and biomechanics subjects.

Biomechanics provides a lens for the professional technical language of osteopaths. This language utilises anatomical terminology with mechanical terms to describe sensations: tightness; to express how things 'go wrong': sprains, strains, it was the "*biomechanics with the pelvis"* (PHD#4); to develop shared understandings in the dyad with metaphors such as "*off kilter*" (PHD#11), "*takes the load off*" (PHD#6) or "*postural compensation*" (PHD#2) to describe biomechanical forces linking sensations from one part of the body to another. The language also describes manual techniques by the forces applied, including

"*stretch myofascial"* (PHD#3*), "indirect technique*" (PHD#4) and High Velocity Low Amplitude (HVLA) manipulation or '*spinal manipulation'* (Evans, 2010).

*Holistic biomechanics* undergirds the thesis of osteopathy by taking the sensations and functions, the physical phenomena reported by patients in their life and linking these to the clinical findings and palpated sensations of the clinician. This linkage provides explanatory power to the clinical reasoning of osteopaths, underpinning decisions that become the treatment plan. As a consequence of this thinking, the osteopath, as a part of the dyad, applies a biomechanical intervention as manipulative therapy techniques that apply physical stress to the patient's body with the intent: *"I want you working best as you can"* (PHD#9), or *"hold the body into a better position of balance"* (PHD#5), to reinstitute or normalise the path of physical forces through the body resolving or normalising the patient's sensation, or as expressed in the sub-theme: *function in life*. The quote below is instructive:

> *"That's everything in the past impacts on the present. The whole life, impacts on the present. So, even in a simple issue, … from a mechanical angle, things going on in the rest of the system or even the organ systems will have an impact on what is going on musculoskeletally and so you want to get a sense to that, cos you are looking at those relationships and try and understand how they come to be in the present. Then you've got, also the psychological, the spiritual, the energetic elements, as well. So that's why I asked a little bit about her energy levels, to see what, how they will link in with her psychological and her physical symptoms and see how interrelated they all are, yeah"* (PHD#1).

## *Theme 3. Communicating: Connecting to the Wonder, the Passion, the Nature of the Whole Person*

Communication between the practitioner and the patient is of a deep and broad nature, underpinning a multilevel connection to the whole person.

'*Of all affairs, communication is the most wonderful'* (Dewey, 1938a, p. 166), resonates with the theme *Communicating: Connecting to the wonder, the passion, the nature of the whole person.* This knowledge theme was developed from ten contributors, twelve codes and five sub-themes. *'The social process is presupposed in order to render thought and communication possible'* (Mead, 1934/2015, p. 260). In a parallel with the social process, *Communication* supports a holistic view for the professional interaction. *Communicating* is a life skill that is specifically honed in professional training for the health field. It '*is a natural bridge that joins the gap between existence and essence'* (Dewey, 1938a, p. 167), making a *"greater connection"* (PHD#4) with an *"innate intelligence"* (PHD#15) that enables '*us to live in a world of things that have meaning*' (Dewey, 1938a, p. 204).

The vocal gesture is the key communication tool for social interactions, '*language, the tool of tools'* (Dewey, 1938a, p. 168) and it is for professional interactions. The full suite of '*signalling acts … that form the basic material of language*' (Dewey, 1938a, p. 177, emphasis in original) utilises many forms for example, *"hands on is communication"* (PHD#8). The act of connecting is with the whole person, *"the wonderland"* (PHD#4), where the individualised elements – the physical, mental and spiritual, are united. The connection is multidirectional multimodal communication developed through a *"rapport"* (PHD#8) in a

multifaceted longitudinal relationship that embraces the specialised therapeutic contract to support an approach to therapy, the professional and the client's other meaningful relations. The sharing of experience and meaning is more than verbal communication it is a relationship, a *"journey"* (PHD#10) supported by the nature of the consultation. It is a conscious inter-relationship supported by time and a direct physical connection where there is an *"ongoing dialogue with the tissues"* (PHD#15) and the patients *"tissues tell"* (PHD#4) the practitioner, in which "*empathy building"* (PHD#14) occurs through *"compassionate hands"* (PHD#15).

> '*The heart of language is … communication; the establishment of cooperation in an activity in which there are partners, and in which the activity of each is modified and regulated by partnership'* (Dewey, 1938a, p. 179).

## *Theme 4. The Foundation of the Consult: Individualized Interaction with the Patient Develops Comfort, which Leads to Trust*

Utilising flexible and adaptive acts allows the clinician to make the patient the focus of the consult. Such acts support individualizing the interaction with the patient, which in turn develops comfort, which leads to trust, the foundation of the consult.

Comfort represents the sensations that comprise mental and physical comfort in the patient-practitioner dyad. "*Comfort"* (PHD#2, 3, 10, 13), is an in-vivo code encapsulated in the sub-theme: *comfortable: mental and physical / practitioner and patient*. It is important '*because uncertainty forms a focal point for the patient, it should also be a focal point for the practitioner'* (Tyreman, 2015, p. 472). The theme: *Individualizing the Interaction with the Patient Develops Comfort, which Leads to Trust - The Foundation of the Consult,* shortened to *Individualizing,* was developed from ten participants contributing twelve codes and five sub-themes.

Practitioners recognise the need to manage uncertainty. They therefore institute a generalised approach as gestures and acts that individualise the approach to a client, designed to develop comfort as "*rapport and trust"* (PHD#13) in the dyad and minimise uncertainty with the situation. *Individualizing* the interaction as a practice strategy utilises adjustive responses as flexible and adaptive are expressed in the sub-themes: '*you're dealing with a human being: adapting to the broad picture',* and *'solution tailored to the individual'*. PHD#4 describes an act of individualizing the interaction after the initial social greeting: "*I get a bit more into the, get below the niceties, the surface"*. PHD#4 moves on from the "*niceties*" to the specific question*: "What's happening with your life?"* (PHD#4).

Individualising as a fundamental strategy for the osteopath at the practice interface commences in undergraduate programs with students recognising and discussing variations in tutorials to develop skills to facilitate the interaction. It is fundamental to the consultation to generate trust and comfort to elicit the fullest and most accurate inputs that contribute to the clinical reasoning processes. If the client is comfortable, trust and comfort develop from appropriate boundaries in the social relationship or patient: doctor relationship they feel more able to co-operate with the process and confide with the practitioner. PHD#10 notes: *"my job is to make sure that the patient is comfortable and I can get what out, what out of them I need to, to be able to deliver the service".*

Mental comfort, as reassurance, is not just for the client, but also the practitioner. PHD#5 notes a "*caring relationship is two way"*. Two-way means that each in the dyad has expectations, with comfort referring to both the clinician and the client and not solely to physical comfort, but also to mental comfort or the *'trust relationships'* (Lee-Treweek, 2002, p. 48). Comfort as a sensation ensued with full honest open input as a strategy to support trust. Honest input supports the professional to act with certainty, as there was no red flag or irreversible pathology lurking in the background: *'truths that enable us to act with certainty'* (Tyreman, 2015, p. 473). If the clinician and the client trust that each is co-operating and providing the best information, then the dyad can be sure of the thinking and the evaluation of safety and other decisions that may impact in an irreversible manner on the case.

## *Theme 5. Clinical Reasoning and Judgment are Critical to Practice: They are Continuous, Integrated and Transformative*

Clinical thinking, as reasoning and judgment, is intrinsic to clinical practice providing the foundation to all actions undertaken in the consult. It occurs as soon as the clinician and client interact, and is ongoing and continuing throughout the consultation.

Clinical thinking as reasoning, and the consequential summaries termed judgments or decisions, is a specialised subset of decision making, which is central to all aspects of life. Clinical judgments or decisions are recognised as critical to practice with this theme emerging from thirteen contributors through seventeen codes and four sub-themes. They are the basis of the acts that are professional practice.

Osteopathic clinical reasoning and judgment occur within a framework that supports the collection of data within the osteopathic interaction, primarily in the consult. It starts with the initial contact and case history / review, then the examination, the treatment and then a concluding review. Despite this apparent linear description, data is collected in a non-linear cyclical continuing approach, with the clinician collecting and processing data at all times throughout the patient interaction and even outside of the interaction to develop an outcome that will then be communicated with the other, the patient.

The thinking process is best described by cognitive continuum theory, where the clinical reasoning and consequential judgement utilises a '*quasirational*' (Custers, 2013) approach that utilises a mix of tools along a mental continuum. Tools

include Type 1 reasoning seen as "*intuitive knowledge"* (PHD#4), "*flow"* (PHD#12) or pattern intuitive type thinking and "*wobble"* (PHD#2), as an intuitive technique where some of the observed practitioners (PHD#2, 3) placed one or two hands on the patient and wobbled or gently shook the body part in an almost unconscious manner. Intuitive technique was seen as a having a "*quick listen"* (PHD#8) or a mindfulness gazing (PHD#9, 13) with the practitioner gazing out of the window to facilitate the palpatory experience or pattern assessment. The type 2 thinking tool is a rational approach with practitioners approaching clinical thinking in a structured manner. There was a hypothesised deductive approach with an acceptance that there is the need for clear strategies and an organised approach to the learning, development and execution of techniques with the client. That included "*a clear purpose"* (PHD#5) with what was to be done and getting the "*positioning"* (PHD#4) right which refers to the physical interface with the practitioner, client and the environment. Further to this, practitioners deliberately implemented the non-manual techniques to "*positively reinforce"* (PHD#6) the outcome and the recognition that *"attention and control"* (PHD#4) have a role to play.

> *"It's unlikely that it's something in the leg. It's more likely to be something of a more central cause if it's essentially happening on both sides. So, trying to determine if it's going to be neurological, which was my primary thought. If so, where is that coming from? But I was still very open to it being something else"* (PHD#8).

### *Theme 6. Verification: Knowing of the Case in the Present*

Acts do not occur in a vacuum, but within the parameters of established expectations and aims. The act of verifying is used to authenticate or substantiate the established truths that comprise a case and are derived from clinical thinking.

There is an overall knowing of the case as a truth, that includes what is written down from the past. This overall knowing is subject to the real time updates that have occurred with the current interaction with the client. Verification is the process of the individual checking a decision, confirming their thinking, establishing accuracy and validity of a decision to correlate a truth.

This theme, *Verification* for short, arose from fifteen codes and four sub-themes from eleven contributors. It correlates data collected from an act that feeds into the clinical reasoning process that represents knowing as truths that comprise the patient's case in the present time. These truths are continually verified, correlated or checked throughout the consult allowing for the fine-tuning of actions that are enacted to meet the aims of the treatment, to ensure that the treatment is on track to meet the expected outcomes.

Updating the knowledge of the case, with knowing of what is happening immediately in the present, supports aims and expectations of the consult. *Verification* is not just related to outcomes, but also expectations within the dyad. It directly to supports the comfort of the participants in the consult as well as the expectations that relate to the specialised social and physical context of a consult which supports the performed acts and negotiated outcomes. Examples include the specialised social and physical context temperature include modesty, lighting,

expected professional behaviours and when conducting an examination (an act), the practitioner will use vocal gestures to determine if the examination causes pain and if present, whether it is due to the examination, and / or the impulse that led the patient to the consult. *Verification* generates gestures and acts as symbols – way points or check points, throughout the interaction to ensure that a shared meaning is emerging. Not only does verification support the knowing of the whole case in the present time, but also that the process of reaching the negotiated outcome is in train. '*Truth is a process supported by veracity and verification*' (James, 1995, p. 79).

## *Theme 7. The Plan: An Outcome Is Expected, Negotiated and Enacted*

The overall expectation of a consult centres around the notion that the patient and practitioner negotiate an outcome. This negotiated outcome or treatment plan is the basis of the actions that constitute a consult.

Outcomes resulting from the consummation of acts, were multiple throughout the observed professional interactions in this research. However, this theme overall represents an outcome as generalised from the overall interaction developed as an agreed outcome of the interaction and may be successful or not. This outcome is negotiated by the dyad and then instituted in a plan. An outcome is expected from the outset, it is expected by each component of the dyad, as well as being intrinsic to the social contract and recognised by each as existing in the other. It emerged from fourteen codes and five sub-themes from eleven contributors.

The acts that constitute a consult, that is the interaction between a professional and a client occur within a context, that is defined by the declarations and expectations of the professional – a practitioner, and the client – a patient (Leach et al., 2013). These declarations and expectations frame the basis of a negotiation, the outcome of which defines the acts, that are formulated to settle them. This negotiation is not a single event, but occurs in phases with the primary negotiation occurring in the initial consults and then being maintained and renewed as required by changing circumstances and expectations. This negotiation process is central to the aim and acts of the practitioner and the client, underpinning the social contract or exchange between the client and the osteopath.

> *'This reduced focus on the bedside physical exam not only results in potentially delayed or missed diagnoses but also sacrifices a valuable therapeutic and symbolic ritual involving the physician's healing touch and bedside presence'* (Wellbery & McAteer, 2015).

The quote above describes the outcome of clinical acts noting that a change in the focus of training leads to outcomes that are less than expected or desired. What is important to note from this quote is the relationship indicated between the act and the outcome and the impact on the status of the practitioner acting in a dyad, but more importantly the greater perception of the physician as a person skilled in the art of healing. Here the authors use '*symbolic ritual*', '*healing touch*' and '*bedside presence*', which are all terms that are linked to skilful wise practice or phronesis. Pragmatism focuses on meaning deriving from acts. The meaning that derives from the act contains all the meaning that is associated with the total interaction – the whole profession and more. It is the meaning from these acts that society develops its conception of the profession. Therefore, although the meaning of the interaction may seem small and isolated to one treatment act, it also forms or develops the overall conception of the whole. There is no individual meaning from the healthcare professional interactions, because without the dyad as the basic healthcare unit, there can be no healthcare practice. Even the case of criminal injurious practice or sexual assault on the patient is an example of the outcome of a professional behaviour, where all of the virtues or qualities of practice are broken and not acceptable to society.

### *Theme 8. Manual Technique Proficiency and Delivery*

Manual techniques are chosen to execute a treatment strategy or plan. Proficiency and delivery pertain to acts that are utilised to enact the strategy to best meet patient and practitioner context.

Manual techniques perform a key role in executing an osteopathic treatment. Although this draft knowledge theme is the smallest developed from ten codes and two sub-themes from seven contributors, it is considered central to a conception of practice (see Chapter 2.7.7): *"Anyone can chat to anyone. It's the technique that, you know, what I'm doing to help make her better"* (PHD#6).

Manual techniques are a range of acts comprising assessment and examination techniques, and those designed to deliver therapeutic outcomes. The techniques chosen need to be prudent in that they are safe, the patient has provided consent for all, not just for unusual or unexpected techniques such as ones with sudden movement or risky components like HVLA, or ones that impact intimate space such as intra oral techniques. Manual technique needs to be practical. Practicality is multifaceted as there are the skills and coordination of doing them, there is the practical outcome of changes in passive or active ranges of motions in the patient providing better twisting of the neck to reverse a car with less pain, thus an easier engagement with the physical world. Proficiency relates to the skill and ability to administer and complete the individual technique in the particular circumstance with any necessary adaptions as the situation demands. Techniques also need to be able to address the client and not be too strong relative to their physical status such as weakened connective tissue from age or medication. There is also

the practical organization of structuring the techniques in the treatment plan, time management – how many can be done, what type, environment factors, order of application to name a few. Such acts require specific considerations to ensure that the manual technique selected meets both the overall treatment goals and the specific interaction of the treatment dyad.

Manual techniques need to be plausible. The osteopath's professional 'me' expresses a conception that 'hands-on' or manual manipulation of the physical body can address the presenting sensations. That is manual therapy acts through this theme provide a pathway to a successful response to the professional interaction. Although the physiological mechanisms are not fully understood the techniques chosen need to be believable on the part of both the patient but as an argument to the profession. Manual techniques require patient participation to complete. This is in the form of moving, relaxing, responding to tenderness, assessment questions. Participation is also relevant to exercises and other non-manual interventions. Patients also need to understand that manual techniques can be provisional in that the outcome may take time. There is a need to wait for changes and provide relevant feedback to the clinician as to the sensations related to the manual technique. Getting better is about the patient witnessing this outcome and then providing feedback about their improvement. Patients may also appreciate a 'feel good' factor related to the physical interaction, they perceive that they are looser and more relaxed and treatment outcome is positive.

> *"If required I will adapt the manual technique to generate compliance out of the patient and to deliver a service which is what that patient wants, otherwise they get someone else*" (PHD#10).

## 6.6 Concluding… Where to now?

This research breaks down the osteopathic consults of fifteen osteopaths, and then reconstitutes them. The start of this reconstitution belongs with the themes described above. It then continues into the next chapter with the development of a conception of osteopathic practice in the context of Pragmatism. This conception will argue that meaning developed from an osteopathic consult, that is the outcome(s) of the osteopathic consult, are a result of the professional social interaction or behaviour. This conception is discussed in two parts, the first focuses on the social aspect of the interaction. It will describe how there are themes and acts that contribute to the professional behaviour in supporting the generalised other. Acts that are designed to take a member of society and their impulse, and bring them into the osteopathic fold. Then later in the chapter the focus moves to the consult as the key space that the acts of osteopathy take place. The consult is where the impulse that brought the member of society to osteopathy is explored. It is where meaning is developed from the social interaction, that forms the basis of acts that are designed to align the impulse with the expectations of those involved with an outcome.

# DISCUSSION and THEORIZING: A DIALECTIC

# Chapter 7 A pragmatist model of osteopathic practice.

This chapter will discuss the outcome of the results of this research as a theorized model of osteopathic practice (Figure 7.1).

A brief overview of the model is illustrated in Figure 7.1, below. The model is presented in four sections:

- Section 1. An overview of 'A Pragmatist Model of Osteopathic Practice' containing three subsections which define the parts of the model. The first subsection considers the epistemic practices represented by the middle-nested circles of Figure 7.1 in some detail, although these circles are discussed in depth in the subsequent sections.
- Section 2. 'Social Praxis – The "me" engaging Society' describes the second epistemic nested circle and the themes (1-5) at the top of the diagram in detail.
- Section 3. 'Conducting Phronesis in The Consult' describes the themes (6-8) at the bottom of the diagram in detail.
- Section 4. 'Phronesis: The pub test' discusses the outcome of the patient-practitioner dyad interaction and the emergent meaning.

This model titled 'A Pragmatist Model of Osteopathic Practice' is an integrated representation of the orchestration of gestures and acts that occur from the moment the person has an impulse and is sensitised to osteopathy, to the agreed conclusion of the interaction. The central nested circles represent the entirety of the profession from impulse to meaning interacting with the two groups of themes

at top and bottom of the figure, that are derived from the research results. The central nested circles entitled ‘A framework for osteopathic epistemic practices’ consist of the outer circle, titled:

i. ‘Pragmatism’, which represents the philosophy of Pragmatism providing a corralling effect for practice.
ii. Social Praxis’, represents the osteopathic profession engaging with society to perform its role. ‘Social Praxis’ represented by the “me” is the top group of themes that focus on gestures and acts that support aspects of practice that focus on engaging society or the ‘abstract social class’.
iii. ‘Consult’ represents the sphere where the delivery of the key acts that define the profession takes place. The bottom set of themes headed ‘Conducting phronesis in the consult – The “I”’ focuses on interacting with the individual.
iv. The emergence of meaning in the present time, as the outcome of the interaction is the reason for the profession. The meaning is represented through the amelioration of the impulse(s) that set the individual to seek out osteopathy.

What professional practice or *‘a behavioristic psychology is trying to do is to find that in the responses, in our whole group of responses, which answers to those conditions in the world which we want to change, to improve, in order that our conduct may be successful’ (Mead, 1934/2015, p. 116).*

# SECTION 1 An overview of 'A pragmatist model of osteopathic practice'

**Knowledge Claim 1**: That osteopathy as a professional practice is constructed by a set of epistemic practices and Pragmatism is the philosophy to support conducting these practices in society.

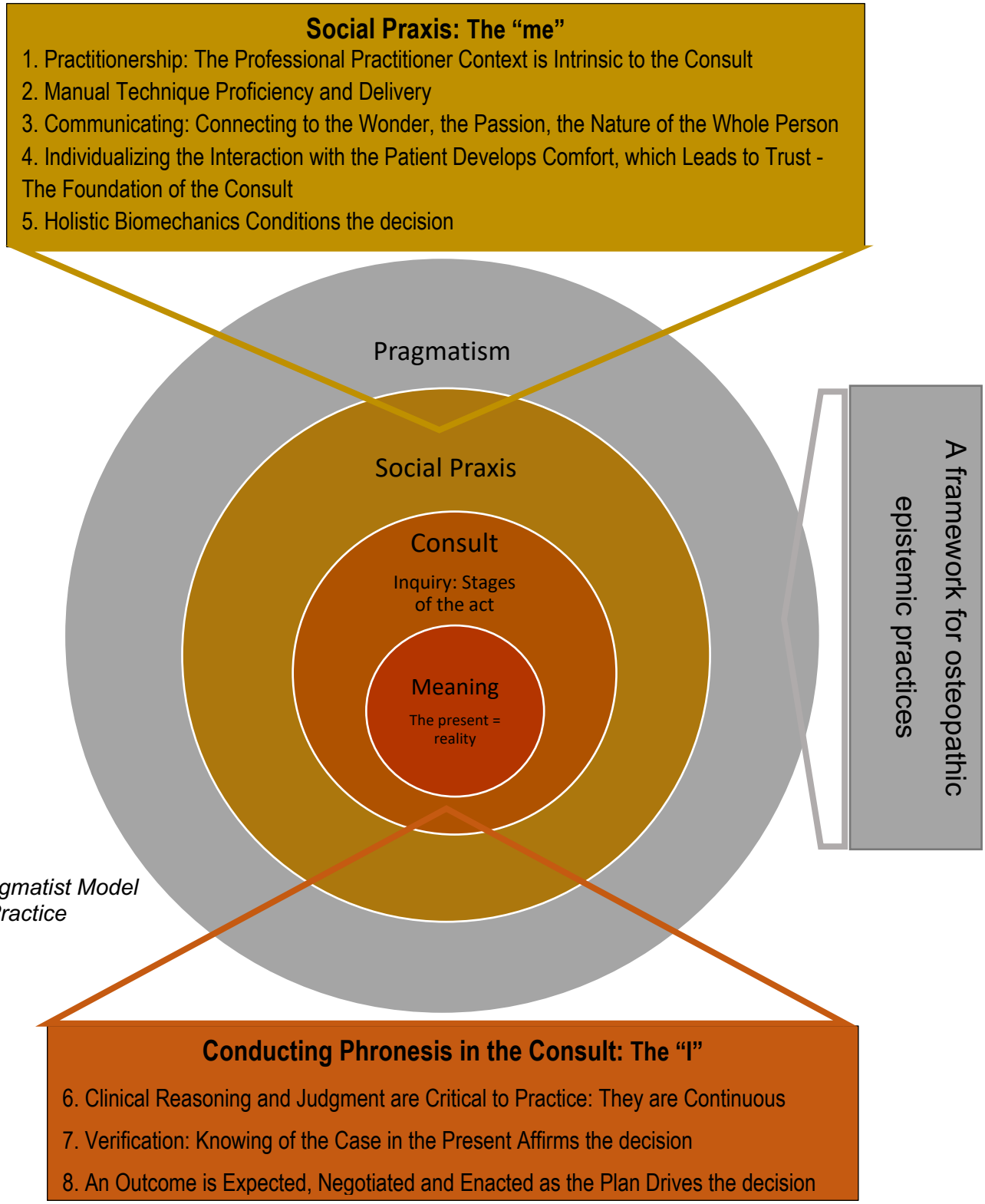


*Figure 7.1 A Pragmatist Model of Osteopathic Practice*

## 7.1 A framework for osteopathic epistemic practices

This section considers the nested circles of Figure 7.1: 'A framework for osteopathic epistemic practices' (The Framework), that represent domains of epistemic practice that constitute the practice of osteopathy as observed in this research. The Framework represents the holistic function of the knowledges and practices that support the entire osteopathic interaction from initiation to the agreed end. The outer circle titled 'Pragmatism' (Figure 7.1) encompasses all the elements of The Framework, because as a philosophy Pragmatism provides a theoretical overview that integrates and coordinates the approach to knowledge production in osteopathy as a field of practice. That is, Pragmatism embraces the aims of osteopathy that exist to co-produce acts to develop meaning in a professional interaction. Pragmatism provides for the fallible imperfect world that is perceived through the neurological filters of biology, which are responsive to, and modified by social impacts (Hundert, 1995). '*Pragmatic philosophers see the human organism as being in a state of struggle for survival in its environment'* (Ikiugu & Schultz, 2005, p. 87*).* Evolution is the observation of these forces, which are always at work. Any system, including humans, that is to survive and cope with evolution must be able to *'… interact effectively with the environment and therefore to adapt and survive'* (Ikiugu & Schultz, 2005, p. 87)*.* Pragmatism is able to manage the flux of the ever-changing natural biological and social systems of which the organism is a part. These natural and social systems as the holistic system represent a super context, a higher order or superordinate theme (Banton, 2019) in which all life occurs through the forces of the basic impulses over shorter periods, such as need for food, shelter and social interaction, and over longer periods with social systems, evolution and the physics of space, time

and gravity. The osteopaths in this research practiced within this omnipresent social-biological-physics superordinate world. Pragmatism supports acting and knowing in this world. The emergent meaning is encapsulated in the amelioration of the event or impulse that leads to a patient seeking osteopathy.

The second circle from the outside of Figure 7.1 of The Framework, titled ‘Social Praxis’, represents a defined or specialized professional ‘social behaviour’ that is aligned to the profession of osteopathy. Osteopathy as a practice interacts with society and Social Praxis organises the knowledges and practices required to operate and interact as a profession. The profession is set to redress the interruption that was experienced by a respondent that sensitised them to the osteopathic gesture. That is to ameliorate suffering and health concerns of society – the ‘abstract social’ group represented by ‘concrete social’ individuals. The respondent at the outset is from the generalised abstract group. Such a person(s) does not become a concrete patient until a series of gestures and acts have transpired, culminating in making an appointment. As such knowledges pertaining to social behaviour are those that support the profession translating the generalised abstract group to the concrete. The outer 2 circles of The Framework provide the context for the special social, the professional behaviours that are osteopathy. The knowledges are represented by the five themes on the top of the diagram, titled ‘Social Praxis: The “me”’ (Social Praxis). Social Praxis is discussed first because gestures are developed by the profession to society, to those who are sensitised. A profession is a social conception that interacts with members of society to generate meaning and understanding. In a masterstroke, least because it was a century ahead of its time, Mead (1934/2015) made the

social behaviour and inter-action the focus of his conception. He considered that consciousness as meaning emerges from social experience:

> *'We attempt, that is, to explain the conduct of the individual in terms of the organised conduct of the social group, rather than to account for the organised conduct of the social group in terms of the conduct of the separate individuals belonging to it'* (Mead, 1934/2015, p. 7).

The inner two circles in Figure 7.1 represent interpersonal interaction. The third circle from the outside titled 'The Consult' is where the primary acts pertaining to the individual are conducted. Its purpose is to align the perspective of the patient and the practitioner, as the treatment dyad, into a social object, meaning or truth that supports the interaction. As such it represents the epistemic practices that are necessary for conducting this practice. These epistemic practices are captured in the themes listed at the bottom Figure 7.1. Finally, the inner circle of Figure 7.1 represents meaning in the present time. The inner circle represents the culmination, the journey of the overall interaction. It is the outcome represented by all the gestures and acts that have occurred in relationship to the initial sensation. As the outcome or consummation of a journey it becomes the basis for continued action and it will form the basis of meaning for the profession.

In summary there are *'two basic and complementary logical aspects of the social* process' (Mead, 1934/2015) that underpin this two-part conception of osteopathic practice.

1. Social Praxis as '*the social process, through the communication which it makes possible among the individuals implicated in it, is responsible for*

*the appearance of a whole set of new objects in nature, which exist in relation to it (objects, namely, of "common sense")'* (Mead, 1934/2015, p. 79).

2. The Consult which comprises *'the gesture of one organism and the adjustive response of another organism to that gesture within any given social act bring out the relationship that exists between the gesture as the beginning of the given act and the completion or resultant of the given act, to which the gesture refers'* (Mead, 1934/2015, p. 79).

## 7.2 Social Praxis – the "me"

This sub-section considers 'Social Praxis – the "Me"', the top box in Figure 7.1 and it comprises Part 1 of 'A Pragmatist Model of Osteopathic Practice', and is discussed in detail below in Section 2 as 'Social Praxis the "Me" Engaging Society'. For the purposes of this research 'social' is not being defined sociologically, although it is recognised that all participants bring those characteristics to the interaction. Social is being considered epistemologically, as a detailed examination of the acts of practice that the different actors (objects) bring to bear to negotiate an outcome and develop meaning (as knowledge). Tyreman (2000) states praxis as the *'practical endeavour that is that profession'* (p. 118), with the dictionary defining it as 'action, practice such as exercise or practice of an art, science, or skill', a 'customary practice or conduct' and 'practical application of a theory'. Osteopaths represent scientific conduct through a structured approach to the gathering of data and analysis for the consummation of action.

Social Praxis is a combination of ‘things’, an umbrella of skills, gestures, objects and actions that can be taught, learned and stored. These ‘things’ are represented by the five themes contained within the top block arrow box in Figure 7.1. They are the knowledges that inform the acts that directly facilitate professional practices and roles to engage the generalized other, as the osteopathy patient. Part 1 of ‘The Pragmatist Model of Osteopathic Practice’ supervenes (Lévy et al., 2020, p. 4) ‘The Consult’ and is represented diagrammatically by ‘the Social Praxis’ circle surrounding the circle of ‘The Consult’ in Figure 7.1. Supervention occurs because ‘Social Praxis’ provides the conditions to conduct practice and the space for phronesis, or wise action to occur. ‘The Consult’ (Part 2) is present to facilitate the patient-practitioner dyad, and although it cannot exist without addressing society first, it provides the meaning with which to address society.

Social Praxis is the actions of the “me”, the social conception of an individual, the professional practitioner, the osteopath. The “me” is defined as *‘that phase of the self that represents the social situation within which the individual must operate’* (Cronk, n.d.). The self is the osteopath, the social situation is the consult and Social Praxis positions these together. An osteopath interacts with a person from society, who is responding to a gesture from osteopathy and who, through Social Praxis, is being inculcated into the profession of osteopathy as a patient. This social interaction is led by the professional practitioner who uses a set of knowledges and practices to support the interaction. These knowledges and practices define Social Praxis because they represent the versions that are appropriate or judicious for the profession and the interaction.

> *'That is to say, objects are constituted in terms of meanings within the social process of experience and behavior through the mutual adjustment to one another of the responses or actions of the various individual organisms involved in that process, an adjustment made possible by means of a communication which takes the form of a conversation of gestures in the earlier evolutionary stages of that process, and of language in its later stages'* (Mead, 1934/2015).

For an example, we can reflect on Dr AT Still's "me", his social conception of his roles as a father and doctor. The death of his children had a dual impact, first, to disrupt his family life and his conception of being a father. Second, a professional impact, as the children were part of the generalized other, as patients of his medical practice. The generalized other as '*an organized and generalized attitud*e' (Mead, 1934/2015, p. 195) is applied to individuals as a group, to which the individual has developed an attitude. There is no doubt that Still with his medical, frontier life and civil war experiences was already reflecting on and adapting his medical practice (Lewis, 2012, p. 44). These multiple social interactions were incorporated into Still's consciousness or his "me". When an individual like Still, can view themselves from the standpoint of the generalized other, self-consciousness is attained. This self-consciousness was described in Still's writing, and embodied in his actions, through the reconception of his medical practice. The personal conflict Still experienced with his social roles led to gestures and acts. The outcome was not just individual gestures, but a reconstruction of his medical practice for the generalized other, which he termed osteopathy. Mead (1934/2015) notes that conflict is *'settled or terminated by*

*reconstructions of the particular social situations and modifications of the given framework of social relationships'* (Mead, 1934/2015, p. 308). The following quote refers to conflicts at a societal level, however, it is relevant to the individual, as society is the sum total of the individuals that comprise it:

> *'The organization, then, of social responses makes it possible for the individual to call out in himself not simply a single response of the other but the response, so to speak, of the community as a whole' (Mead, 1934/2015, p. 267).*

## 7.3 Conducting Phronesis in the Consult - The "I"

This sub-section 'Conducting Phronesis in the Consult - The "I"', is an overview of Part 2 of 'A Pragmatist Model of Osteopathic Practice' and is discussed in detail below in Section 3. 'Conducting Phronesis in the Consult - The "I"', shortened to The Consult, considers the application of epistemic practice to support the intimate interaction of the patient-practitioner dyad. The three themes listed in the bottom block arrow box in Figure 7.1 represent the epistemic practices of the "I". The Consult is the primary vehicle for conducting the patient-practitioner dyad interaction to determine the nature of the impulse that sensitised an individual to become a patient that triggered the osteopathic act. Mead's consideration that meaning occurs from being made self-conscious from a social interaction, like a consult is masterful. It places the acts that comprise the social, in this case The Consult, as the context making the conduct of the patient-practitioner dyad primary: the '*functional interrelations among individuals, not a priori social facts, are primary*' (Johnson & Shifflett, 1981, p. 146).

The Consult is where the “I” reflects on the unique circumstances and personalizes the conduct to that time, to develop meaning in the patient-practitioner dyad. The *‘“I” is an emergent response to the generalized other’* (Cronk, n.d.). Mead (1934/2015) notes that an individual or the self, the “I”, reflects on their role, which is developed from their interaction, the “me”, with society: ‘*The self, as that which can be an object to itself, is essentially a social structure, and it arises in social experience’* (Mead, 1934/2015, p. 140). Mead describes the interaction between the “me” (the conception an individual has of themselves, in reference to society), and the “I”, as the individuals response ‘*to the attitude of the community as this appears in his own experience* (Mead, 1934/2015, p. 196). Phronesis construes epistemic practice of the “I” applied in a professional context, represented in the three knowledge themes in the bottom block arrow of Figure 7.1. Phronesis manages the epistemic practices that form the consult, ensuring they apply to the perspectives of the dyad in the consult. It unites the opinions and context, forms the judgment of the consentient set of knowledges and practices, so that meaning is derived from the interaction and is beneficial to those involved improving their lot.

> *‘The most fundamental phase of these differences is found in the determination of what the relativist calls a "consentient set," i.e., the selection of those objects which may all be considered as "here" with reference to the individual. It is this set, which is co-gredient with the individual, that constitutes an environment within which motion may take place’* (Mead, 1925, p. 256).

# SECTION 2 Social Praxis - The "me" Engaging Society

**Knowledge Claim 2**: That society is a superordinate theme in professional practice and Social Praxis provides the tools for managing the consentient acts required to conduct professional interaction.

## 7.4 Introduction to Social Praxis - The "me"

> *'The social act is not explained by building it up out of stimulus plus response; it must be taken as a dynamic whole–as something going on–a complex organic process implied by each individual stimulus and response involved in it*' (Mead, 1934/2015, p. 7).

*'The primitive situation is that of the social act'* (Mead, 1934/2015, p. 44). Mead wrote extensively about the social act and his literature is utilised because of the superordinate nature of society to osteopathic practice. This research considers an evolution of the social act, through Social Praxis, to a professional interaction, a modified social contract, the professional contract, where the health practitioner is expected to do things that improve the patient's overall lot. The profession of osteopathy derives meaning and relevance from its interaction with society. Meaning is expressed by PHD#5 as feeling valued, a part of something and maintaining a living:

> *"… the level of care often builds over a period of time, so there is a very strong care with a long-term patient, that you sort of know everybody in their family, and their medical history and quite possibly have treated some family members. It's really special to be part of that and, so I guess, that's*

> *one part of working in the one area for a long time. That you are much more likely to build family relationships, especially a suburban type area, where you are very likely to sort of meld into the community, which is definitely something I like doing" (PHD#5).*

The social context is considered a superordinate category and it is consentient, for the acts that are conducted to lead to the emergence of meaning as a negotiated outcome (as knowledge). At least a part of the consult relies on general knowledge about society, as in typification, to develop ideas about the dyad (Crossman, 2020). This research reflects on the acts used to engage the social group to conduct professional practice and is summed up for a health practice like osteopathy:

> *'Attending solely to individual thought, as in the thought of the practitioner, becomes insufficient without a consideration of the collective background. Rather, it becomes important to attend also to the collective thought that implicitly informs the backdrop to the process of an individual's worldmaking in practice*' (Kinsella cited in Kinsella & Pitman, 2012, p. 45).

Social Praxis is an epistemic practice represented by the resultant knowledge themes in the top block arrow box of Figure 7.1. Social Praxis is defined by these knowledge themes, which in turn are represented by the gestures, the acts that inform the professional interaction, from the earliest most nascent impulse to the finale. Social Praxis appreciates that each clinical interaction is a unique consentient set and these knowledge themes support '*the interaction of different*

*forms which involves, therefore, the adjustment of the conduct of these different forms to each other, in carrying out the social process'* (Mead, 1934/2015, p. 44).

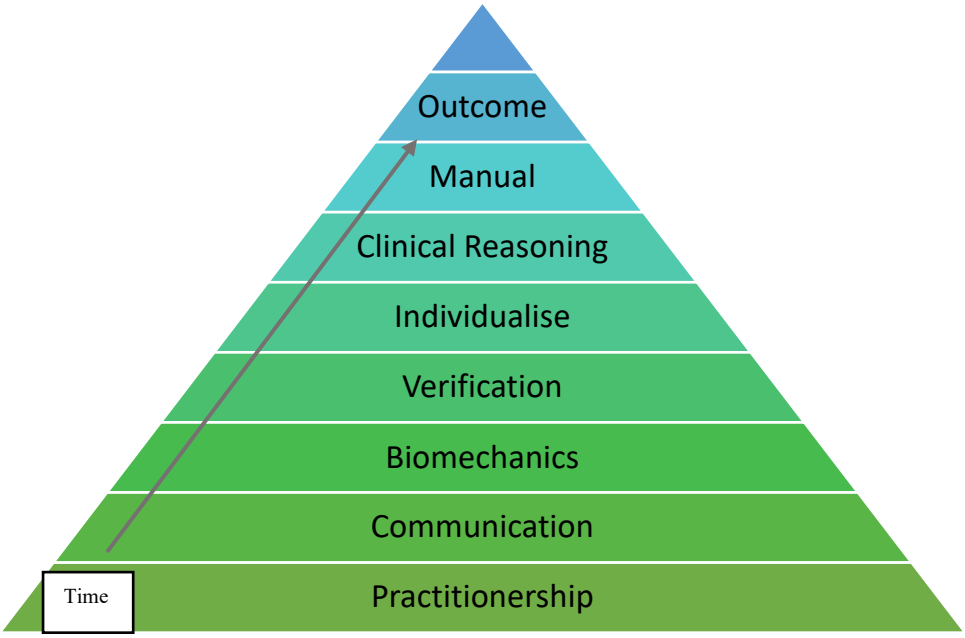


*Figure 7.2 Interaction of knowledge themes over time in a consult*

The professional interaction provides the opportunity for the "me" to express professional acts within the patient-practitioner dyad. Through an adjustive response, the patient-practitioner dyad can bring meaning to the professional, the individual and the abstract social group contexts that meets the purpose and goal of the professional contract. Figure 7.2 is a pyramidal depiction of a hierarchy from below upward, of the commencement over time, of the resultant knowledge themes in an osteopathic interaction. The hierarchy is indicative, as the themes possess an overlapping and recursive relationship. The width of the pyramid represents the amount a theme might be active across the time of an interaction. This hierarchy and its role through Social Praxis is discussed below considering four key elements to Social Praxis (Figure 7.3). The first, as 'Professional acts make a professional', considers the notion of being a professional and describes gestures and acts that make the professional contract. The second element, 'Gesture and the impulse', refers to that which sensitised a human organism to

osteopathy, the third element is "The appointment as an act', representing a key act as an object that aligns the time and physical presence of the two human organisms, the professional and the individual from the '*abstract social classes* (Mead, 1934/2015, p. 157), who will take part in the professional interaction and form the patient-practitioner dyad and the final element, as 'The Case Framework for Social Praxis', 'Case Framework' for short which organizes the particular professional acts that occur in The Consult and the basis of Part 2 of 'A Pragmatist Model of Osteopathic Practice'.

## 7.5 Professional acts make a Professional


*Figure 7.3 Professional Acts (a)*

Membership of a professional group, like osteopathy, is defined by the title and represented by the *Practitionership* sub-theme:[1] *Professional acts*. These are the profession-oriented gestures and actions enacted by the "me" to society. Being a professional is a socially constructed role, an *Interacting with professional knowledge and expectations* (PHD#13 theme) with the abstract other. That is to be an osteopath, means to act as one. Such behaviour is encompassed within the *Practitionership* sub-theme *I'm passionate, I strive to meet patient expectations*. Acting with passion alludes to energy and a powerful feeling about the profession. Striving is more than just making do, as the Merriam-Webster Dictionary defines it: 'to devote serious effort or

[1] Definition of a sub-theme: A code resulting from axial coding of transcript themes. See Tables 6.6 & 6.7.

energy'. Therefore, professional behaviour may include being *"passionate"* (PHD#2), as devotion, zeal, intensity, feeling, dedication and spirit. Social Praxis is active through the knowledge themes which are operationalized by practitioners as they conduct their practice in a "*thorough and systematized"* (PHD#8) approach to gathering clinical data. Such acts comprise a broad set of actions that underpin professional duties, with the structuring of the practice environment, through *Time Conservation / Duration* (PHD#7 theme) to expedite the consult, meeting societal expectations set in rules, laws and ethics and moral expectations. The client expects a professional to act in a professional manner: that they lead the consult and meet the quality standards that are expected by the generalized other as the client or patient. The notion of a quality interaction is intrinsic to the professional interaction. At a minimum, a quality interaction is one that successfully achieved meaning from the interaction, and is summarised by PHD#9: *"I like my patients to be walking out there, know[ing] exactly what, why, and the advice I've been giving".* In short, meaning for each individual is developed through social interaction *'because we are in the world we are condemned to meaning.'* (Kinsella citing Merleau-ponty in Kinsella & Pitman, 2012, p. 44, emphasis in original).

Mead states that he has:

> *'been presenting the self and the mind in terms of a social process, as the importation of the conversation of gestures into the conduct of the individual organism, so that the individual organism takes these organized attitudes of the others called out by its own attitude, in the form of its gestures, and in reacting to that response calls out other organized*

> *attitudes in the others in the community to which the individual belongs'* (Mead, 1934/2015, p. 186).

This process of the self is representative of the professional self, with professional gestures representing the interaction of the professional "me" with society. These professional gestures that present a conception of the professional "me" are represented in the theme *Practitionership*, and this is why it is at the bottom of the pyramid in Figure 7.2 (above). For osteopaths this professional "me" develops early on when the thoughts about becoming an osteopath are translated into gestures and acts that lead to study to become an osteopath.

*Professional acts* require a strategy of *Individualization,* fourth from the bottom of the hierarchy described in Figure 7.2, so that the profession may engage the context of each component of the dyad. This strategy occurs through adaptions and flexibility that are built in as organisational approaches and practices to allow for the generalizing of *Individualization* across the whole profession. Profession wide acts to address the individual may appear to favour one or the other of the dyad, but in general these acts benefit the dyad. Such acts and objects include professional indemnity insurance, adjustable treatment table and other occupational considerations; privacy curtains, draping and patient gowns for privacy; flexible times for appointments and strategies for managing clients arriving late for their appointment. Profession wide acts are also designed to address abstract groups, such as common marketing strategies to communities, as well as interacting with educational institutions, professional groups and societal institutions like the regulator, journalists and statisticians. Generalizing also means that professional acts of Social Praxis may be shared across

professions as generic acts of professional practice, and include registration of multiple health professions by AHPRA sharing common issues such as ethics, business skills and continued professional development i.e., first aid training.

*Professional Acts* as Social Praxis expects professional communication with a professional language, which for osteopathy is through the lens of health care, *Biomechanics* and *Manual Therapy*. *Communication,* second from the bottom in Figure 7.2, as a function of Social Praxis coordinates the interaction: '*Communication is consummatory as well as instrumental. It is a means of establishing cooperation, domination and order*' (Dewey, 1938a, p. 202). The vocal gesture is particularly useful in communication and supports *Individualization.* The professional language of osteopathy is more than a vocal gesture, it connects *to the wonder, the passion, the nature of the whole*. To do this it utilises all the senses for *Communicating* especially touch, which *'is diagnostic, procedural, and an expression of care'* (Kelly et al., 2018, p. 208). Importantly for osteopathy as a manual health practice *'the research to date on touch indicate touch communicates care "above words"'* (Kelly et al., 2018, p. 207). The science of touch is complex and still being investigated. It interesting to note that non-hairy glabrous skin, for example found in the lips and finger tips used in evaluating and discerning objects, is received in the discriminative part of the brain. Touch as palpatory and discriminative skills is a: *'cornerstone of practice, involving tacit knowledge that cannot easily be described through language'* (Brosnan, 2016). In the consults observed for this study, touch as all physical contact with the client occurred for a minimum of 75% of the consult time (see Table 6.2).

The sub-theme *my hands are telling me: they connect to the patient* from the *Communicating* theme identifies the notion that touch is two-way, with the originator of the touch and their goal, and the return of touch from the individual who is being touched. '*Every time a professional touches a patient, they are themselves touched'* (Kelly et al., 2018, p. 201), which underpins communication as more than talking, it is connecting. It is a presence, a meaning developed by the dyad from communication, with presence relating to physical and mental, as much as the vocal presence. An individual is greater than the physical self, and through a comprehensive approach to communication in the social interaction, a connection is made with the whole person, it is holistic. Science supports this when it is noted that sensation from hairy skin (non-glabrous) is received in the emotional part of the brain, represented through the reassuring acts of touching and pats and rubs on the shoulder and the general health benefits from touch: '*Touch is credited with healing power when a patient and a professional together create a space where they can safely touch'* (Kelly et al., 2018, p. 208). This supports the idea that *'touch, even when it performs essential clinical tasks, can be interpreted as an expression of compassion, empathy, care, and presence*' (Kelly et al., 2018, p. 208).

Trust as a professional act is identified in the sub-theme: *trust and care is two-way, and the foundation of the consult*. The importance of trust as a professional act is supported by Tyreman (2015) who indicates that *'the foundational role of the primary care practitioner in particular is … to support the uncertain patient in learning to trust again – providing an appropriate dependency'* (p. 477). Trust as

a quality '*can be seen to have both social, cultural and phenomenological aspects*' (Lee-Treweek, 2002, p. 67). Lee-Treweek (2002) interviewed patients of an osteopath about '*the development of trust relationships'* defining them as *essential,* with a trust emerging from the patient striving '*to find meaning in the treatments they experience'* (Lee-Treweek, 2002, p. 48). Although her paper focuses on the individual experience, Lee-Treweek (2002) describes '*trust relationships',* which are developed through acts and Lee-Treweek (2002) describes three '*visible points*' or acts from patients that demonstrate trust: *'the patient's choice to attend for an initial meeting; in continuing treatment in the short term and in continuing treatment over a longer period of time'* (Lee-Treweek, 2002, p. 51). Trust emerges as shared meaning, from the practitioner leading an approach conducted through *Communication* of professional gestures and acts as Social Praxis to share meaning and build a caring relationship. Thus, the practitioner *"is looking at that person and coming up with a solution or plan, that's very tailored to that individual, taking into account their physical, mental, emotional - all that sort of stuff"* (PHD#11). Which summarises the foundational reason for Social Praxis, and that is defining meaning for the impulse that led to the interaction.

Striving to meet patient expectations illustrates the '*foundational role'* of health professional behaviour, described by Tyreman (2015, p. 477). The professional is attempting to understand or know how the patient has lost certainty in their body, how they view themselves in society, and what can be done about it. The professional is attempting to interpret the impulse and the perception of lost trust

in their body, their health, and to either restore their trust in how they are in their social conception or support the journey to a new conception.

> *'Key to providing that trust and managing a situation appropriately and effectively is understanding the uncertainty of a patient, not as an uncertainty of truth – not knowing what – but as a practical uncertainty of lost trust in his own body – not knowing how.'* (Tyreman, 2015, p. 477 emphasis in original)

## 7.6 Gestures and the impulse

> *'The emergent event is an unexpected disruption of continuity, an inhibition of passage. The emergent, in other words, constitutes a problem for human action, a problem to be overcome' (Cronk, n.d.).*

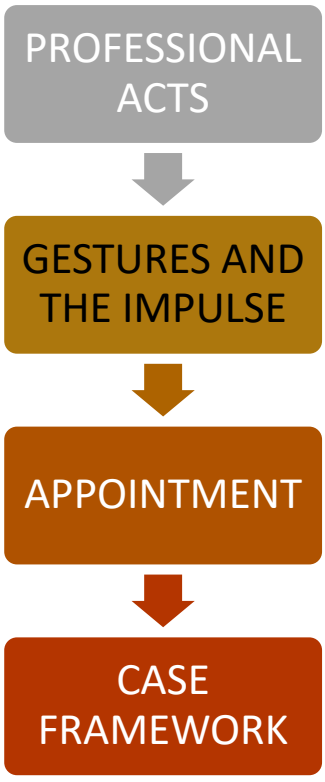


*Figure 7.4 Professional Acts (b)*

What makes a person notice osteopathy? What brings them to the consult to form the patient-practitioner dyad? A person develops a sensitivity or heightened awareness of sensations and objects through conscious and unconscious mechanisms. An awareness becomes an impulse, when it has an impact on the individual's life narrative, it is a *'situation out of which the difficulty, the problem springs is a lack of adjustment between the individual and his world'* (Mead, 1938, p. 6). The individual has '*a confrontation with novelty'* (Cronk, n.d., p. 37). Novelty in osteopathy usually relates to a health issue, primarily pain and perhaps an injury (Adams et al., 2018; Burke et al.,

2013). This lack of adjustment has a temporal element, as it alters the perception of the individual's timeline, their future. The interruption also requires energy from increased physical and mental activity to develop a perception of the sensitizing impulse. From an evolutionary and survival standpoint this is a cost to the individual and triggers the stress response. The impulse(s) sensitizes the individual to the gestures of the osteopath that coalesce into symbols and acts, such as a telephone call and the establishment of an appointment. The individual attends the osteopath as a patient with the aim of *'… passing from a problematic present to a non-problematic future'* (Cronk, n.d., p. 37).

> *'What is the basic mechanism whereby the social process goes on? It is the mechanism of gesture, which makes possible the appropriate responses to one another's behavior of the different organisms involved in the social process' (Mead, 1934/2015, p. 13).*

Meads concept of the family as the base unit of society and meaning emerging through social behaviour is mirrored in osteopathy as a professional interaction with the patient-practitioner dyad as the base unit, with meaning arising from the professional interaction. An initiating gesture is a sensory cue, which can be visual, auditory or other, such as a muscular pain. The sensations, the impulse from an individual's idea of their body are conceptualised from a socially constructed perspective: *'The relation of mind and body is that lying between the organization of the self in its behavior as a member of a rational community and the bodily organism as a physical thing'* (Mead, 1934/2015, p. 186). Social Praxis ensures the gestures contain enough of a message to be specific, to guide those who are receptive or sensitized toward a professional interaction. Professional

gestures are designed to support a sensitising or funnelling process, they are biased toward the profession. This intrinsic bias or tendency occurs from the beginning, with professional gestures that are relevant to the profession focussed through the lens of the themes *Manual Technique* and *Holistic Biomechanics*, particularly the sub-themes *biomechanical thinking* and *tension the sensation is biomechanics of the whole person*.

Social Praxis develops an environment for the organism – the patient *'through the selective power of an attention that is determined by its impulses that are seeking expression'* (Mead, 1925, p. 256). The *'peculiar environment does not exist in the consciousness of the form as a separate milieu, but the consciousness of the organism consists in the fact that its future conduct outlines and defines its objects'* (Mead, 1925, p. 256). That is to say that the gestures that attract the sensitised individual will define the future. For example, if the individual feels the impulse will have significant irreversible consequences to their health, then the gestures of the ambulance service may sensitize the individual, resulting in a telephone call to that service. For this research, it was the gestures of the osteopath that sensitized the individual leading to them making an appointment.

> *'Meaning involves a reference of the gesture of one organism to the resultant of the social act it indicates or initiates, as adjustively responded to in this reference by another organism: and the adjustive response of the other organism is the meaning of gesture' (Mead, 1934/2015, p. 81).*

## 7.7 The appointment as an act

Social Praxis through *Communication* uses the '*adjustive response*' to support meaning arising from an act (Mead, 1934/2015). An adjustive response is a group of gestures that occur back and forth between individuals in society and the profession. These '*gestures are movements of the first organism which act as a specific stimuli calling forth the (socially) appropriate responses of the second organism'* (Mead, 1934/2015, p. 13). For the profession of osteopathy, the first organism is the osteopath generating initial gestures to demonstrate the osteopathic "me". The initial gestures via the '*adjustive response*' are responded to by appropriate gestures from the second organism as a member of the public, a sensitised person. A professional osteopath must respond to the gestures they have made to society and its constituents: patients. *'An adjustment is effected by means of gestures, of the actions of one organism involved to the actions of another'* (Mead, 1934/2015, p. 13). Such actions include images, text or vocal activity by telephone including missed calls and messages that lead to meaning, an outcome, represented by a key object: the appointment.

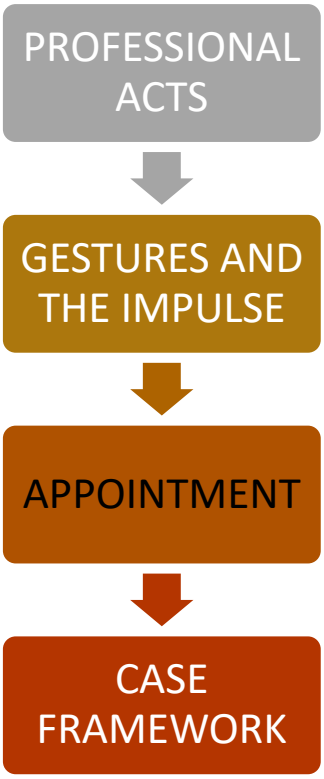


*Figure 7.5 Professional Acts (c)*

> *'Gestures are, then, the early stages in the overt social act to which other forms involved in the same act respond.'* (Mead, 1925, p. 271).

The appointment as an object, an outcome of the initial gestures is a data entry. Once settled the member of society making the appointment becomes a client of the professional as a new or return patient, and this commences the next set of gestures and acts. The person may also fit some other category as befits the initial response to the gesture i.e., sales. An appointment aligns the physical and temporal nature of the sensitised individual and the professional. With the professional and the client in the same time and place, they can conduct the professional activity notionally agreed to. The appointment as an object *'and the direction of the process going on form the basis for the rational determination of the future'* (Mead, 1959, p. 13). In most cases the rational determination will have the client attending the physical clinic premises for the appointment. There are other variations including rescheduling the appointment due to unforeseen circumstances or a 'telehealth' appointment. For the purposes of this research the appointment was at the clinic premises and once attended is called a consult, which consists of a structured case framework.

Gestures and acts culminating in an appointment represent a professional act of the "me". The appointment object represents an agreed time and place for a minimum of two human organisms to engage in meaning making about an agreed topic. The topic is the impulse that sensitised one of these human organisms to respond to the professional gestures of the other. Using the gesture is a socially accepted method for a human organism to develop meaning with another. It is the 'who I am' demonstrating a practical link of the 'how I am'. Mead describes this process:

> *'We have seen that the nature of meaning is intimately associated with the social process as it thus appears, that meaning involves this three-fold relation among phases of the social act as the context in which it arises and develops: this relation of the gesture of one organism to the adjustive response of another organism (also implicated in the given act), and to the completion of the given act–a relation such that the second organism responds to the gesture of the first as indicating or referring to the completion of the given act' (Mead, 1934/2015, p. 76)*.

## 7.8 The Case Framework for Social Praxis


*Figure 7.6 Professional Acts (d)*

Social Praxis provides 'event management' for the professional interaction, ensuring all the necessary elements expected by all parties are in place to meet the aims and agreed objectives. The Case Framework is an act, an outcome of the appointment object that evolved to meet the requirements of being a professional. Social Praxis through The Case Framework provides a structure to conduct the consult, to enact phronesis, to be a practitioner. Through the adjustive response, The Case Framework utilises different tools or acts in a private environment to "*multitask*" (PHD#6) and in *managing time to get more things done* (sub-theme) support an efficient approach to delivering the necessary elements. These commence with the opening greeting, and then move through a series of acts including the case history (presenting concern, medical history, related

questions), the examination (physical, special, profession specific), the treatment (all treatment and management options) and the conclusion (follow up management, next appointment, fee-for-service and recording the interaction).

Effective communication is essential for all health professionals (Denniston et al., 2017), as it supports the Case Framework, sets the relationship and allows for the collection of data. The practitioner, as the professional and the holder of the specialised knowledge, takes the lead in guiding the patient-practitioner dyad. *Communication*, through the umbrella of Social Praxis provides a vehicle for *'the act or adjustive response of the second organism'* (Mead, 1934/2015, p. 77). The Case Framework initializes with customary social practices the "*personal interaction"* (PHD#12), which is part of everyday social behaviour and supports function in society and it is these preliminary gestures that indicate the commencement of the Case Framework.

The professional health interaction is a specialized social interaction. The health professional has had training to be able to conduct the acts of the Case Framework and the relationship is a lop-sided one. The practitioner collects data, the patient shares about themselves with little reciprocation from the professional. The case history is dominated by vocal gestures, which have a special place in communicating as they bridge space, funnelling the process toward more intimate forms of communication like touch, which follows in the examination phase. The new or return case history act starts with an opening question, *"what brings you in today?"* (PHD#13), given by the professional '*to the gesture of the first organism'* (Mead, 1934/2015, p. 77) – the patient. The opening question aims

to derive meaning to the attendance of the patient to the appointment, by having the client *"discuss, talk and describe their story without me influencing that at all"* (PHD#13). Such an act supports the *Individualizing* sub-theme: *I let them tell me,* indicating that the clinician is listening to the client. For the consultations observed for this project, times of the initial case review were flexible ranging from 1m 15s as the shortest (PHD#6) to 8m 19s for PHD#8 as the longest.

A case history, as the name suggests, is also store of past treatment outcomes and other events incorporated into the decision making of that consult and updated with each visit or interaction. A case history as an act of Social Praxis links the past to the present, by bringing the practitioner up-to-date with the patient's details and any modifications to the social relationship already in place (case review). It also explores the impulse that sensitised the person to attend the osteopath. The case history document is a socially constructed perspective of the patient and Social Praxis makes this available to The Consult. A case history is not the patient (even the term patient is a representative perspective), it is a particular representation of the person developed for and from a particular perspective. Mead (1959) identifies this present as an *'emergent character, being responsible for a relationship of passing processes, sets up a given past that is, so to speak, a perspective of the object within which this character appears'* (p. 18).

Approaching practise in an organised manner with the Case Framework is a demonstration of an individual's socially conceived professional "me". It is how a professional expects practice to be. The rest of the elements of the Case

Framework are addressed in the next section The Consult. The Case Framework provides the means for conducting these elements; however, The Consult will be discussed from the perspective of the role in deriving meaning. The differentiating line between Social Praxis and The Consult is not linear and their acts do overlap. Nevertheless, a framework provides a professional demonstration of conducting practice. The clarification of the sensitising impulse is an iterative funnelling approach with the main clinical decision-making time occurring once some data has been collected to provide for judgment. Meaning making occurs from early on in the interaction, but for the dyad, in reference to the initiating impulse, meaning occurs after the start of the case history, although as The Consult is a recursive iterative process, when it starts is not exact.

# SECTION 3 Conducting phronesis in the consult - The "I"

**Knowledge Claim 3**: That the consult is the key space for conducting phronesis as the application of wise practice to the case through the dialectic interaction of "I "& "me".

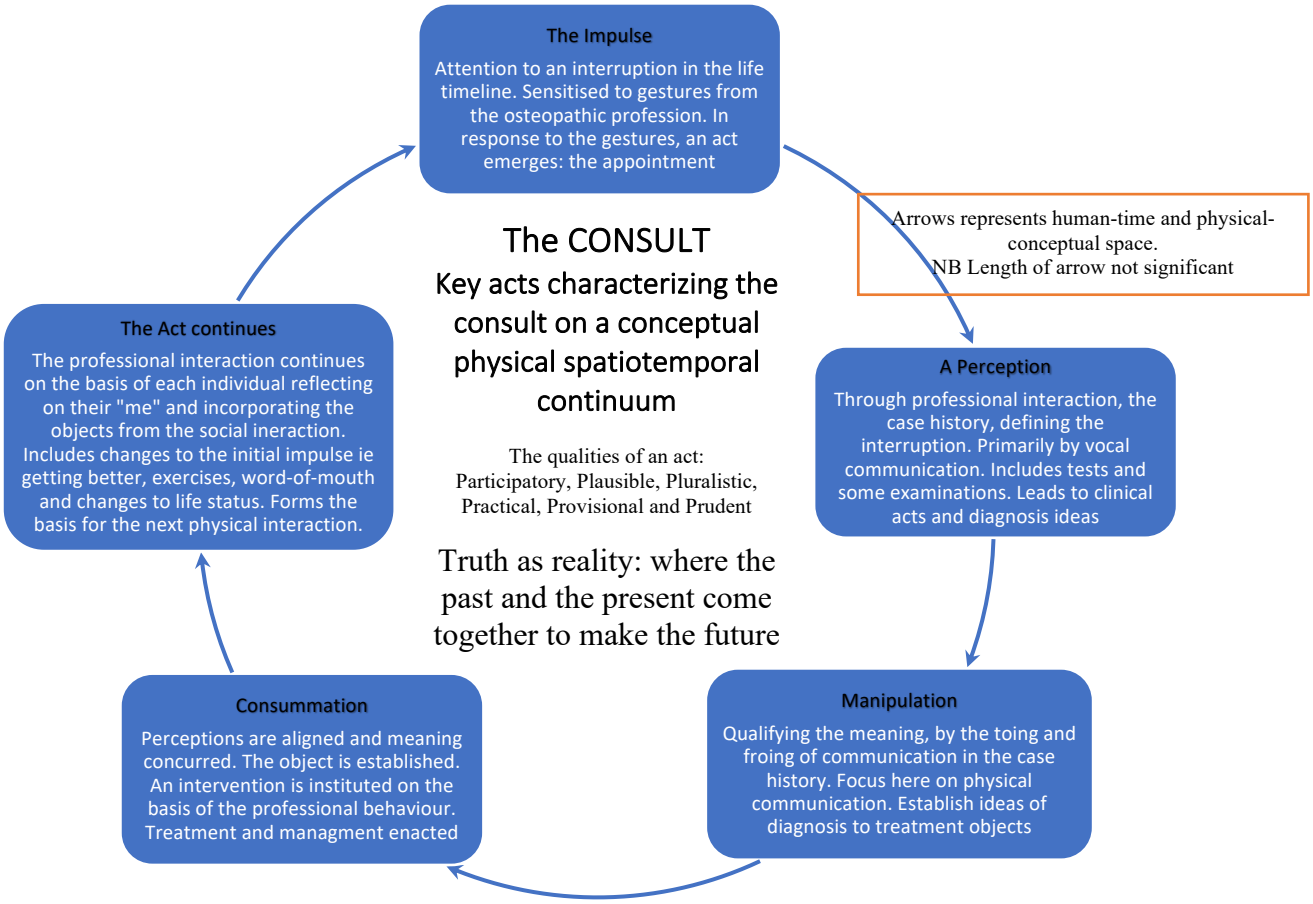


*Figure 7.7 The Consult: cycle of the act*

## 7.9 Introduction to Conducting phronesis – The "I"

'A pragmatist model of osteopathic practice', is a two-part model. Part 1: Social Praxis – the "me", is discussed first as it incorporates the acts that engage

society. Part 2: 'Conducting phronesis in the consult - The "I"', is discussed next. The Consult as a function of the holistic Epistemic Framework (Figure 7.1 above) is facilitated by the umbrella of Social Praxis (top row of Table 7.1 below - the uncoloured boxes). Part 2 focuses on the bottom of Figure 7.1 above, and considers three resultant themes, see the right-hand column of Table 7.1 below. The Consult is not the only place that meaning emerges for the osteopath and the patient. Other interactions occur by telephone and text, through chance meetings and within other social institutions. However, The Consult as a professional act, is the raison d'être of the professional, it is the primary act in osteopathic practice for deriving meaning as a consciousness about the impulse. '*So far from being a precondition of the social act, the social act is the precondition of it'* (Mead, 1934/2015, p. 18). Meaning and consciousness as the self, the professional or patient "me" are derived from the consult (Mead, 1934/2015, p. 140) and we are *'forced to conclude that consciousness is an emergent from such behavior'* (Mead, 1934/2015, p. 18).

Consult is defined in the Oxford dictionary as 'seeking information or advice from someone, especially an expert or professional'. This definition focuses on the client seeking; however, 'to consult' is a two-way interaction. Conducting a consult, in return for something – usually a monetary fee, is what the expert or professional does. How a consult is conducted is dependent upon the advice sought. For osteopathy a consult is designed as a set of actions that is prefaced with an appointment as an object, that brings the patient-practitioner dyad together in the same time and space. All fifteen of the consults observed for this research were face-to-face, not phone or Telehealth.

| The Framework | Stages of the Act | Treatment Act | Knowledge Theme |
|---|---|---|---|
| Social Praxis | Impulse / stimulus | Professional commitment / Appointment | Practitionership |
| The Consult | Perception | Consult<br>Case history / exam | Clinical Reasoning<br>Delineating meaning |
| The Consult | Manipulation | Consult<br>Exam / diagnosis | Verification<br>Qualifying meaning |
| The Consult | Consummation | Consult<br>Treat & manage | Outcome<br>Actioning meaning |

*Table 7.1 Structure of the osteopathic interaction*

The Epistemic Framework through Social Praxis and The Consult (Figure 7.1 & Table 7.1), is conducted through *'the stages of the act-stimulus, attitude, perception, manipulation, and consummation'* (Strong, 1939, p. 72). The stages and acts do not individually constitute a consult, *'though the different stages are parts of the whole process',* each *'implies the entire process and embodies it in a particular phase'* (Mead, 1938, p. 452). The '*different stages'* of the consult may be completed as standalone acts. This function provides for the use of such activities when, wherever and in whatever order required, without them being fixed or tied to any one phase. For example, each is taught independently in an educational setting. The stages of the act represent the total journey of the professional interaction of the patient-practitioner dyad from the initiating impulse that '*requires the reflective process to set up hypotheses in order to guide action'* (Strong, 1939, p. 72), to achieve the realisation of an object of meaning and

consummation. For this research The Consult consists of the perception, manipulation, and consummation stages (Table 7.1).

> *'I wish, however, to restrict the social act to the class of acts which involve the co-operation of more than one individual, and whose object as defined by the act … , is a social object'* (Mead, 1925, p. 263).

Social Praxis describes the context for conducting the osteopathic consult, an osteopath cannot simply apply manual techniques to a client without knowing some things before doing so, and society today does not look favourably upon osteopathy practiced on a footpath. The strategies of Social Praxis and the actions of The Consult are not simple biological impulses, they require coordination and correlation through cognition as thinking and decision-making. To do this The Consult correlates the consentient set of things that are necessary to conduct the acts or professional practices expected of the patient-practitioner dyad. Such things include tools such as reflection, power and a case framework, which are grouped together for a structured inquiry (Dewey, 1938b). Tools facilitate The Consult and are structured into 'The Case Framework', which oversees the implementation of a priori thinking into acts and objects, that are then assessed in the clinical thinking process. Tools such as power and reflection interact to assist in executing the actions of the dyad. They are seen in action as reflexivity through gestures, such as the clinician instructing the patient to perform an act, the client listening and complying to the practitioner actions that represent the particular power relationship defined as the doctor: patient relationship. Power is intrinsic to the professional relationship, it is made obvious through practices such as professional boundaries and ethics, which represent the

reflection of the "I" on the effects of power. The Case Framework includes the 'Treatment Acts' (Column 3, Table 7.1): as the case history, examination, diagnosis, treatment and management. Each of these then incorporates further gestures and acts that facilitate their role as tools in achieving the goals of the consult. Such acts, utilised in an iterative process, include questioning strategies, examinations, diagnostic procedures, manual techniques – the minutiae of the clinical interaction with gestures as questions, reactions and answers and further questions, that in turn lead to significant objects as tests and examinations to provide input to clinical thinking to support a clinical judgment as meaning that is the basis of the provided advice and information (Table 7.1 & Figure 7.7 above). Respondent PHD#13 describes this iterative process*:*

> *"… for the most I'm probably just following a schema that I learnt in uni, and then just trying to tailor it to ruling out different diagnoses or ruling in, or getting an idea of what I'm dealing with"* (PHD#13).

The Consult is the space where the dance of the patient-practitioner dyad enables them to fulfill their role. It is the professionally constructed deliberate behaviours performed by the practitioners "me", as a coordinated rational flow of tuned inter-related gestures and acts represented by *'it's down to business time'* (PHD#4). It is overseen by the practitioner's "I" accessing knowledge and conducting reasoning, verifying and negotiating in the present time that considers "*how important a patient's thoughts and mindsets are*" (PHD#12). The Consult is conducted with the generalized other, represented by acts and gestures of the patient "me". The patient's "I" assesses and reflects on the acts and gestures of the professional including the progression to consummation. It is this dance, this

interaction of the professional "me" with the patient "me" that was triggered by an impulse and the attendance of the generalized other patient. The creation of the dyad allows each "me" to discharge their commitments represented as what *"patients expect"* (PHD#12) for the professional, via the specialized social contract and is overseen by the reflection of the "I's" on the emerging outcomes.

The Consult supports the flexibility to explore the unknown of the impulse, within the set time of the consult. It brings the past into the present as what has passed impacts what arises and what is taking place 'conditions' what is arising. It '*is not a piece cut out anywhere from the temporal dimension of uniformly passing reality. Its chief reference is to the emergent event … to the occurrence of something*' (Mead, 1959, p. 23). The past conditions the outcome, but does not determine the full reality of what is emerging, of what is *'there'* (Mead, 1959, p. 16). The consults as objects of time observed for this research, ran within 10% of their advertised time, with the minimum of twenty-seven minutes for a thirty-minute appointment and maximum at forty-seven for a forty-five-minute appointment.

## 7.10 Perceiving - Delineating meaning

The Consult as the designated time for the patient-practitioner dyad to facilitate the movement along the path from perception as the start of the development of understanding towards a conception of things as a consciousness that emerges from the professional interaction of the dyad (see Table 7.1 & Figure 7.7 above). The case history is the fundamental tool enacted to achieve this in medicine. Historically, developed from social behaviour practices to be enhanced into

professional acts through training to modify, minimise and maximise certain behaviours and responses. This link to general social behaviour means the non-trained individual can participate in a case history and develop shared meaning, shared objects. The case history as a professional tool predominantly uses the vocal gesture, as questions and answers, for delineating the parameters of the sensation, the impulse that sensitized the individual. The case history starts with the initial opening interaction: *"she'd come in wanting to tell me all of that stuff you save that until you come"* (PHD#14). This initial contact or greeting, largely reliant on typification, opens the case history. It establishes the professional interaction and brings the dyad into the present. As the amount of time for the consult is set, the opening needs to move quickly to inquiring about, and developing a perception of the impulse that sensitised the patient to the gestures of the osteopath in the first place: "*how did you go with your last treatment or that sort of thing usually"* (PHD#14). Phronesis is embodied in the interaction as the balancing of the client's needs, with the professional needing to do the things to discharge the professional contract, in a time-limited appointment aiming to define meaning: "*that particular patient will keep talking, and so I do often need to say to her: 'let's talk while we work'"* (PHD#14). The professional contract that underpins the professional interaction is specialised, lop-sided or unbalanced as it focuses on gestures to gather data about one participant with the aim of generating a shared outcome about that individual's sensitizing impulse, as indicated plainly by PHD#9:

> *"Yeah, they're not here to pay me to hear about how my weekend is. So, if I've got something to talk about, I want them to notice themselves over here… you know they shouldn't pay to hear you, you're their practitioner.*

*I don't know much about my GP; I don't know much about my dentists"* (PHD#9).

The clinical thinking or reasoning process as an act has the outcome to delineate meaning for the dyad is described as moving through the stages of perception, manipulation and consummation. In turn these are aligned with the second stage of The Act (Table 7.1) which comprises three parts: (i) perception, (ii) The sensuous character of things and, (iii) The reality of the object in perception (see Chapter 3.3). The process of moving through these stages defined in Table 7.1 occurs in micro and macro cycles represented in Figure 7.8 below. This iterative process is represented by acts such as lines of questioning ruling in our out potential clinical outcomes and is described in detail below. Mead (1938) uses

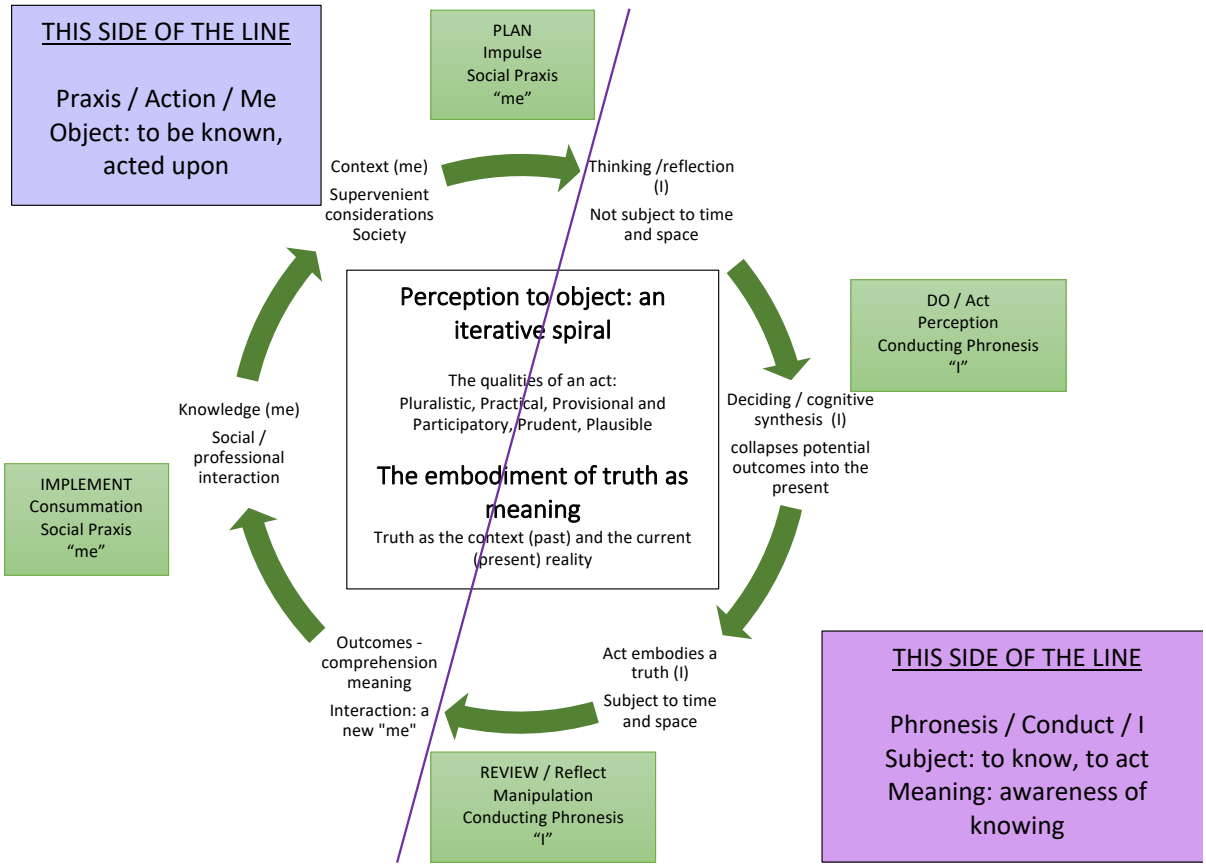


*Figure 7.8 Cognitive synthesis of the "I": Making meaning with Phronesis & Praxis*

'sensuous', found in part (ii) of the second stage of The Act, as to make sense,

have a sense of things, and in a polysemous use of the word, sensuous also refers to the sensory nature of (physical) examination. Truth as the embodiment of meaning (Figure 7.8) refers to a 'Reality' ((iii) of the second stage of The Act) which is about bringing a sense of meaning in that present time, as an in-depth perception for the patient-practitioner dyad.

In this iterative cycling process making meaning is a funnelling of the results of gestures and acts before any object is established, that emerge from the case history as leads and questions for the examination, which in turn helps to delineate the perception as an increasing understanding of the impulse. Gestures lead to acts within the consult, which may lead to significant symbols such as summary statements, other physical acts such as examinations or further questioning. A significant symbol is clearer, more defined and shared by the treatment dyad. Interestingly Mead notes that '*Imagery and meaning are there in the objects as contents, before they become material for the mind, before the mind appears in conduct'* (Mead, 1925, p. 258). Each of these significant symbols is a present truth, incorporating the new data (meaning) into a current truth, to generate an up-to-date or present truth that provides meaning to the perception on the pathway to a sensuous character of things and that contributes to the reality of that present for the treatment dyad.

> *'The significant symbol is nothing but that part of the act which serves as a gesture to call out the other part of the process, the response of the other, in the experience of the form that makes the gesture'* (Mead, 1934/2015, p. 268).

This spiral building process represented in Figures 7.7 & 7.8, is the clinical reasoning of the practitioner that leads The Consult to firm up the perception and develop an object as shared meaning. As PHD#8 indicates "*you don't really know what's going to be uncovered and I think that helps to direct them what it is that you're going to ask and what to focus on…".* She goes on to support the notion that verbal communication is important in establishing the perception and represents the first phase of the consult.

> *"I think it's always good to give people an opportunity just to talk and see what they tell you, because I think patients often don't know what the bit that's important"* (PHD#8).

The case history utilises input from all the senses of the dyad to explore and gather data about the impulse, to delineate a perception of the patient complaint. The history part of case history, refers to its role of incorporating the past into the present with a view to the future as a perception of the impulse. Therefore, the case history provides the dyad the opportunity to access past knowing as the patient medical history, relevant knowledge as techne – technical knowledge and know-how, and episteme as scientific or theoretical knowing (Davis, 1997, p. 189) These knowledges are timeless, stored as theories, facts, skills that exist from the past and in the future, to be examined, utilized and incorporated into the present reality as truths through a case history and clinical thinking. Symbols and objects in a case history are accretive being added to over time, within, and across consults to develop a more in-depth conception of the interaction. The case history records the consult, preserving the meanings made at each interaction to support future action. Over time the repetition of these actions led

to the description of the case history, and '*… the explanation, or statement of the conditions of perception, is in reality a statement of the method of discovering what the actual object of perception is'* (Mead, 1938, p. 10). The vocal gestures of the case history develop a level of meaning that build and funnel the interaction to the examination stage. Delineating a perception allows for the development of symbols or objects as meaning to qualify the examination stage.

> *'Percepts—physical objects—are compounds of the experience of immediate stimulation and the imagery of the response to which this stimulation will lead. The object can be properly stated in terms of conduct'* (Mead, 1912, p. 401).

> *'… another very important phase in the development of the human animal which is perhaps quite as essential as speech for the development of man's peculiar intelligence, and that is the use of the hand for the isolation of physical things. Speech and the hand go along together in the development of the social human being'* (Mead, 1934/2015, p. 237).

In the quote above Mead outlines the import and integrated nature of touch with the vocal gesture in developing meaning. The examination stage is an extension of the vocal case history with a significant physical component. *'As a medium of communication, the affective dimension surpasses the meaning of spoken words'* (Kelly et al., 2018, p. 208). Examinations are designed to capture data about the impulse, qualify the vocal gestures and assist with developing the perception and meaning of the impulse for the patient-practitioner dyad. It is an iterative process (Figure 7.8) that funnels individual perceptions toward a shared meaning. The input from the vocal and physical gestures supports clinical judgment, that then

leads to the development of treatment and management objects. Table 7.1 above coordinates the 'Treatment Acts' (3rd column), with the 'Resultant Themes' (4th column). The case history and examination were structured with discreet timings. However, as indicated by PHD#3 *"I didn't ask that; I'll ask that now",* the conduction of these acts is adaptive to responses, and flexible to the context for each case.

## 7.11 Manipulation – Qualifying meaning

> *'There is in manipulation the greater fineness of discrimination of the tactual surfaces of the hand, the three-dimensional experience which comes from the grasping and, of more critical importance, there is the instrumental nature of the manipulatory experience. This instrumental nature involves the act to a temporary pause. It does not go through to its consummation at once. … The arrest affords the opportunity for competing tendencies to response to arise within the act'* (Mead, 1938, p. 24).

A spatiotemporal distance exists between the perception and the consummation of meaning, represented by the arrows in Figure 7.7 above. *'Thought differs from raw sensations in that it cannot be immediate'* (Olshewsky, 1983, p. 201). This distance recognises the provisional and fallible nature; the nearly right or nearly wrong of 'fuzzy logic'; the gut feeling; the notion that the decision, the emergent nature of the object as meaning or truth, is in transit, that life goes on while it is coming. The case history, utilises this distance and it is a strategy to continue the inquiry process, as understanding about the presenting impulse emerges. Decision moments represent meaning in the consult and occur with *"a natural*

*evolution in terms of the time in the treatment"* (PHD#2). *Verification* is a tool of the Manipulation stage (Table 7.1) to account for undeveloped meaning perceived via gestures and symbols, through a process of manipulation. Manipulation using *Verification* as a tool may use any sense – the toing and froing of vocal, visual and physical gestures: a check, a touch, a sniff, re-doing an examination, a question, a test, to qualify, confirm and correlate in a structured, deliberate, conscious professional manner the undeveloped perceptions, shared meaning or nascent truth already delineated, because *'verification and meaning are not of an individual nature*' (Strong, 1939, p. 74). Therefore, perceived meaning evolves toward an object through questions – answers and actions – reactions, occurring in multi-amplitude wave cycles that allow time to funnel the dyad toward the *'reality of the object in perception'* (Mead, 1938, p. 12). In focussing on the shared meaning, the Manipulative stage moves the emphasis from the person who experienced the initiating impulse to a focus on the emerging meaning for the dyad. It is a step towards meaning, to an object, to the abstract. *"I'm very open to changing my diagnosis. I am seeing her again quite soon, and if I need to, the diagnosis will change accordingly"* (PHD#8). This is '*the framework within which objects of perception arise and this conduct is in so far responsible for the organization of our physical world'* (Mead, 1912, p. 401).

In the osteopathic interaction physical gestures are a key extension of communication, to the dominance of the vocal gesture noted by Mead. The physical body communicates what is going on in the thinking of an individual through ideomotion, which is *'"the sequence of movement upon the mere thought*

*of it"* (William James cited by Shin et al., 2010, p. 944). The to and fro of unconscious physical communication is described in the following:

> *'If one picks up a little child who has fallen, he adapts his arms and attitude to the attitude of the child, and the child adapts himself to the attitude of the other; or in boxing or fencing one responds to stimulus of the other, by acquired physiological adjustment'* (Mead, 1925, p. 263)

Physical 'listening' or palpatory feedback of the tissues can 'hear' and respond to ideomotion. When touching someone the toucher is also being touched, it is no surprise then that the theme: *Communication: Connecting to the wonder, the passion, the nature of the whole person* includes the words wonder, passion and nature, when it connects through the whole social behaviour, as well as providing direct therapeutic benefit.

*'Our conduct in movement and manipulation, with its stimulations and responses'* (Mead, 1912, p. 401) is a general approach in qualifying meaning used in all instances where there is an impulse that needs delineating and qualifying. It is broad allowing for adjustment to the different patterns, the sensitivities and proclivities of those in the dyad. And it is narrow, used in a single question cycle, where for example, a patient is putting on a brave face and the clinician verifies their clinical question about the pain through palpatory feedback and the sensation perceived in the patient's body is different to the vocal gesture. Such mis-match alerts the clinician to further questioning or some other action. In this manner the interaction evolves toward a '*sensuous character of things'* (Mead, 1938, p. 10), that is both physical and conceptual. PHD#2 describes the progress: "*I am familiar with him, and familiar with the treatments we have done in the past.*

*I know what I need to ask about and we'd asked about that and then, it's just time to do the examination"* (PHD#2).

Manipulation as the qualifying of meaning pertaining to the initiating impulse impacts the stages of the act, through gestures and acts to support the best, most wise decision. In this manner verifications become data that buttress the significance of the dubious certainty of objects and symbols. At some stage a shared physical and conceptual meaning emerges and the manipulated perceptions as underdeveloped objects are aligned and condensed into a perceived or arguable relationship to the impulse, to construct the case, so that the dyad can be assured that they can be an object or symbol upon which to consummate the act. Decisions as acts collapse the spatiotemporal gap, the reflections and thinking options, into an act and lead to the stage of consummation. That which emerges from the manipulative process, a description, decision or definition informs the *Consummation* stage (Table 7.1 & Figure 7.7) as meaning to develop the treatment plan - the *Outcome*. A "*working diagnosis"* (PHD#2, 8 & 13) as a significant symbol represents meaning emerging on the path towards the *Outcome*, towards the development of meaning of the sensitizing impulse.

> *"I guess you start to feel with most patients when you're taking the case history, you start to get a few possible diagnoses in your head and you just think: ok well now, you know get onto the phys exam and try to rule in or out, you know, to come to a working diagnosis"* (PHD#2).

## 7.12 Consummation – Actioning meaning

> '*Want, interest, and satisfaction – each implies the entire process and embodies it in a particular phase. In this respect they are not composite parts of the whole process. In experience, as in life as an entity, the whole is given in the part. In contrast with this, in a mechanism the whole arises out of its parts'* (Mead, 1938, p. 452).

Both parties in the dyad have expected outcomes that need to be negotiated and defined within the context of the dyad. Outcomes are pluralistic because multiple 'betters' exist that are ideal or otherwise. A successful consummation provides positive adjectives and meets the following criteria as practices of the practitioner: Practical, professional, scientific, commercial, ethical and moral (Frank cited in Kinsella & Pitman, 2012, p. 4). An unsuccessful consummation leads to negative adjectives and subsequent supporting acts such as complaints, refunds or other acts of reconciliation. A positive outcome for the patient is summed up as 'feeling better', a sensation resulting from satisfaction with the process, a meeting of the patient's wants, from managing uncertainty about the impulse, from a change, a reversibility, a feeling of less pain or greater movement. The practitioner also has an expected outcome that when positive is satisfactory and prudent, ensuring the continuation of the professional relationship.

> *"I've always had this idea that, I'm treating a patient, I know that I make a living off treating patients. So I know that it's important for me to, you know, see that patient again, to get a referral from that patient cos that helps me have a job. Which can be conflicting at times"* (PHD#13).

A person attends an appointment with a conception of their problem, but meaning is not developed until a shared understanding emerges and is consummated by the dyad. *Consummation* has two parts, the first is derived from the interaction of the treatment dyad represented by the culmination of action to satisfy the original impulse with the emergence of the 'diagnosis' as the *Outcome* of meaning (Table 7.1), codified from a perception that has been through *Verification* and Manipulation. The second part is the *Outcome* as an action arising from to the diagnosis is the *Negotiated* treatment plan and management plan and its success or otherwise, represented as a truth, as satisfaction, "*therapeutic change"* (PHD#8), "*all total body ease"* (PHD#14). The success of the diagnosis will be verified by the outcome of the treatment and management, as noted by PHD#3 *"treat, reassess, move on or treat".* This statement also alludes to the iterative nature of the consult process with the use of significant symbols and acts as treatments and reassessment of these through gestures and acts to inform emergent meaning.

> *'The process of knowing consists in co-ordinating perspectives. The objects of knowledge, as Mead views them, are universals that have their source in common perspectives which are arrived at through the process of emergence' (Strong, 1939, p. 74).*

The initial definition of diagnosis from the Merriam Webster dictionary is 'the art or act of identifying a disease from its signs and symptoms'. The diagnosis as shared meaning developed by the treatment dyad becomes a socially constructed object that can be shared, written down, stored and reused. It becomes a generalised condition, an abstraction belonging to the other that

represents a knowledge or truth developed from the past to be used for the future, for example the International Classification of Disease (ICD) (World Health Organization (WHO), 2020). The further definition of diagnosis by the Merriam Webster dictionary is more appropriate to osteopathic practice outside of the USA: the 'investigation or analysis of the cause or nature of a condition, situation, or problem'. Patients may present to an osteopath with muscular pain that appears low-risk, but represents a high-risk disease, hence the training as primary care practitioners and the awareness of risk. Diagnosis is more than risk or an abstract disease, it *'is a content of an object which is dependent upon the relation of an organism or group of organisms to it*' (Mead, 1934/2015, p. 80). All of the participants in this project were asked to provide a diagnosis for their patients, summarised in Table 6.5.

> *'And these happenings should so fit into our experimental findings that they may find their reality in the concretion of what is taking place in an actual present'* (Mead, 1959, p. 21).

Osteopathy is part of a group of health practices that qualifies the diagnosis and then enacts the treatment by the same practitioner. In 14 of the 15 interviews the diagnosis and treatment / management were delivered by the one practitioner. In the one that didn't, a portion of the treatment was delivered by a different person under instruction from the primary practitioner. As such the diagnosis becomes the basis for the sub themes *Stratagems for delivering technique* and *Manual technique delivery and proficiency* in the negotiation of the treatment and management process and subject to what the dyad feels is achievable within the nature of the diagnosis, their expectations, the time, practitioner skills and

condition of the client. This is in contrast to other groups like medical practitioners whom through a prescription rely on the patient to manage the time to collect and deliver the treatment or another group like surgeons where a team is generally involved in delivering the treatment. In all cases the diagnosis is the object upon which the cycle of the act continues, '*action in turn is tested through action, thus bringing about consummation'* (Strong, 1939, p. 72). In this sense the two parts of the *Consummation* stage represent the basis for negotiating ongoing action as the diagnosis, as the emergent meaning of the originating impulse, and then the treatment and management plan as the approach to resolve the impulse.

> *'And they are consummatory because power relations promote communication, a "sharing in the objects and acts precious to a community, a sharing whereby meanings are enhanced, deepened and solidified in the sense of communion"'* (Dewey cited in Wolfe, 2012, p. 12)

> *"I'm reassessing my diagnosis during the treatment process. I'm also trying to assess when I'm doing a technique whether the body is liking what I'm doing and whether that is the right selection of technique for that person on that particular day. And it always changes"* (PHD#5).

*Consummation* is both the final stage in the cycle of the Act and the start of the next cycle. The *Consummation* stage is also subject to *Verification.* The 'treatment plan' emerges from the 'working diagnosis' and must be plausible, because the negotiated outcome must be believable, doable and achievable or realistic for the given situation. In this sense both are provisional truths for the dyad that are tested or verified over time through feedback and adapted as necessary. *'Truth is perspectival for Mead; the environment and the experiencing*

*organism constitute a mutually dependent perspective. Second, the test of truth occurs when a perspective can be sustained'* (Johnson & Shifflett, 1981, p. 152). The Outcome as meaning is analogous with truth as the cash value, as being directly applicable for a practical outcome like osteopathic practice. Truth is inherent to the meaning of the word practical, as useful manifested in action, not theoretical or ideal.

> *'within any perspective what has passed cannot recur. In that perspective what has happened has happened, and any theory that is presented must make room for that order in that perspective' (Mead, 1959, p. 13).*

## SECTION 4 Phronesis: The pub test

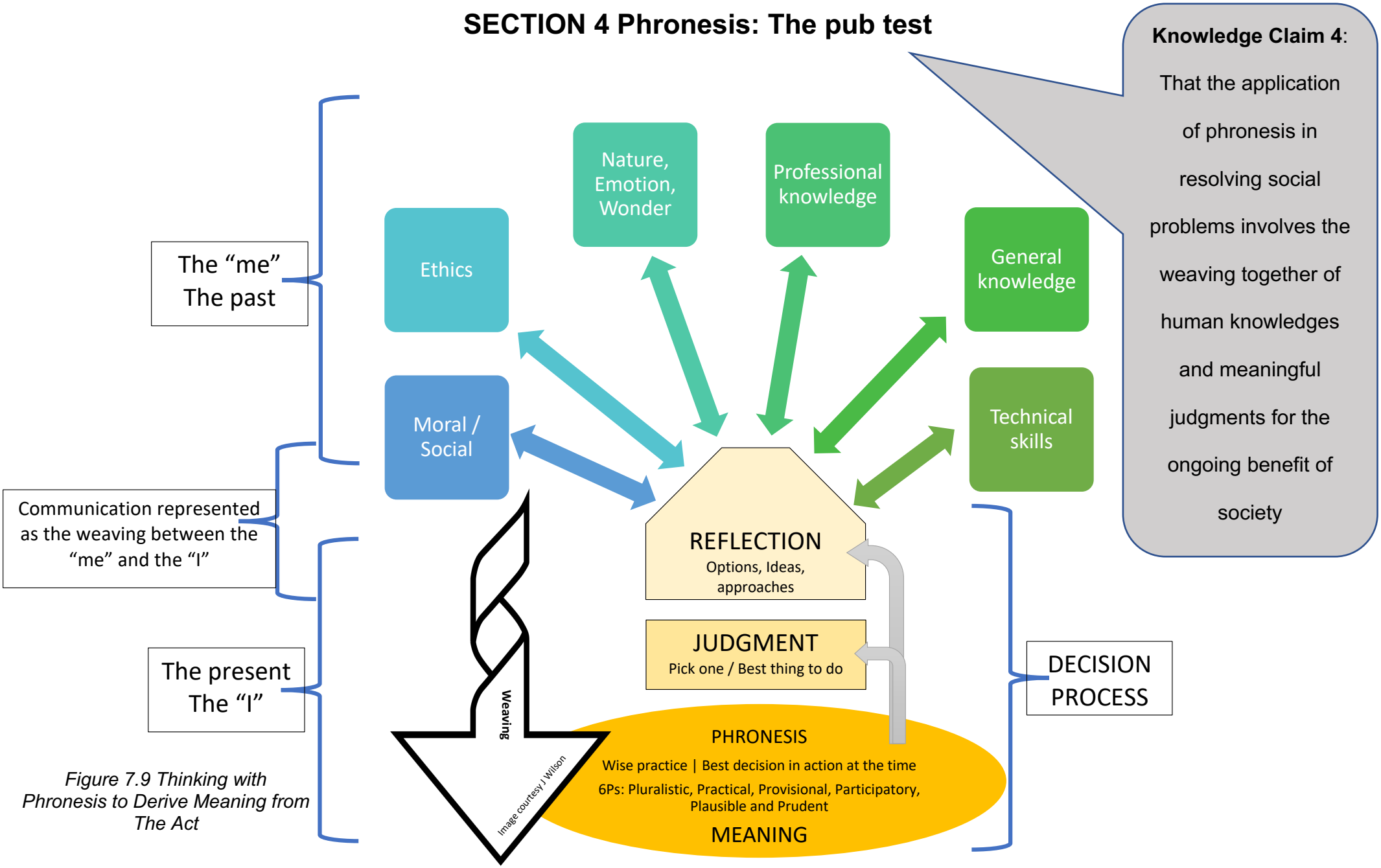


*Figure 7.9 Thinking with Phronesis to Derive Meaning from The Act*

Pragmatism hinges on the outcome or consummation of an act, which for a professional consult is measured as some form of satisfaction negotiated within the dyad. The resultant satisfaction is contingent upon *verification* by the dyad as agreement or disagreement, that is the consult is subject to usefulness or validity - 'the pub test', as a measure of success. The 'pub test' is a modern metaphor for James's (1995, p. 77) '*cash value*'. Not only must the emergent meaning meet the test of the dyad it must also meet a broader test of meaning as bound to the social activity – in this case the professional consult. Meeting the pub test successfully is phronesis in action, as wise practice. It is the bridging of the theory-practice gap. What does it take to get to the end of a consult and achieve a useful level of satisfaction in a fixed time? How does a professional meet all the requirements, the vagaries of dealing with the interactions of different individuals and all the complexities of a professional relationship? This is the very definition of phronesis. Not all dictionaries have a definition of the old Greek word phronesis, which is of interest to health profession philosophers because it describes practical wisdom. Dictionary.com defines phronesis as 'wisdom in determining ends and the means of attaining them' which is particularly pertinent to a professional consult. Phronesis as wise action, is conceived as the referee, the filter of cognitive ability that oversees the conduct of the professional interaction. How far does the clinician go to verify an uncertainty? When does the clinician follow a hunch or ignore one? How should a question be phrased to obtain the best response? What is the best balance of open and closed questions? What and how should evidence be included in the case? These and many more judgments are made to carefully guide a professional consult. These

judgments are managed by phronesis through reflection and reasoning of the "I" to guide the praxis of the "me" and apply prudence to the consult.

Reflection and reasoning, the thinking-reflective process of the "I", are two key tools of phronesis to manage the consentient set of things that make the professional "me", with the things that make a patient "me" of the patient-practitioner dyad. Phronesis applies reflection and judgment woven together in the mind of the clinician (Figure 7.9) to produce summary outcomes: *"that led me to think that it was potentially a facet sprain"* (PHD#13). It is the "I" that recognises (or not) the boundary, considers the impulses, and then modifies the response through the "me" in line with the social professional contract. It is the "I" that continually weaves together the theory, ethical, moral (social) and professional knowledge and skills and through the praxis of the "me" converts these into the most prudent and wise acts of professional practice in the present time (Figure 7.9). Phronesis is in continual action throughout the consult (Table 7.1) as gestures that conclude a line of questioning, the decision to conduct one examination over another in response to vocal gestures, and guiding the emergence of significant symbols: *"But as always that is a working diagnosis" (*PHD#13), and the emergence of objects such as the treatment plan.

> *'Clinical decisions are made about an individual suffering person, but informed from knowledge of suffering people in general. In turn, knowledge of suffering people is derived from:*
>
> - *similar clinical experiences of other individuals, but who experienced their suffering in different contexts;*

- *changing medical knowledge about health and disease that is developing and being added to at a fast rate'* (Tyreman, 2000, p. 119).

Reflection, from reflect is Latin 'to bend', used in the sense of a person stopping thinking about other things, to look back, like in a mirror, and consider their own past actions. Phronesis, through the "I", watches the flow of praxis reviewing and questioning the acts of the "me". Phronesis using reflection and reasoning, reviews and compares the actions of the "me" against known expectations. Thus a person *'requires knowledge of and familiarity with the values and practice mores of a profession and involves making moral judgements, i.e., judgements based (in part) on the values of a profession'* (Tyreman, 2000, p. 120).

A professional is expected to reflect: "*I constantly reflect on my practice*" (PHD#11). Reflection '*is a carved-out space in which we ask ourselves what we're doing, and* ***who*** *is doing the things that seem to be getting done* (Frank cited in Kinsella & Pitman, 2012, p. 54, emphasis in original). Kinsella and Pitman (2012) describe a continuum between pre-reflective, reflective and reflexive experience. These different types of reflection are '*iterative and dynamic*', acting in '*an interminable dialogic praxis*' (Kinsella & Pitman, 2012, p. 46). This means a practitioner can reflect on the nature of the total interaction in the dyad – that is client, profession and society, using '*reflective monitoring'* to provide a form of professional '*self-control as the standards by which individuals regulate their actions direct their participation*' (Wolfe, 2012, p. 8)

> *'The individual is held accountable for what he has done in order that he may be responsive in what he is going to do. Gradually persons learn [...]*

> *to hold themselves accountable, and liability becomes a voluntary deliberate acknowledgment that deeds are our own, that their consequences come from us'* (Dewey cited in Wolfe, 2012, p. 8) .

Phronesis interrupts praxis of the "me" due to an unexpected pattern or a '*lack of adjustment'* (Mead, 1938, p. 6) to reflect, to institute the thinking acts of reflection-on-action and reflection-in-action within clinical reasoning. Phronesis aligns with Schön's reflection-in-action where '*competent practitioners conduct on-the-spot experiments'* (E. A. Kinsella cited in Kinsella & Pitman, 2012, pp. 38-39). The vocal-auditory process (and other sense circuits) supports reflection-in-action, where the "I" recognises patterns almost instantly from memory, as intuition or a gut instinct that emerges through Type 1 reasoning. The practitioner ideally then questions the pattern as practical, plausible or prudent: does it equate to the situation? The "I" utilises the Type 2 deductive processes to assess both Type 1 responses and also to develop Type 2 responses by empirically assessing the clinical data against the criteria of the aim or expected outcome. An example is an act described by PHD#2 as "*a little bit of a joint play, a little bit of a tissue texture, a bit of a fascial indicator"* and referred to by the researcher as '*the wobble'* (PHD#2 & 3) for its action. This 'wobble', through the palpatory touch sense circuit, was used to verify the tension in the patient's tissues, with PHD#2 using *the wobble* "*like, other motion testing looking for asymmetry or any area that is resistant to that, you know, rhythmic wobble"*. The clinician intuitively compares the response from *the wobble* to verify that expected from the client, "*always looking for that complete entirety of assessment through the body"* (PHD#2), as well as against the known library of expected tissue tensions, to

verify the clinical actions that have occurred in the consult to that time. In the final phase of reflective practice, described further below, PHD#2 "*would install that into my brain for, you know, something that would, could benefit from treatment of some kind to try to restore, that even elastic feeling".*

*Verification* supports reflection-in-action, as the professional through phronesis is attuned to recognize patient personal variations and traits, and adapt the interaction to take account of these. Acting through the "I", the progression of the consult is lubricated by the gestures and acts, the regular updates that allow a clinician to adjust or manipulate the conduct in the present. *Verification* as input comes from the response to a checking-in question like: How are you feeling? These questions represent the "I" reflecting on the actions of the "me": comparing the expected tissue tension, assessing expected tenderness with a technique and comfort with the situation are all verifications that support the individualization of the consult, and allow for the adaptive gestures and acts in the conduct of the consult. Such gestures include: minor adjustments to make a hand grip gentler, draping for warmth, adapting to an unscheduled toilet break and modifying behaviour to situational preferences.

> *"Also getting reports from the patient: is that still painful, does that, has that changed? Are you getting any weird symptoms? But I guess that is me shifting my focus to again, questioning and getting information. So that's probably more a palpatory sense. Sometimes as well it's a bit of time sense. I've spent three minutes on doing this technique, it's done a bit, but there's other stuff I need to do and I've got a client in ten minutes time"* (PHD#3).

Reflection-on-action is also a tool of phronesis as wise action, as it supports the "I" in considering the past, present and future. Reflection-on-action is the review, the analysis of the actions of the "me": actions that occurred from the decisions made by the "I"; responses from the client and impulses from the practitioner such as surprise or fear. Reflection is the "I" making sure that the professional actions of the "me" include the supervenient requirements of practice, for example past knowledge of the case, relevant archived theoretical knowledge and power relationships. For example, when referring to the opening social interaction PHD#8 says: *"Yes, I don't like to blur that too much, because I want to be really clear in myself, that I'm clinically being, not only appropriate, but really making sure that I have a clear working diagnosis*" (PHD#8).

Reflection in socially contrived roles like patient and professional, is supported through the vocal-auditory process as it allows the "I" to reflect in and on the "me", to manipulate and enact the conception of the self. Becoming an object to oneself allows for an individual to qualify, to verify their "me", their meaning with that which is being shared. It is through the vocal-auditory process, and in osteopathy also touch, the "me" acting as a patient becomes 'an object to themselves'. A participant *'can take his response to pieces and present it to himself as a set of different things he can do under conditions more or less controllable. The process of communication simply puts the intelligence of the individual at his own disposal*' (Mead, 1934/2015, p. 243). Therefore, a patient from both a societal and specific professional context, through their "me", can respond to the clinician's gestures, report sensations related to the initiating impulse, cooperate with completing

examinations and consent to treatment techniques when asked. In this manner the vocal-auditory process and other sense circuits, help to close the spatiotemporal gap, as it helps the individual adjust to a concept as meaning emerging from the interaction. An action exemplified by the practitioner: *"And, that bit where I am explaining it, I just think that's crucial for a patient explaining what you are doing"* (PHD#13). The practitioner as an object to themselves, reviews the actions of their "me" through their "I". Phronesis through the "I" makes sure that the acts implemented by the "me" in Social Praxis meet the expectations of the "I", producing a recursive or circular function that conditions and informs the professional acts. By monitoring the interaction with their self and others, not only can the practitioner review their practice, they can also look after themselves in their job and manage their strengths and weaknesses. Such reflections look like: *"I am still grasping and struggling"* (PHD#13), whilst another can "*miss things"* (PHD#10) recognizing their scope of practice.

The outcome of reflective interaction of the "I" reflecting on acts within the dyad as meaning, is represented through updates to the professional / patient conception "me". This conception is seen as acts represented through strategies and practices in the defined professional group and the abstract patient group. These reflective outcomes impact the role of the patient and they also become the traits, peculiarities and quirks that characterise or differentiate a profession. In the case of a patient, the strategies are less structured with some professional groups, like paramedicine, producing a patient charter that outlines expectations for the interaction of the dyad. For professions like osteopathy reflection is expected, with the conception of the professional enacted by the regulator from

the beginning by registering enrolled students in osteopathy (AHPRA, 2020c) to expecting a professional practitioner to continue learning that is part prescribed and in-part chosen through practitioner reflection. The cyclical nature of reflective practice is outlined in Figure 7.8 above as an action spiral coordinated with the stages of the act:

> *'The rational attitude which characterizes the human being is, then, the relationship of the whole process in which the individual is engaged to himself as reflected in his assumption of the organized roles of the others in stimulating himself to his response'* (Mead, 1938, p. 445).

Phronesis recognises that decision-making requires time to complete – the combining of what is known, with what is happening into a judgment of what might be. Phronesis uses clinical thinking, as clinical reasoning which utilises day-to-day thinking processes augmented by training, as a professional act that combines past, present and future to define meaning in the patient-practitioner dyad. The practitioner uses gestures, symbols and objects from the patient combined with practitioner knowledges, to define the perception of the impulse that made the individual a patient. It is complex because it processes multiple gestures from multiple sources at differing time rates, with the interaction required to reach a significant symbol in a limited time. Clinical reasoning as a universal process is perhaps best conceived through *'cognitive continuum theory'* with reasoning occurs in a continual iterative spiral (Figure 7.8) supporting a *'quasirational'* approach (Custers, 2013, p. 1075) designed to respond to the initial stimulus (problem) in an individual, and *individualized* through the conducted acts of the practitioner. Such gestures and acts are coordinated,

coloured by phronesis as adaptions, start and ending, choice of words, and much more.

> *'… the beginning of the act of one is a stimulus to the other to respond in a certain way, while the beginning of this response becomes again a stimulus to the first to adjust his action to the oncoming response. Such is the preparation for the completed act and ultimately leads up to the conduct which is the outcome of this preparation*' (Mead, 1934/2015, p. 145).

System 1 thinking is the predominant thinking process with our impulses generated automatically and continually monitored (Kahneman, 2013). The system 1 thinking that is 'clinical thinking' is operationalized early on and as a spiral is conducted continuously (Figure 7.8), initially to identify variables and patterns noted within the abstract social group. The Respondents are making decisions in response to gestures and symbols with the patients throughout the consult. These two processes interweave as described to make phronesis (Figure 7.9). An example of phronesis, and of the continual monitoring of system 1 by the "I" (system 2) is with the management of risk. High risk is the chance of irreversible injury happening within an imminent timeline: an immediate future of hours, days or perhaps weeks. Judgments pertaining to risk are continual, concurrent and consecutive, with the Respondents continually sensitive to gestures indicative of pathology described by 'red flag' as a metaphor for danger. Phronesis responds to the "*prioritising"* (PHD#4) of clinician thinking particularly when emergent and unclear, and the underlying question: "*am I safe to treat this person?"* (PHD#8). Red flags as significant symbols of pathology, *'are simply*

*ways of calling out responses'* (Mead, 1934/2015, p. 268), that are informed by reasoning and reflection but directed by phronesis. Phronesis demonstrates *'a relation between a highly developed physiological organism and an object, or an environment in which selection emphasizes certain elements*' (Mead, 1938, p. 8).

## 7.13 The 6 Ps – tools for thinking

A conception of practice embraces how a practitioner completes their practice. Table 7.2 below provides examples of practice related to meaning in the stages of the act. These practices are then representative of the profession, because '*taking any institutionalized attitude he organizes in some degree the whole social process, in proportion as he is a complete self*' (Mead, 1934/2015, p. 264).

| | **Case Framework and The Consult**<br>**A cognitive synthesis of praxis and phronesis** | | |
|---|---|---|---|
| **The Interaction** | The Impulse | Making Meaning | The Other |
| **The Consult** | Acts for Delineating | Acts for Qualifying | Acts for Actioning |
| **Gestures** | Vocal gestures: greeting, questions & answers, instructions: lie on your back | Verify hunches from case history: Palpation of tissue tension, or confirm painful area | Prudent \| Provisional: rule in and out individual questions, examinations, techniques |
| **Significant Symbols** | Fuzzy stage, not decided. Symbols provide basis to move on to examination. Does this hurt? What is the range, intensity? | Rule nascent ideas in and out. Groups of exams for regions, structures. Segments of case history or exam i.e., past health or abdominal exam | Practical \| Pluralistic: Groups of techniques with contributory goal - Working diagnosis as thesis |
| **Objects** | Consent and Risk identified and resolved to conduct consult. Significant objects that are required for next act | At a level to progress safely & ethically to treatment. A diagnosis | Participatory \| Plausible: Treatment plan – agreed manual intervention, exercises, home considerations |
| **Each organism in the professional behaviour is developing meaning through their own physiological systems in their own time.** | | | |

**Phronesis is a mental act expressed through actions in the consult to develop meaning**

*Table 7.2 Phronesis in action leading to meaning*

Pragmatism derives meaning from the outcome of the act; therefore, a conception of practice must lead to acts for meaning to emerge, to be useful. In the case of 'A Pragmatist Model of Osteopathic Practice', the conception presented in Figure 7.1 and summarised in Table 7.3 describes the practice and theory of osteopathy and presents the 6 Ps: Pluralistic, Practical, Provisional, Participatory, Plausible and Prudent as guiding codes or tools to assist thinking and reflection of the "I". The 6 Ps do not all work in the same magnitude at any one time, but they feature in a constant cycle of application dependent upon the clinical thinking associated with the consult (Figure 7.9). A practitioner uses the 6 Ps to form questions, for reflective practice, about the act itself, that the "I" can frame in relationship to judgments to be enacted: Are the acts that make up my practice participatory, plausible, pluralistic, practical, provisional and prudent? The 6 Ps emerged from the four supplied by Brendel (2004) (Practical, Pluralistic, Participatory & Provisional. See Chapter 3.3), with the two additional P's emerging from this research. The first addition is Plausible, where the approach to the patient and the therapy must be believable by the dyad. The second new P is Prudent. Prudence is a term synonymous with, or representative of, phronesis. In this case it is used to describe sustainable sensible moderate ethical and safe practice with the patient. Significant symbols such as a 'working diagnosis' are enacted by phronesis and assessed to meet the criterion of the 6 Ps. A 'working diagnosis' considers pluralistic nature of the dyad and it is

provisional subject to revision on the basis of additional data. The 'working diagnosis' emerges from participation within the dyad supporting plausibility.

The 6 Ps are codes of phronesis or wise action, that through the eight resultant knowledge themes of this research support the acts and gestures that contribute to the objects of professional behaviour (see Table 7.2). For example, PHD#12 moved his patient to another room so she could change and not have this act captured on video. This is an example of phronesis combining Social Praxis as *Practitionership* to meet his professional obligations and *Individualizing* for the unusual situation of participating in a research project whilst still conducting the consult. The "I" reflecting guides the "me" to ensure that the examination is conducted 'professionally', meeting the needs of all involved in this unusual situation. Phronesis allows for the potential of disputes, indeterminism or fallibility, it considers the options (Figure 7.9) and then produces an act as a decision. Producing an act is akin to the nature of an electron being determined by the observer – Heisinger's 'Principle of Uncertainty'. Phronesis is the "I" deciding when the measurement and in what context it is done by the "me". This process embraces and then resolves the fallibility with verification and the reflective process supporting the emergent meaning. The actual principle of uncertainty relates to the prediction of the position of an electron and how it is calculated in space. What is important is that as a general concept defining the position of an electron describes a general theory of decision-making. It resolves the electron into emergent meaning as a position or direction, much as Pragmatism views meaning as emerging from the act, supporting Pragmatism as a "philosophy of everything".

*'To be in a superposition state means that all possible measurement values have some potential for being expressed at each moment. The potentials can interfere with each other—like wave interference—to change the final observed measurement value. The concept provides an intrinsic representation of the conflict, ambiguity, or uncertainty that people experience' (Busemeyer & Wang, 2015, p. 164).*

<table>
<tr><th colspan="2">A Pragmatist Model of Osteopathic Practice</th></tr>
<tr><td colspan="2">PRAGMATISM:<br>An act is accompanied by a decision. A decision is foreshadowed by thinking. Thoughts are not exposed to the same time and space relationship. Truth is an outcome of the birth of the act. Truth is context, knowledge and reality. The process is cyclical.<br>A practice is phronesis and praxis. Praxis being the outcome of the decision and phronesis being that which occurs within the individual to lead to the act</td></tr>
<tr><td>Praxis (action)<br>The "me" acts<br>Time – past / future<br>Acts to support problem solving<br>These things involve the other</td><td>Phronesis (conduct)<br>The "I" reflects<br>Time in the present<br>Acts to conduct problem solving<br>These things involve the self</td></tr>
<tr><td>Things 'praxis' that directly support the osteopathy contention – physical things, processes like timing and certain knowledges</td><td>The application of phronesis or clinical wisdom develops praxis. This is where the patient will experience the osteopath and from this develop their truth or knowing</td></tr>
<tr><th colspan="2">The resulting themes</th></tr>
<tr><td>Practitionership: The Professional Practitioner Context is Intrinsic to the Consult</td><td>Clinical Reasoning and Judgment are Critical to Practice: They are Continuous</td></tr>
<tr><td>Manual Technique Proficiency and Delivery</td><td rowspan="2">Verification: Knowing of the Case in the Present</td></tr>
<tr><td>Communicating: Connecting to the Wonder, the Passion, the Nature of the Whole Person</td></tr>
<tr><td>Individualizing the Interaction with the Patient Develops Comfort, which Leads to Trust - The Foundation of the Consult</td><td rowspan="2">An Outcome Is Expected, Negotiated and Enacted as the Plan.</td></tr>
<tr><td>Holistic Biomechanics</td></tr>
<tr><th colspan="2">Qualities</th></tr>
<tr><td>Social Praxis – the acts required to connect with the client in the osteopathic context<br>Is a truth<br>Is something to be done<br>Can be stored away<br>Is written down/recorded<br>Can be shared and communicated<br>May not lead to a subsequent outcome</td><td>The Consult - knowing the case. To apply appropriate knowledge, to execute the correct acts, to achieve a negotiated outcome, to verify the case. Becomes a truth. Leads to an outcome<br>Happens in the moment / Present time: may be temporary or momentary in action<br>Requires decision in context with the left column.</td></tr>
<tr><th colspan="2">The 6 Ps</th></tr>
<tr><td colspan="2">Pluralism: a clinician has an array of explanations;<br>Participatory: the meaningful participation of the patient in treatment planning;<br>Practical: a sensible, appropriate approach to patients with a suitable argument;<br>Provisional: clinical practice is imprecise. Knowledge in health practice is expanding with more explanations to old problems and exploring the new;<br>Plausible: the approach to the patient and the therapy must be believable by the dyad;<br>Prudent: Wise, safe and ethical practice.</td></tr>
<tr><td colspan="2">*Table 7.3 Summary of A Pragmatist Model of Osteopathic Practice*</td></tr>
</table>

# Chapter 8 Concluding thoughts

As I reach the consummation of this research act, it is time to reflect on the aims and whether the impulse that triggered the research was settled satisfactorily. It was in my mind at the beginning to describe what an osteopath is. I had a notion that there was a description of an ideal osteopath, a generalisation which in essence translates as single truth of what an osteopath is. If there is one thing that I learned from this process is that this cannot be so. Did I achieve what I aimed to do? The short answer is a resounding yes! But it was not the outcome I anticipated. In extending my thoughts about this project the first part of this chapter will consider the research aims and questions (Figure 8.1). The second part will consider the broad issues raised, what is unresolved and where the study might go next. Finally, I will outline a reflection on my journey, the bricolage and how it has impacted my practice.

> '*We are always obliged to act in any case; our actions and with them their consequences actually change according to the beliefs which we have chosen'* (Thayer, 1982, p. 31)

## 8.1 Research aims and questions

1. *To analyse the research data that define clinical practice, utilising the concept of phronesis and its connection to human well-being and contribution to health of society*.
    - *What are the acts that constitute osteopathic clinical practice?*

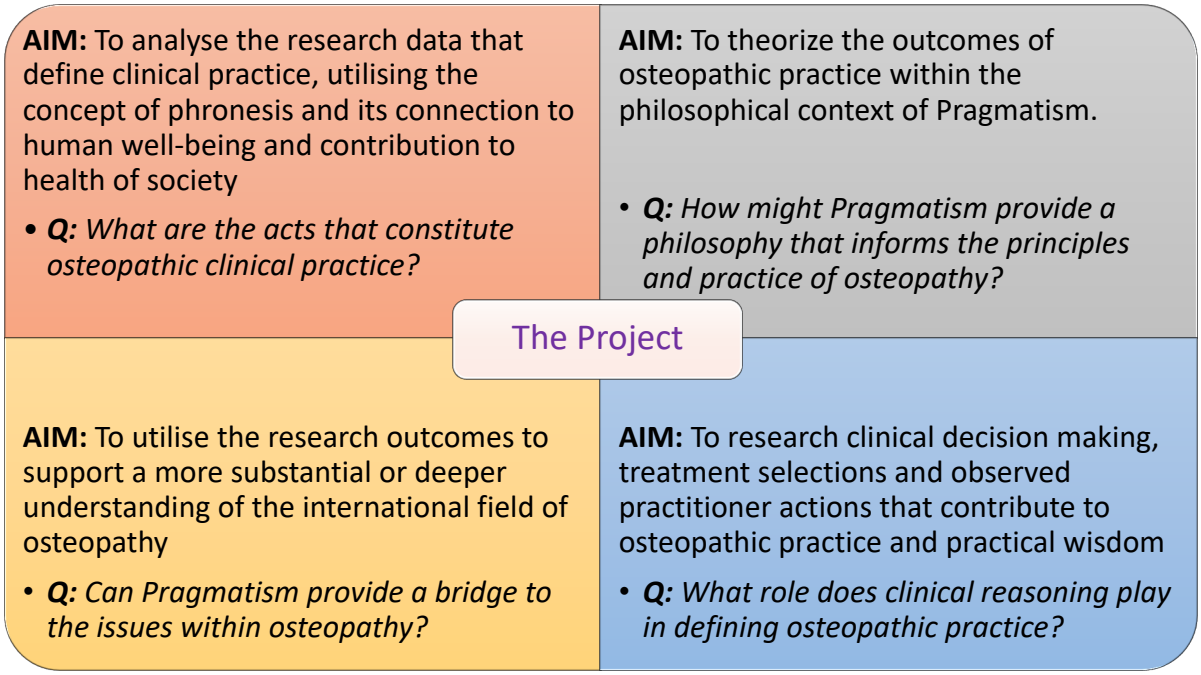


*Table 8.1 Project aims and research questions*

The research data that is used in this research to define clinical practice arose from fifteen interviews of osteopaths observed on video that were transcribed, analysed with themes emerging from this analysis. These themes were pooled and further analysed. Through this analytic process eight knowledge themes emerged and these were used to construct a concept of osteopathic clinical practice. A diagram was constructed to represent a conception of osteopathic practice: 'A pragmatist model of osteopathic practice' (Figure 7.1). I have every confidence that the analysis provides a fair representation of the data. I am also confident that if I or another repeated the analysis, there would be variation in the outcome. Fortunately, I feel that the conception as the three elements of this model: 'A framework for osteopathic epistemic practices'; 'Social Praxis: The "me"' and 'Conducting Phronesis in the Consult: The "I"', are relevant enough to provide a conception for another profession, to other practice scenarios. This is because the concept is a generalization, an abstraction about a profession.

Addressing fields of knowledge outside of osteopathy was not conceptualised initially for this research. However, as this research progressed, I recognised the potential that some elements of this research might support others with their professional practice. Professions are a generalization about a group who share particular knowledge that they are presenting to help society function in return to support them with their livelihood. Whilst the knowledge themes would be different for another profession it is arguable that all professions have to deal with society represented as social praxis, as that is the raison d'être for a profession. Secondly all professions have to conduct their practice and whilst no doubt each profession has a consult structure, there is still the requirement for phronesis to meet the '*swampy lowlands*' (Schön, 1983, p. 42) that are where uncertainty lives and boundaries are met. After all, consulting is using tools and knowing from the past to apply to the present to make a difference, which means the future.

Generalizations as inferences from specific cases, or an abstraction as an idea or a consideration independent of associations or attributes, such as descriptors, labels, names and taxonomies are epistemological tools for managing data and knowledge. Dewey refers to language as the first generalization '*thinking takes place in terms of universals*' (Mead, 1935, p. 77). In essence once you apply a label it is a code, a grouping or a generalization. Generalizations occur so that humans can manage the world and the volume of data and decisions that are required. Generalizations as patterns are a time saving and energy saving process. They allow for the use of symbols and objects in communicative gestures without all the associated baggage tied up in attributes and

associations. Taxonomies allow for comparisons, measures and the ability to address a profession with general strategies for training and interaction with some stakeholders at a societal level. The use of generalizations in defining professions is recognised in a taxonomy - the International Standard Classification of Occupations (ISCO). The United Nations document:

> *'ISCO-08 classifies jobs into 436 unit groups. These unit groups are aggregated into 130 minor groups, 43 sub-major groups and 10 major groups, based on their similarity in terms of the skill level and skill specialization required for the jobs' (International Labour Organization, 2012)*

This whole process is been represented through eight themes, four sections of theorizing with four key diagrams described in detail in this thesis. There were two key aims: The first was to demonstrate ethical practice through a description of the process that is clear for another to be able to repeat the process. To make sure that the voice of the participant was heard fairly, equally and inclusively and that the results are grounded in the meaning of the participants. Ethical practice as a key element of phronesis represented through prudence (one of the 6 Ps) that helps develop trustworthiness, supporting veracity in the process. Veracity underpins a confidence in the outcome supporting those who might choose to access the results for their practice, giving it more potential for human society.

The second, and really the primary aim, was to develop a concept of what an osteopath is, to define the practice and improve my understanding of what makes an osteopath an osteopath. The response to this is outlined in the results and

discussion and summarised in the main diagrams. In short, I found that there is a deep knowledge represented through a vast literature and practical experience that is applied at the time in an interaction that then defines meaning. This is the essence of wise practice, the linking of the broad, of society to the well-being of the individual through a societal lens and that is the defining adjective: osteopathic practice.

This research contributes to the dialectic about the nature of the profession, that is what describes the adjective ‘osteopathic’ before the noun ‘profession’. It does this taking the voices of fifteen osteopaths and coding these into the resultant themes, knowledge themes and theorizing sections which all arise from the data: the voices of the participants processed by a researcher. As a result, a structured approach to clinical practice was identified that is appropriate for a health professional, which was used in tandem with Mead’s description of The Act to structure the theorizing discussion chapter (Chapter 7). This research considered the reasoning process of the respondent osteopaths and supports the comments from Grace et al. (2016) about the two-stage reasoning process of Australian osteopaths with red flags and a biomechanical lens. Further, through examining the individual practice of fifteen Australian osteopaths this research can inform the workplace surveys, for example supporting the notion of manual therapy as a primary approach to patients by tabulating the hands-on time (Chapter 6.2) or describing the practice details of these osteopaths (Chapter 6.3). This data can be built on with further research and patterns may emerge that may be generalizable. For example, work done as hands on represents both particular

elements of osteopathy, but may also describe manual elements that may be recognised in other disciplines.

Despite my initial expectations that a group of items would be identified that could be packaged as osteopathy, this was not the case. Pragmatism focusses on the meaning derived from the health interaction which is conducted in a particular context. Describing this context and then assessing the descriptions for common features as was done in this research, and can then feed back into the literature to provide for the ongoing dialectic. Health as a representation of society and life-in-general is an ever-changing environment and any description that fixes a profession in time, marks the end of that profession. Much like defining the position of an electron. Once the position is fixed, we can no longer predict the trajectory. Most importantly this research supports the shared heritage of knowledge in healthcare and explores a philosophy that focusses on the act between therapist and patient as key to the meaning and knowledge for the participants providing a philosophy to underpin a dialectic to develop the knowledge for the changes that occur constantly in the health profession.

2. *To theorize the outcomes of osteopathic practice within the philosophical context of Pragmatism*.
    - *How might Pragmatism provide a philosophy that informs the principles and practice of osteopathy?*

Through a journey (Chapter 2) this research identified Pragmatism as a philosophy of action to underpin osteopathy as a field of practice. The outcomes of fifteen osteopathic practitioners have been theorized through the lens of

Pragmatism. This theorizing has been summarised in figures and tables to demonstrate the links between theory and practice. As a practitioner I view this as important, as I see theory must inform practice otherwise it becomes a dusty legacy. For practical purposes, an overarching philosophy provides a structure for the professional dialectic of knowledge (epistemology) and how this knowledge guides the field of practice. It therefore provides a locus from which a professional dialectic can emerge, continue and also support an interprofessional debate, for example around practice roles. It can inform both current practice by clarifying epistemological questions and it can inform future practice by supporting education. The principles of osteopathy have traditionally played this knowledge role (Stark, 2013) and they have been criticised for their inadequacy and general nature (Cotton, 2013; Fryer, 2013). In a sense the principles of osteopathy were not theorized in the scholarly manner of other professions, like medicine did (Pellegrino & Thomasma, 1981), until the last couple of decades with the likes of Fryer (2013) who critiqued past knowledge in MET with EBM and Tyreman (2003, 2013) who critiqued the uniqueness of osteopathic principles and their philosophical support for the epistemology of osteopathic practice. Pragmatism not only provides a window through which the theoretical basis of the profession can be explored, it brings the knowing and thinking of osteopathy into the broad scholarship of practice. It provides the philosophical support to develop an understanding of the peculiar relationship between society, osteopathy and the interface with an individual within the general contexts within which practitioners must operate. Pragmatism provides the underpinning for a dialectic of profession specific debates, such as how evidence informs osteopathic practice; what might or might not be relevant to a contemporary

osteopathic curriculum; how osteopathy might fit into an interprofessional team, or how the art and science of health professions might interact, and how this is different for osteopathy in the different jurisdictions (Orenstein, 2019) (Chapter 2.7.1). From a directly practical perspective the 6 Ps as a theorized outcome are presented as questions that an osteopath might ask themselves as they reflect on and develop their (wise) practice: Is this diagnosis Practical, Plausible or Participatory? In this manner the 6 Ps can be applicable to everyday clinical decision making. More broadly, humans require social connection for their well-being, we have evolved this way and it is so intrinsic to our way of life that it is exploited as a key weakness, so aptly demonstrated by the pandemic related to the SARS-CoV-2 (Covid-19) virus. Making wise decisions day-to-day can support the well-being of human society, not just clinical practice.

> *'Like James, we regard the relations between things as "matters of direct particular experience." But we do not accept his radical generalization of the categories applicable to experience to all reality. While grounding our analyses in experience, we seek meanings and essences deducible from the experienced realities'* (Pellegrino & Thomasma, 1981, p. 4).

Pellegrino and Thomasma (1981) stop at embracing Pragmatism as the philosophy of medicine. On the contrary, I posit that Pragmatism is the philosophy for the practice of osteopathy and through the shared health heritage is also for medicine. Pellegrino and Thomasma (1981) indicate an eclectic approach, which they call a '*practical ontology*' (p. 4). I think they hit the nail on the head with this language as medicine is about things practical. Medicine over time, like all professions, has been subject to critique about its role in providing healthcare,

with '*no evidence of any direct relations between this mutation of sickness and the so-called progress of medicine'* (Illich, 1975, p. 15). What is the overall aim of medicine? If it is to stop people dying then it has failed miserably, however if it is to comfort people through their illness and ameliorate suffering then that behoves a different measure, a different meaning. Pragmatism as an overarching philosophy would help address controversies like balancing healthcare expenditure, dealing with the rapid advances of medicine and the associate ethical, cultural and legal conundrums and balancing goals such as extending life over the relief of suffering (Anderson, 2007). Further to this Moses (2017) discusses the evolving goals of medicine identifying the balance of theory and practice: '*It is primarily the physician's duty to balance the goals of medicine with the goals of care'* (Moses, 2017). This is quite a pragmatic aim when one considers that the measure of this could be the emergent meaning from the interaction of the dyad. Four contemporary goals have been identified for medicine:

> *'(1) preventing disease and injury and promoting and maintaining health; (2) relieving pain and suffering caused by maladies; (3) caring for and curing those with a malady and caring for those who cannot be cured; and (4) avoiding premature death and pursuing a peaceful death*' (Anderson, 2007, p. 407; Moses, 2017).

Pragmatism as a philosophy of action would provide a correlating approach for these goals, which relate to medicine broadly as much as to the medical profession. Each goal can be measured by the meaning established by the patient-practitioner dyad. The measure as meaning is established by actions and Pragmatism is placed to provide the conduction of the processes to develop

relevant meaning for each goal. Like osteopathy, the medical act is about acts that focus on the meaning for the dyad.

3. *To research clinical decision making, treatment selections and observed practitioner actions that contribute to osteopathic practice and practical wisdom*.
    - *What role does clinical reasoning play in defining osteopathic practice?*

Decision-making is central to life. It is so important that the brain, where it all happens, despite being only 2% of the body mass, consumes 20% of the energy as glucose (Mergenthaler et al., 2013). In researching errors related to airplane crashes and loss of life, it was noted that the greater number of decisions made in real time the better the outcome. This research led to airline simulation training moving from the captain as the central decision-maker to including all the crew (Crew Resource Management CRM) (Olsen et al., 2011). A brain is geared up to recognise patterns contextualized to different situations and assess for variations, for example ‘sticks out like a sore thumb’. These patterns are an effective short cut or quick decision-making process, valuable at times of risk. The weakness or inherent bias in this short-cut is well recognised and demonstrated with the metaphors ‘don’t judge a book by its cover’ or ‘the first impression is the last’.

Clinical reasoning as a specialized sub-set of decision-making is clearly a necessary component to practice including that of osteopathy. In this project the clinical reasoning was observed and explored with fifteen osteopaths and their clinical actions with return patients. The aspects of reasoning – deductive and inductive approaches were clearly observable, in addition in the literature I came

across ‘Abductive Reasoning’ described by Peirce. I would like to explore this aspect further as it appears important in osteopathic reasoning especially given the imprecise and contextual nature of data that is used to inform clinical decisions within osteopathy. The responses of the participants are examined, analysed and reconstructed through the lens of Pragmatism, specifically that of Mead and his description of The Act. Figure 7.1 presents an overarching epistemological concept for osteopathic practice, Figures 7.7 & 7.8 describe the reasoning process in context with Pragmatism and Meads description of The Act. These summaries can be used to support the clinical education of students. They can also contribute to the dialectic of a specific osteopathic clinical reasoning which although based on universal practices must reflect the idiosyncrasies of a profession.

Clinical reasoning, although a generic practice, is clearly central and representative of clinical practice. Careful observation and analysis of practitioner actions that occurs in a consult can elucidate profession specific characteristics. The data that emerged in this research supports the two-tier reasoning process described in the literature (Grace et al., 2016) with the first the ongoing consideration for ‘red flags’ as representing biomedical disease. The second is a reasoning process that utilises a biomechanical lens recognising ‘*the relationship between structure and function in the human body’* (Grace et al., 2016), which is a key outcome of this research described in ‘Theme 2: Holistic Biomechanics: Thinking of the Body as a Unit’ to osteopathic practice. The ‘Holistic Biomechanics’ theme is intrinsic to osteopathic practice describing osteopathic techniques by the palpatory sense of tension in the tissues. Biomechanical

knowledge also influences the thinking of the practitioners and is represented (coded) in the professional language defining a practitioner's claimed therapeutic approach (McGrath, 2015) as '*indirect'*, '*direct',* or '*combined'* (Educational Council on Osteopathic Principles, 2017, p. 3) and more broadly throughout the language in osteopathy. However, a more extensive level of reasoning would appear to occur in the new patient population (demonstrated in PHD#8 who had a return client with a new issue), not the return patient population viewed in this research, so a further study that considered new patients within a Pragmatism lens that deliberately looked and assessed actions of reasoning such as induction, deduction and abduction would, I believe be informative of osteopathic practice.

4. *To utilise the research outcomes to support a more substantial or deeper understanding of the international field of osteopathy*.
    - *Can Pragmatism provide a bridge to the issues within osteopathy?*

Osteopathy as a profession and where it is placed in society has been subject to debate since Still proclaimed it in 1874. Although some have claimed that it is craft or quackery and not worthy of the status given to a health profession, the profession has grown substantially attaining unlimited practice rights in the USA and limited practice in other regions. This debate regarding the '*naming process itself is a glimpse into the complexities of power and history'* (Gale, 2014) that impacts all professions. Osteopathy continues to respond to the critique, represented by this research and other literature cited in this thesis, which is representative of the continual changes in society that professions need to account for to keep relevant. To be a profession, is to be the subject of reasonable

criticism, which provides the means – the reflective interaction, to keep a profession relevant in its role. It is to test the significance, truths, validity and costs of the profession to society:

> *'The pragmatic philosophy, as the term 'pragmatism' is here to be applied, is primarily a theory about the tests or criteria for significance, truth or validity by reference to which the meaning and worth of ideas ought philosophically to be appraised'* (Murphy & Singer, 1993, p. 144).

Overall, the conception of practice proposed in Figure 7.1 corrals the research aims and questions of this project, with the outcome of the interviews and the related literature synthesis. This conception becomes a point in time to contribute to the professional dialectic. It is a point of departure for the members of the profession and the interested others to extend the ongoing dialectic with a new concept, another view of the field of practice. In achieving the aim toward a *more substantial or deeper understanding of the international field of osteopathy* this research addressed the existing literature, explored Pragmatism and proposes to extend the field by adding Pragmatism to the dialectic, particularly that around osteopathic principles, as the philosophical perspective for osteopathy. Pragmatism by focussing on meaning as an outcome of interaction does not discriminate between osteopathic physicians in the USA or osteopaths in Australia offering a bridge to the practice for these apparently disparate health professionals that share a similar title. It simply addresses the actions of each as they interact in their practice and meaning emerges from the patient-practitioner dyad. Each practitioner can ask the '6 Ps' of their practice and determine if the meaning that emerged met the expectations of those involved. Remembering that

meaning must meet the negotiated outcomes and pass the test of the individual "I" and the socially constructed "me" of all involved in the interaction.

## 8.2 Issues Raised

I have addressed the research aims to the stage where I am satisfied. I feel that I have described my perception of the impulse that initiated this research, which has then been manipulated in response to my supervisor's expert comments. It is now time for the consummation of this thesis, which is for the research to be examined by external examiners, to be subject to *verification* and then any consequential *manipulation,* as a determination of the satisfaction of this project against the expected measure.

The space provided by this spatiotemporal gap provides an opportunity to reflect on where to next? What areas do I feel need addressing? There are many problems in life, like crossing the road in busy traffic or cutting your hand that require immediate attention, others can bubble away in the background. The outcomes to this research will to continue to percolate for some time and given that I now asked myself: Where to next? In reflecting on my practice, it appears to me that there are three areas where I can proceed. The first is to reflect on how this research integrates with the current professional dialectic on the principles of practice and the philosophy of osteopathy. Given all I have said and done in this research I am excited to make a contribution to the continuing professional dialectic. I feel that it may occur through a journal article as well as informing my teaching practice.

> *'A philosophy of medicine is needed: to organize medicine's rapidly increasing number of successes; to form an integrating principle for its splintering specialties; to offer rational, scientific explanation of its methods; and to discover the relationship between an expanding world community'* (Pellegrino & Thomasma, 1981, p. viii)

The second is exploring how this research conducted in the field of osteopathy might interact with or translate to a broader field of knowledge, such as that of professional practice. Osteopathy has tensions like other professions that have the potential to be managed through Pragmatism. Such tensions as the roles of osteopaths in different jurisdictions and professions; the balance of knowledge used in clinical practice with EBM an ongoing debate and exploring the role of abduction in clinical decision making, and finally more generally as a 'go-to' strategy to address issues that arise into the future.

> *'"Our beliefs guide our desires and shape our actions" When all goes well, beliefs are not doubted and action flows smoothly. But when problems arise, beliefs become doubts and smooth actions are plagued by "an uneasy and dissatisfied state from which we struggle to free ourselves*"' (Peirce cited in Bradley, 2008, p. 301).

Mead outlines the process and an overarching structure to practice through The Act, I would like to deepen my understanding of what happens at the moment of the interaction – the practice interface. I have touched on the dialectic from a quantum physics perspective, the principle of uncertainty, the nature of an electron and the role of the observer as a potential explanation to the physics of

making a decision. Pragmatism appears to be able to manage the "I" operating outside of the relativity of time and space with the "me" that must operate in the present and is subject to time and space. I have proposed the 6 Ps as a practical application to help ensure the making of wise decisions or enable the practice of phronesis. This dialectic can explore the direction Pragmatism offers with a focus to the practice interface '*the world that is there'* (Aboulafia, 2016a), '*our whole experiential world–nature as we experience it–is basically related to the social process of behavior'* (Mead, 1934/2015, p. 112).

Professional practice is the consummation of a perspective, derived from an impulse arrived through a modified social process experience. Practice is a structured skill represented through social praxis and the consult. The practice interface as the consult is the time when the acts occur to address the presenting impulse. The process of managing the aspects of an act consists of elements that are both related and unrelated to physical time. A key aspect of phronesis is being able to manage the time zone or moment of emerging meaning from 'non-time knowledge and ideas' to 'time related physical practice'. Pragmatism not only provides the process for this, but also the space for fallibility, a spectrum of right to wrong. Strategies that address the practice interface will be of direct assistance to practitioners who are trying to apply their practice in the context of limited time. The 6 Ps are aimed at the task of assisting a practitioner address the practice interface as the present – that moment: the practitioner standing in front of a client, meeting their needs, addressing the gestures of the profession. The practice interface is represented by acts to attend to the competing interests such as risk, individuality, professional expectations, an outcome and all the

considerations of a professional consult (See Figure 7.9) to make successful decisions and weave together and enact a satisfactory outcome takes skill and wisdom.

The third area that I think would be illuminating is to ask patients about practice. This research only asked one side of the dyad about the practice. It would be useful to obtain the views of the other side of the dyad. Understanding the conceptualisation of practice form those who respond to the professional gesture with a Pragmatist lens could help focus the professional gestures and provide input for the Social Praxis. Without the interaction of the patient the professional consult doesn't work and the contribution of the patient to the treatment is paramount. There seems to be little research in osteopathy on this area and I am not yet cognizant of that in the broader health field. Such research would have a two-fold approach, the first is to assess the role of the patient "me" in the dyad, how the "me" interacts with the dyad and with the patients "I". The next would be to find out what view the patient has of the practitioner "me".

> *'I viewed the interviews as representations of the interviewees' interpretations of their everyday worlds. Moreover, I was concerned with the meanings that they attached to their experience of treatment. The interviews involved asking patients to recall their experience of seeking help…*' (Lee-Treweek, 2002, p. 55)

I started this research wondering about what defines my profession, my practice. As is the case with any topic the more it is explored the more questions that emerge. From a participatory action research view point, as each problem is expressed it goes away, exposing the next. I now realise that contributing to a

professional dialectic through a broad practice that includes the scholarly dialectic is important as it is through these actions that a profession demonstrates it is 'alive', that it is adapting and evolving. The professional reflection on practice encoded by Still is a metaphor for personal reflection on practice, ensuring that one's practice is evolving. Now I find myself wondering about practice as a field of knowing. Is it just professions? How does it fit with the physical trades? And more… I perceive my journey has extended my view to a broader gaze, to a bricolage that is not just about informing my practice, but also that of other fields.

## 8.3 Reflection on my journey, the bricolage

Pragmatism was an exciting discovery for me. Of course, my excitement is transferred to all areas that interest me and to those intellectual figures (not already outed as Pragmatists) that I hold in esteem. It is arguable that Dr AT Still was a Pragmatist, he was subject to a similar environment in which Pragmatism commenced and like the Pragmatists, Still was focussed on developing a practical response to an identified problem with the tools he had to hand. If *'Pragmatic theory entails the doctrine that universals are real, that ideas are embodied in things'* (Weiss, 1942, p. 189) then Pragmatism which views meaning emerging from acts becomes a universal. It is my view that two other figures of interest who were problem-solvers, were also Pragmatists. Holton (1981) notes that Einstein had a '*home-made philosophical system'* and various commentators thought his philosophy a *'house of cards'* and a *'patchwork'* (p. 2). Holton (1981) goes on to write that Einstein acknowledged he appeared *'as a realist, idealist, positivist, or even a Platonist or Pythagorian'* (p. 2). The other key figure, Addams '*refused to categorize herself as belonging to an arbitrary ideology'* (Morrison,

2016), despite being closely associated with the early Pragmatists, which Morrison (2016) reports was because she didn't want opposition to her practical social work at Hull House.

*'…for rationalism reality is ready-made and complete from all eternity, while for pragmatism it is still in the making and awaits its complexion from the future'* (James, 1995, p. 99). For someone like myself who views life as a journey of significant actions or events like a PhD, statements from James like the above are meaningful, which he summarises as: '*On the one side the universe is absolutely secure, on the other it is still pursuing its adventures*' (James, 1995, p. 99) Pragmatism was a natural fit. My desire to pursue a PhD adventure was triggered after I came across case method in an elective in my master's degree. *'Now quite the most striking feature of the new theory was its recognition of an inseparable connection between rational cognition and rational purpose'* (Thayer, 1982, p. 103). I knew that case method and qualitative research would be important to osteopathy. I reflected that despite having undertaken considerable practice with patients and education, my contribution to knowledge, to research was undeveloped. I knew I had to do my PhD, a journey commences by anticipating the future, making a plan, making a start. What started out with clinical reasoning as the focus moved beyond to a much broader horizon and beyond that field of practice:

> *'One thing is clear. There is no such thing as clinical reasoning; there is no one best way through a problem. The more one studies the clinical expert, the more one marvels at the complex and multidimensional components of knowledge and skill that she or he brings to bear on the*

> *problem, and the amazing adaptability she must possess to achieve the goal of effective care' (Norman, 2005, p. 426).*

Clinical thinking is central to health practice as a key act that brings all the knowing of the clinician to bear on the making of meaning of the sensations experienced in the dyad. Clinical thinking is generalised as an act, as reasoning and deciding means to have and perceive an impulse, to then manipulate and verify the perception as meaning and consummate the meaning with an action for a clinical situation. What emerged for me was the notion of practice as a collection of decisions and actions correlated as a field of knowledge. That practice itself is a practice and it is not specific to one profession, but is a generalisation across professions. Practice in the sense of a transitive verb without the need of an adjective. It is recognisable across completely different fields that share certain characteristics or contexts, particularly ones that negotiate the interface between the world in there and the world out there: the practice interface, the emergence of shared meaning. Taking what is in thinking of one and bringing it to a shared meaning in the present requires a set of knowing that is shared across fields, this was new knowledge for me. I was unable to contemplate a broad potential at the outset, but as I progressed, I realised the potential that informing a field of knowing has far greater potential than me and my practice. Stephen Tyreman, the author of the following quote which I feel summarises the approach I have taken to this study, taught me osteopathic principles when I was a first-year student. He died at what I believe is a premature age of 66 years in 2018, and I had him in mind as a potential examiner as he had taken the path of exploring the philosophy of osteopathy.

> *'What I have tried to sketch is a picture of human living as dynamic enmeshment within a world that continues to be made real for us through our actions and engagement with the environment'* (Tyreman, 2015, p. 475).

This research has extended my knowledge in many ways, it has improved my skills and it has exposed me to vast fields of knowledge to which I have barely scratched. My exposure is just enough for me to realise how much I do not know and that I do not have enough lifetimes to even claim a solid grip. I found Mead as an author difficult to read. He did not write much for publication in his lifetime with much produced posthumously. However as I engaged more deeply with his work as a basis for this thesis I found that I was engaging his thinking. I found myself wondering about his academic load, comparing is situation with mine.

> *'To take a distinctively human, that is, self-conscious, social attitude toward another individual, or to become aware of him as such , is to identify yourself sympathetically with him, by taking his attitude toward, and his role in, the given social situation, and by thus responding to that situation implicitly as he does or is about to do explicitly, in essentially the same way you take his attitude toward yourself in general conversation with him, and are thus made self-conscious' (Mead, 1934/2015, p. 300).*

Mead contributed to Pragmatism and other areas in his lifetime. I have come along nearly a century later to engage this work, to contribute to Pragmatism, to take one cycle to its completion as this thesis and set in motion the next cycle of acts. For me these acts will be the next step in my thinking, the next phase of my life: '*the philosophy of medicine is connected with the philosophy of life'* (Yanovsky, 1978, p. 58). What it will be I cannot say, only that I know where it will

start. It will start with a journal article to articulate an act, another outcome of this project, and indirectly of Mead's and the other authors work that supported this thesis, to support a more substantial or deeper understanding of Pragmatism as acts represented through the international field of osteopathy.

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# Appendices

## Appendix 1 - Recruitment email

**Opportunity to participate in a research project for a PhD**

Dr Neil Hooley PhD and Chris Macfarlane of Victoria University are conducting a research project that contributes to a PhD for Chris. This project will video an osteopathic treatment that you undertake (with the consent of your client) and then interview you about the treatment. The aim is to help describe the actions and thoughts that make up an osteopathic treatment. These actions may include techniques, examinations, discussions and so on that constitute osteopathic practice. This has not been examined like this in Australia before.

If you have any questions or would like to register your interest in participating please email: Christopher.macfarlane@live.vu.edu.au or mobile: 0427510050 for further details.

Chief Investigator
Dr Neil Hooley
Victoria University
College of Education
Tel 0481997768

Any queries about your participation in this project may be directed to the Chief Investigator listed above.
If you have any queries or complaints about the way you have been treated, you may contact the Ethics Secretary, Victoria University Human Research Ethics Committee, Office for Research, Victoria University, PO Box 14428, Melbourne, VIC, 8001, email researchethics@vu.edu.au or phone (03) 9919 4781 or 4461.

## Appendix 2 – direct recruit

A sample of a recruitment letter sent to an osteopath in Canberra

Chris Macfarlane
2 Toni Court,
Wantirna Vic 3152

ADDRESS
7th December 2018

Dear X

I am 'cold calling' because I know that you are interested in supporting research and that you have a successful clinic with many practitioners in Canberra. I am 'doing' my PhD and I need to interview practitioners about their practice. I have made a summary below and I have also included the relevant consent and information sheets as approved by the Victoria University ethics committee.

My project involves the videoing of a practitioner treating a return client. The client needs to consent to being video recorded. The video process involves me attending the start of the appointment to set the cameras up (one primary camera and one as a redundancy), which takes a couple of minutes at most. I am also available to address any questions and collect the signed consent forms. The treatment then goes ahead without me being present. The cameras can be stopped if required by you. Once the treatment is completed, I take the cameras away.

I will then need around 3 hours to watch the treatment and organise points in the treatment for us to discuss. Then within 48 hours of the treatment I meet with the practitioner for an interview and go over the thoughts on the treatment. I record this interview and later transcribe it (within 2 weeks) and then email you a copy of the transcript for you to check over and verify.

In summary the commitment is sourcing a return patient, a couple of minutes of time whilst the cameras are set and I respond to any questions and then a recorded interview with the practitioner lasting 1-2 hours. The patient video is only viewed by you, myself and potentially with my supervisor. The patient video will not be published or shared otherwise.

If you think there are those who would participate in your clinic let me know. I could take a maximum of two. I am also writing to a couple of others in Canberra, so that I may be able to maximise a visit to Canberra. If you have any further questions please contact me on 0427 510 050.

Kind regards

Chris Macfarlane
Osteopath & PhD candidate

## Appendix 3 - page set up and coding sample

PHD#4 sample of page set up and coding

| Interview | Codes | Comments, thoughts |
|---|---|---|
| Interviewer 1:30 | | |
| I'm just going to ask you little bit about, um, about the video #00:01:24-7# | | |
| | | |
| Respondent: mmm, hmmm #00:01:24-7# | | |
| | | |
| Interviewer: I haven't exactly, normally I spend a bit longer. So, I'm just gonna play the first, um, the first few minutes and I'm just going to ask you some questions. I am interested in the actions or acts that comprise osteopathy | | Setting the scene – I was a bit rushed / pressured by the appointment of a client in a couple of hours. In the end I came back a week later to follow up interview. |
| | | |
| Respondent: Yep | | |
| | | |
| Interviewer | | |
| With the idea being that the things we do, defines us as practitioners, so I wanna know or I'm after what makes them happen | | Intro / scene setting |
| | | |
| Respondent: Mmm hmm, OK | | |
| | | |
| Interviewer 2:02 | | |
| So, the first one we come to, I'll just play this. Is, you're going to umm, so this, obviously you've got a background with this lady [mmm hmm] and um you've known her for quite a long time, from the, the case, the treatment. But this is an unusual situation I think someone coming like this #00:02:29-1# | BACK GROUND with patient was obvious | Patients used for this project seem to have a pattern of friends or people known.<br>Context relates to BACK GROUND |
| | | |

| | | |
|---|---|---|
| Respondent: Mmm | | |
| | | |
| Interviewer 2:26 | | |
| So, so she's anyway you'll hear what the recording's like #00:02:32-9# | | |
| RECORDING PLAYS #00:03:08-2# | | |
| | | |
| So, I'm just going to start right there [mmm]. So obviously there is this all this hassle going on, #00:03:17-6# | | |
| | | |
| Respondent: mmm #00:03:17-6# | | |
| | | |
| Interviewer: and then you're, um, she's sitting there in the patient interview chair #00:03:24-0# | | |
| | | |
| Respondent: mmm hmmm #00:03:24-0# | | |
| | | |
| Interviewer: you're at the desk and you're making, I guess, some notes about the date or whatever #00:03:29-2# | | Although this not coded it is an action commensurate with osteo – sitting at a desk taking notes, so characteristic of osteopathy. |
| | | |
| Respondent: Yeah #00:03:29-2# | | |
| | | |
| Interviewer: And then something makes you then say "right what's going on?" What, what were you thinking? What was happening there? #00:03:36-0# | Decides to start treatment | |
| | | |
| Respondent: Oh ok, so well, I think it was down to business, down to, we've been doing a lot of fluffing around and with um, and then it's really, um yeah, it's down to business time. So um, I want to know from her what's impacting on her life at the moment. So that's why I just said, it's a very open ended one. Because she | DOWN TO BUSINESS TIME<br><br>WHAT'S IMPACTING HER LIFE AT THE MOMENT | I like this code because it is business, it is time and time has come through in the past as a key element and it's getting down, getting going with energy.<br>Mote on time – 'at the moment'. It is not just the problem but her life. The |

| | | |
|---|---|---|
| has multiple um problems, she has a very long history with a lot of fairly severe injuries, so um it, it's all about I've been seeing her for a long time, and it's all about helping her um, function in life um, and so its um, its treating symptomatically to a certain extent cos it depends on what's she's been doing and has she's coping with it, um and so I just leave it up to her to, um, you know to tell me what's impacting most, what's causing the most problems in her life. #00:04:50-4# | CONTEXT – VERY LONG HISTORY<br><br>FUNCTION IN LIFE<br><br>its treating symptomatically | problem relates to and is her life – context, holistic<br>CONTEXT – the yellow highlights refer a lot to past history which is context scene setting.<br>function in life – holistic, relates practice or praxis to the context* |
| | | |
| Interviewer: So, um, when you, when you ask her to, you have quite a particular tone. I'll just play it quickly again. VIDEO PLAYS #00:05:06-3# | Question about tone of voice | ACTS are physical, verbal… are all the senses related to acts – doing them or receiving them? If biological related acts combined with social acts then you need measuring for feedback – communication. Is there are hierarchy of acts a bit like Maslow's hierarchy? |
| Respondent: mmm | | |
| | | |
| Interviewer: "how you going?" So, it's really a um, you don't speak like that any other time through the whole… #00:05:18-5# | | |
| | | |
| Respondent: No, ok yeah #00:05:19-4# | | |
| | | |
| Interviewer: So, do you, is that something you would do every time do you think with your clients? How do you start of other clients? #00:05:21-8# | | |

## Appendix 4 - consent forms

# CONSENT FORM FOR PARTICIPANTS INVOLVED IN RESEARCH

**INFORMATION TO PARTICIPANTS:**
We would like to invite you to be a part of a study into 'Actions speak louder than words': Exploring Pragmatism in osteopathy.

**CERTIFICATION BY PARTICIPANT**

I, [insert your name]

of [insert suburb]

certify that I am at least 18 years old* and that I am voluntarily giving my consent to participate in the study: 'Actions speak louder than words': Exploring Pragmatism in osteopathy being conducted at Victoria University by:
Dr Neil Hooley PhD
Chief investigator
Victoria University

I certify that the objectives of the study, together with any risks and safeguards associated with the procedures listed hereunder to be carried out in the research, have been fully explained to me by:

Chris Macfarlane

and that I freely consent to participation involving the below mentioned procedures:

- Being videoed whilst treating one patient (single consultation) and
- being interviewed subsequently about the treatment (up to 60 minutes):
    - clinician ☐ please tick relevant box

I certify that I have had the opportunity to have any questions answered and that I understand that I can withdraw from this study at any time and that this withdrawal will not jeopardise me in any way.

I have been informed that the information I provide will be kept confidential.

Signed:

Date:

Any queries about your participation in this project may be directed to the researcher
Dr Neil Hooley
Tel: 0481997768

If you have any queries or complaints about the way you have been treated, you may contact the Ethics Secretary, Victoria University Human Research Ethics Committee, Office for Research, Victoria University, PO Box 14428, Melbourne, VIC, 8001, email Researchethics@vu.edu.au or phone (03) 9919 4781 or 4461.

# CONSENT FORM FOR PARTICIPANTS INVOLVED IN RESEARCH

**INFORMATION TO PARTICIPANTS:**
We would like to invite you to be a part of a study into 'Actions speak louder than words': Exploring Pragmatism in osteopathy.

**CERTIFICATION BY PARTICIPANT**

I, [insert your name]

of [insert suburb]

certify that I am at least 18 years old* and that I am voluntarily giving my consent to participate in the study: 'Actions speak louder than words': Exploring Pragmatism in osteopathy being conducted at Victoria University by:
Dr Neil Hooley PhD
Chief investigator
Victoria University

I certify that the objectives of the study, together with any risks and safeguards associated with the procedures listed hereunder to be carried out in the research, have been fully explained to me by:

Chris Macfarlane

and that I freely consent to participation involving the below mentioned procedures:

- Being videoed whilst being treated by an osteopath:
    - patient ☐ please tick relevant box

I certify that I have had the opportunity to have any questions answered and that I understand that I can withdraw from this study at any time and that this withdrawal will not jeopardise me in any way.

I have been informed that the information I provide will be kept confidential.

Signed:

Date:

Any queries about your participation in this project may be directed to the researcher
Dr Neil Hooley
Tel: 0481997768

If you have any queries or complaints about the way you have been treated, you may contact the Ethics Secretary, Victoria University Human Research Ethics Committee, Office for Research, Victoria University, PO Box 14428, Melbourne, VIC, 8001, email Researchethics@vu.edu.au or phone (03) 9919 4781 or 4461.

## Appendix 5 - information to participant forms

# INFORMATION TO PARTICIPANTS INVOLVED IN RESEARCH (clinician)

**You are invited to participate**

You are invited to participate in a research project entitled 'Actions speak louder than words': Exploring Pragmatism in osteopathy. A shorter descriptive title is: What treatment occurs in an osteopath's treatment room?

This project is being conducted by a student researcher Chris Macfarlane (osteopath) as part of a PhD study at Victoria University under the supervision of Dr Neil Hooley from the College of Education.

**Project explanation**

The project aims to assess osteopathic practice by observing the treatment that osteopaths do to a patient. Using video the treatment will be recorded and then analysed for activities and actions that the practitioner undertakes. This information will be used to make a picture of the activities that occur in a treatment and help to define osteopathic practice.

**What will I be asked to do?**

Practitioners will be asked to participate by having their usual everyday clinical practice with one patient video recorded. You will be asked to go back over the video with the researcher and discuss particular activities – decisions, technique choices, management selections. It is likely that the total time commitment will be in the order of 1.5 – 2 hours allowing for a treatment to be examined and a review of the video.

**What will I gain from participating?**

Quantifiable benefits are difficult to anticipate. This will be an opportunity to take the time to reflect and review your practice in association with another osteopath. This time may even contribute to your continuing professional development requirement.

**How will the information I give be used?**

It is intended that this research will be used to support the discussion and existing literature about what constitutes osteopathic practice. The video and follow up interview will be used to compile a list of activities that occur in the clinic. Activities include treatment techniques, examination techniques, advice, exercises and referrals. The outcomes will go into a PhD thesis and may form the basis for journal articles. The video's will be used for analysis only.

**What are the potential risks of participating in this project?**

No risks are expected. If the treatment being videoed moves into areas that either the patient or practitioner do not want recorded the video can be stopped or deleted by you. The patient or practitioner can reschedule or withdraw from the project at any time without any penalty.

**How will this project be conducted?**

The camera will be set up in the clinic room and can be controlled by those in the treatment room. It will be able to be stopped and started by the practitioner to help ensure privacy and comfort. The recording will be downloaded and analysed by the researcher. The video will be replayed as a prompt for an interview about the treatment. The interview will be recorded and transcribed. The transcription will be available to the practitioner for review. The transcript will support the analysis of the video.

**Who is conducting the study?**

Chief Investigator
Dr Neil Hooley
Victoria University
College of Education
Tel 0481997768

Dr Jane Mulcahy
Victoria University
College of Health and Biomedicine
Tel 9919 1140

The student researcher is Chris Macfarlane DO MPET (osteopath) - a PhD student at Victoria University.
Tel 0427510050

Any queries about your participation in this project may be directed to the Chief Investigator listed above. If you have any queries or complaints about the way you have been treated, you may contact the Ethics Secretary, Victoria University Human Research Ethics Committee, Office for Research, Victoria University, PO Box 14428, Melbourne, VIC, 8001, email researchethics@vu.edu.au or phone (03) 9919 4781 or 4461.

# INFORMATION TO PARTICIPANTS INVOLVED IN RESEARCH (patient)

## You are invited to participate

You are invited to participate in a research project entitled 'Actions speak louder than words': Exploring Pragmatism in osteopathy. A shorter descriptive title is: What treatment occurs in an osteopath's treatment room?

This project is being conducted by a student researcher Chris Macfarlane (osteopath) as part of a PhD study at Victoria University under the supervision of Dr Neil Hooley from the College of Education.

## Project explanation

The project aims to assess osteopathic practice by observing the treatment that osteopaths do to a patient. Using video the treatment will be recorded and then analysed for activities and actions that the practitioner undertakes. This information will be used to make a picture of the activities that occur in a treatment and help to define osteopathic practice.

## What will I be asked to do?

Patients will be asked to participate by having their treatment with the osteopath video recorded.

## What will I gain from participating?

There are no immediate direct benefits anticipated, however the research is intended to feedback into the profession to improve it over time. It is anticipated that this research will be used to support the existing literature about what defines osteopathic practice.

## How will the information I give be used?

The video will support a follow up interview with the practitioner. A list of activities that occur during the treatment will be complied. The outcomes will go into a PhD thesis and may form the basis for journal articles. The video will be used for analysis only.

## What are the potential risks of participating in this project?

No risks are expected. If the treatment being video moves into areas that either you or your practitioner do not want recorded the video can be stopped or deleted by the practitioner. You can reschedule or withdraw from the project at any time without any penalty by speaking to your practitioner or the researcher.

## How will this project be conducted?

The camera will be set up in the clinic room and can be controlled by those in the treatment room. It will be able to be stopped and started by the practitioner or patient to help ensure privacy and comfort. The recording will be downloaded and analysed by the researcher. The video will be replayed as a prompt for an interview about the treatment. The interview will be recorded and transcribed. The transcription will be available to the practitioner for review. The transcript will support the analysis of the video.

**Who is conducting the study?**

Chief Investigator
Dr Neil Hooley
Victoria University
College of Education
Tel 0481997768

Dr Jane Mulcahy
Victoria University
College of Health and Biomedicine
Tel 9919 1140

The student researcher is Chris Macfarlane DO MPET (osteopath) - a PhD student at Victoria University.
Tel 0427510050

Any queries about your participation in this project may be directed to the Chief Investigator listed above. If you have any queries or complaints about the way you have been treated, you may contact the Ethics Secretary, Victoria University Human Research Ethics Committee, Office for Research, Victoria University, PO Box 14428, Melbourne, VIC, 8001, email researchethics@vu.edu.au or phone (03) 9919 4781 or 9919 4461.

## Appendix 6 – interview prompt

**Introduction:**

- ☐ Overall intro to study,
- ☐ Include aim, benefits of study
- ☐ Do participants have any questions?
- ☐ Have participants read info forms
- ☐ Is consent form signed

**Patient data:**
Gender, age, job type (working, retired, physical, non-physical),
Obtain patient diagnosis summary (one paragraph at most – on recording)

**Post-video interview**

After watching the video of your treatment, I would like to ask some questions. It is likely that these will relate mainly to the following:

- ☐ What got you into doing osteopathy?
- ☐ Some things that you do with your patient (actions) will potentially have multiple aims; I would like to explore all the relevant aims to these identified actions.
- ☐ Some things you do that I may wish to ask about may not be clear on the video. They may be obscured, out of focus or muffled and I would like to clarify these if they arise.
- ☐ I will be asking about your overall thoughts of the treatment. Things like general aims or goals, and how these goals lead to you doing the things that make up the treatment you deliver.
- ☐ I would like to hear any questions that you have relating to the process as well as any comments you would like to make or add.
- ☐ As a summary, please describe in a few sentences your definition of osteopathy.
- ☐ I am interested in practice habits. How much does each action / technique / item in clinic require thinking and decision? How important do you feel habit is for treatment? How might practice look without routine or habit? How much is this different for a new client or a change in issue for a client?

It is anticipated that the interview will take a similar amount of time as the treatment time.

## Appendix 7 – interview transcript cover note

Cover note for interview transcript

Dear

Thank you for participating in the research project for my PhD. I have mailed you the transcript of your interview for you to look over. The idea is that you feel the transcript is representative of the interview. The transcript is presented in a basic form, so don't worry about typing errors, it is more about the meaning and intent of the interview. You can respond either in writing including marking the transcript and returning. A response could range from 'the transcript represents the interview', to various comments or feedback on the interview transcript.

For your response, I am happy to cover any postage costs. You can also email me at: christopher.macfarlane@live.vu.edu.au You may also ring me on 0427510050 if you have any queries.

Thank you again for participating, without which it would make it difficult to progress my studies!

Chris Macfarlane

## Appendix 8 – Single Interview Analysis Sample

75 codes

5 History/background/context – sets the scene, has parts in common ie MEDICINE as a social act, but also elements that make osteopathy that which it is ie training, beliefs

6 I'm Always on the lookout: the practitioner is always aware for key 'bits' of data that will have a significant impact on the case. Being alert and watching for this apeeras in the back of the mind of the practitioner

5 Big Information: reviewing the outcome of the treatment. Getting feedback to know it is done. Not like dark red which is about case decision

14 Wonderland: There is a respect, an overview of the patient as a being with a meaningful friendly real interaction with the practitioner on every level

6 Down to business – getting on with the treatment. Treatment is the focus of the overall professional claim and there is an imperative to do it: time, meet the claim and the outcome is predicated on doing treatment

8 Function in life. Impacting function is the goal of treatment and yellow is about witnessing the changes both locally and to the overall life of the patient (not the practitioner)

9 Witness – it is key to treatment that there is an outcome relevant to the patient claims. The dyad of patient/practitioner witness this act together to validate it and to help the patient believe it.

3 Time Stress: Time sits in the background as a measure against all acts. It is governing what is done, how time is spent and if the patient bends the timeline too much it puts pressure on the practitioner and they can even rail against it.

5 HAPPY PRACTIONER: Practitioner professional treatment goal / satisfaction: This one is about the need for the practitioner to feel satisfaction with their career, the treatment, their profession

7 How still I sat: The practitioner is part of the process and acknowledging that is helped by this project. The practitioner has an overall aim of reassurance, treatment planning and executing the treatment

Category ideas:

History: this is the context, background, the pre-existing that has a bearing on the now
About the context as data

I'M ALWAYS ON THE LOOKOUT: data that will change direction of thinking – red flags, hardcore
About data that changes decisions

Big INFROMATION: the palpatory results of the technique Reviewing results
About feedback from treatment

WONDERLAND: Body Communication – meaningful, deep, respectful, holistic
About communication

Down to Business: / Doing time – time to stop talking and get on with the physical. Exemplifies import of manual treatment
About doing the treatment

Function in Life: not just the physiology but also the function IN life. This needs to be doable, meaningful, interactive
About the goal of treatment

WITNESS: Treatment outcome
About the outcome

Time stress: Too much noise, run around. EVERYTHINGS ABOUT TIME. To the point that it can cause tension and need to move on despite patient
About time

Practitioner professional treatment goal / satisfaction – changing, effective inducing a change
About the practitioner – improvement or change

HOW STILL I SAT: Treating symptomatically. It is about delivering the treatment
About the practitioner

These codes are the results of my third pass – given the treatment video review, the first pass highlight and now this summary
4th pass I am going over the codes, checking the comments / memo and starting to think about condensing the codes into categories.

| CODE | USED | TYPE | Comments / memo with INITIAL CODING | Next CODING |
|---|---|---|---|---|
| BACK GROUND | 1 | **Descriptive interviewer** | It is a code that I am testing as I feel context is too broad. Although I know that what sits 'under' a them describes it nevertheless I still want to search for the right words<br>See comment above, especially on developing Individual, biological and social context as codes. | |
| DOWN TO BUSINESS TIME | 2 | **Descriptive In-vivo** | There is this time that the practitioner gets into acts that are directly related to the matters-at-hand. This statement indicates an intent to do the things that constitute the treatment and are the finger-print or identifying of the treatment | |
| WHAT'S IMPACTING HER LIFE AT THE MOMENT | 2 | **Process In-vivo** | Relates to the code above – down to business. It is about focusing (grounding?) the treatment in the patient expectations.<br>WHAT'S BOTHERING HER MOST (p17 or…) comes up later and relates to this too | |
| CONTEXT – VERY LONG HISTORY | 1 | **mixed Interviewer / in-vivo** | Context is from the interviewer – very long history is putting context in context (ah ha!).<br>Perhaps VERY LONG HISTORY or history could be the code for context | |
| FUNCTION IN LIFE | 3 | **In-vivo Descriptive Process** | Function in life occurs once as a code, the term function is used 2 more times to related to activity within the body. This code again ties into the down to business and impacting codes as being related to the things the patient can/cannot do that makes up their narrative | |
| its treating symptomatically | 16 | **In-vivo process** | 1 x as a phrase, 6 x as symptoms. Treating symptomatically relates to treating symptoms. Treating symptomatically ties into function, business and impacting above. These is this claim to act on the things that relate to the patient's life / well being | |
| I am REALLY INTERESTED | 1 | **In-vivo** | Probably not a longer-term proposition as a category and even as a code (subcode?). Acts that indicate a focus on the client are important from an engagement perspective. | |
| GET BELOW THE NICETIES, the surface | 1 | **In-vivo descriptive** | Indicates this division between the non-focus on acts that relate to the reason for presenting and other things. Down to business etc | |
| What's GOING on? | 11 | **In-vivo** | Used throughout the text. In the case this code refers to, there is a vocal emphasis on the GOING. Overall this code is related to the impacting and business codes. But it is used also in reference to the actions in the body ie function | |

| | | | |
|---|---|---|---|
| TWO CONVERSATIONS IN A TREATMENT SOCIAL CONVERSATION | **1** | **interviewer** | There is more than one conversation in a treatment – as indicated above by the getting below the surface or down to business – there is the conversation of introduction, then there is the getting on with it, there are more though and this comes up later and previous interviews with the conversation around health, with the body, listening to the tissues etc. |
| SOCIAL - PURPOSE | **1** | **descriptive** | Even though the conversation is social in nature, there is a purpose. This indicates that social conversation is less valuable than other conversation, it aligns with Getting Down to Business, but it also indicates the use of this aspect of the treatment for a purpose. |
| HOW WELL SHE'S COPING | **2** | **In-vivo** | Coping is a word indicating the client's ability to manage the various elements of her life that are going on at the moment. This COPING is physical and mental. It is the clinician making a judgment of how the patient is putting together the jig-saw of life and dealing with all the things. |
| HARDCORE | **1** | **In-vivo / descriptive** | Ranking symptoms relating to risk is a clinically relevant action. In this case the respondent refers to symptoms that require referral and further action as HARDCORE. If they are not hardcore then the need for action outside what the clinician can deliver is reduced or negated. |
| PRIORITISING PRIORITY | **2 multi** | **In-vivo, descriptive** | Red flags. FOCUS / ATTENTION. There is limited time so not everything can be done and needs to be ordered / structured<br>PRIORITY = what might be the key thing that's troubling client at this point in time |
| IM ALWAYS ON THE LOOKOUT | **1** | **In-vivo process** | Indicative of the multiple acts that make up clinical practice – this looking for red flags in the background is on-going. |
| Put the pieces together in her body | **1** | **In-vivo phrase Descriptive** | The idea that bringing together the multiple of complaints and issues so that they can be managed holistically, efficiently |
| GET SOME RELIEF | **1** | **In-vivo** | Overall aim of the treatment |
| WHOLE PERSPECTIVE BUILD A PICTURE | **1** | **In-vivo** | In contrast to PRIORITY and the idea of focusing on one or a few things the respondent wants to ensure that the WHOLE PERSPECTIVE is covered and that the interviewer BUILDS A PICTURE |

## Appendix 9 - Analysis notes sample

PHD#4 Analysis
Date: 20th Feb 2019
Highlight respondent text relating to comments
Highlight relating to my questions of theoretical thoughts
Highlight to follow up
Highlight for interviewer talking
Metaphor
CAPITALS are codes

METHOD notes for this analysis:

1. First pass for this transcript was typing it up, although there is no actual analysis just grammar, anonymising it and organising it for analysis – 3 column set out.
2. Pass Zero was the watching of the video and dividing it into parts for the interview
3. Pass 2 was reading through the text to condense it and seek out or see codes emerge. Primarily descriptive codes, in-vivo codes. Aim is to code respondent's words, however I also considered words from the investigator that were patterning or condensing actions, reflecting on aggregate views of previous interviews.
4. This analysis was done over a week approximately in lumps of ½ - 2 hours, altho primarily 1-hr blocks.
5. Pass three was reviewing codes and reorganising codes to start building categories, themes and ideas. Linking also starts to occur with other interviews and the literature.

Context:
Practitioner practices from a home clinic in the northern suburbs of Melbourne. It is a farming type environment just outside a rural suburban fringe town. It was an hour drive for me. There were two interviews because the first time the practitioner had a client and the interview wasn't done in time. The treatment takes place in an outbuilding set up as a clinic with waiting area, toilet etc. This is where the first interview occurred. The day was lovely, I was on time and there were no stresses or other concerns. The second interview occurred in the respondents lounge as it wasn't tied to a treatment. Again, lovely day and no other issues.

Method Notes

Additional Notes
* Context is fixed, historical and perhaps fits into the episteme frame for Aristotle. In any case day-to-day living must interact with the context so helping someone to function in life if translated into Pragmatism speak is about adapting a life truth to a new set of truths. We could call it Plan A and Plan B or managing the narrative. In the end what pains and MSK issues a person has need to be incorporated into their life – their biological context. Osteopaths are doing that according to this interview that is one of the goals to treatment.

There are many ways that humans communicate apart from verbal – touch, visual, smell etc. I have chosen to observe treatment and then ask therapist about it using the video as a prompt. The video itself is an interpretation because it doesn't show everything and it doesn't pick up interaction nuances with prac / patient. This means that I believe that physical acts and the acts that comprise a treatment are able to be interpreted by voice. So physical acts can be reinterpreted post-hoc and communicated to the interviewer.

Is it possible that language is developed to express the provisional nature of actions? It would seem logical. The present participle ie it is happening, it is present, it is provisional as it isn't over yet. So perhaps phronesis is defined by present participles?

Dictionary result for present participle (https://www.google.com/search?client=firefox-b-d&q=what+is+the+present+participle)
*noun*
Grammar
noun: **present participle**; plural noun: **present participles**

1. the form of a verb, ending in *-ing* in English, which is used in forming continuous tenses, e.g. in *I'm thinking*, alone in non-finite clauses, e.g. in *sitting here, I haven't a care in the world*, as a noun, e.g. in *good thinking*, and as an adjective, e.g. in *running water*.

ACKNOWLEDGING patients. Should all codes be in the present participle?

^I have considered the first coding pass to be the reading of the transcribed interviews, however I am making conclusions and looking at patterns, repetitions and acts grouped together in the video. In effect the first coding is the video watching. The second pass is the typed text. (top page 8)

## Appendix 10 - Code distribution

| | |
|---|---|
| PHD#1 (7) | PHD#9 (6) |
| PHD#2 (5) | PHD#10 (10) |
| PHD#3 (9) | PHD#11 (6) |
| PHD#4 (10) | PHD#12 (6) |
| PHD#5 (9) | PHD#13 (5) |
| PHD#6 (6) | PHD#14 (5) |
| PHD#7 (9) | PHD#15 (5) |
| PHD#8 (9) | N= 4x5, 4x6, 1x7, 4x9, 2x10 (107) |
| | |
| PHD#1 (7) | |
| TREATMENT PHASES (1) | |
| TUNING (1) | |
| NATURE (1) | |
| TIME DURATION (1) | |
| MECHANICAL (1) | |
| ADAPT (1) | |
| GENERAL SWEEP (1) | |
| PHD#2 (5) | |
| **PASSION** (2) | |
| COMMUNICATION (2) | |
| BIOMECHANICAL (2) | |
| TECHNIQUE (2) | |
| Thought process: complaint reputation (2) | |
| PHD#3 (9) | |
| DATA GATHERING (3) | |
| CONCEPT OF A PROFESSION (3) | |
| COMFORT / OUTCOME (3) | |
| BRAIN PROCESSING (3) | |

| |
|---|
| GET MORE THINGS DONE (3) |
| EXPECT AN OUTCOME (3) |
| SENSING (3) |
| The Patient (3) |
| PHD#4 (10) |
| History/background/context (4) |
| I'm Always on the lookout (4) |
| Big Information (4) |
| Wonderland (4) |
| Down to business – getting on with the treatment (4) |
| Function in life (4) |
| Witness – it is key to treatment that there is an outcome relevant to the patient claims (4) |
| HAPPY PRACTIONER (4) |
| How still I sat (4) |
| PHD#5 (9) |
| UP-TO-DATE WITH CLIENT: OVERSIGHT OF THE CASE (5) |
| CARING RELATIONSHIP IS TWO WAY (5) |
| IMPROVE OVERALL HEALTH: MULTIPLE FACTORS MAKE PATIENT FEEL BETTER (5) |
| BIOMECHANICS IMPACT THE WHOLE PERSON (5) |
| PRACTITIONERSHIP (5) |
| TECHNIQUE CONSIDERATION (5) |
| PATIENT IN TOUCH (5) |
| MY HANDS ARE TELLING ME TISSUES SENSATION (5) |
| WE'RE COMFORTABLE AND HAPPY, GOT THE OUTCOME RIGHT (5) |
| PHD#6 (6) |
| ADAPTING PRACTICE– THE PATIENT INFLUENCES (6) |
| TIME EFFECTIVENESS IS A KEY ELEMENT TO PRACTICE (6) |
| CLINICAL THINKING UNDERPINS JUDGMENT (6) |
| PHYSICAL AND MENTAL COMFORT SUPPORTS THE FLOW OF THE CONSULT (6) |
| THERAPY TECHNIQUE APPROACH (6) |
| TO NAVIGATE THROUGH PAIN AND IMPAIRED FUNCTION (6) |

| |
|---|
| PHD#7 (9) |
| PATTERN EXPECTED / NOT EXPECTED (7) |
| CLARITY OF ACTION or TRUTH (7) |
| TENTITIVE (7) |
| NEGOTIATED OUTCOME (7) |
| HOLISTIC (7) |
| THERAPEUTIC TX (7) |
| TIME CONSERVATION / DURATION (7) |
| COMMUNICATION MORE THAN VERBAL (7) |
| PROFESSIONAL APPROACH (7) |
| PHD#8 (9) |
| TIME (8) |
| RAPPORT (8) |
| AM I SAFE TO TREAT THIS PERSON? (8) |
| PLAUSIBLE THERAPEUTIC PICTURE (8) |
| THOROUGH & SYSTEMATIZED (8) |
| DEFINE SCOPE OF CASE (8) |
| READING OF THE WHOLE SITUATION (8) |
| VERIFICATION (8) |
| THERAPEUTIC CHANGE (8) |
| PHD#9 (6) |
| OSTEOPATHY PROFESSIONAL ACTS (9) |
| THAT'S WHY WE ARE HERE (9) |
| I wonder, I work it out, I know what I'm doing (9) |
| I LET THEM TELL ME, correct me (9) |
| ADAPTING BROADER PICTURE (9) |
| I WANT YOU WORKING BEST AS YOU CAN (9) |
| PHD#10 (10) |
| PROFESSIONAL RAPPORT (10) |
| QUALITY OF THE WHOLE PERSON (10) |
| THE PATIENT (10) |

| |
|---|
| COMFORTABLE (10) |
| MUSCULOSKELETAL MODEL (10) |
| THE PRACTITIONER (10) |
| RISK (10) |
| TRUTH (10) |
| TECHNICAL & BUSINESS (10) |
| CHECKIN' IN (10)<br>VERIFY (10)<br>STEPPING STONES (10) |
| PHD#11 (6) |
| INDIVIDUALIZATION OF CASE / CONSULT (11) |
| A SELF-REFLECTIVE PRACTITIONER (11) |
| CULTURE AND BUSINESS: A PROFESSION (11) |
| THE PATIENT (11)<br>INITIATIVE, EDUCATION & EMPOWERMENT (11) |
| TREATMENT IS AN ACT OF ASSESSMENT (11) |
| IN TOUCH WITH THE BODY (11) |
| PHD#12 (6) |
| THE PRACTITIONER – elements of professional practice (12) |
| THE PATIENT PARTICIPATES (12) |
| DATA, ASSESSMENT, VERIFICATION: A PLAN (12) |
| SMOOTH ACTION (12) |
| DIALOGUE (12) |
| SENSATION, FEEDBACK, ACTION AND OUTCOME (12) |
| PHD#13 (5) |
| RAPPORT & TRUST SUPPORT COMFORT FACILITATES CONSULT (13) |
| THINKING AND JUDGMENT GUIDE THE CONSULT (13) |
| OUTCOMES CRYSTALIZING THE ACTS IN THE PRESENT (13) |
| INTERACTING WITH PROFESSION KNOWLEDGE AND EXPECTATIONS (13) |
| CONSIDERATIONS IN DELIVERING TECHNIQUES (13) |
| PHD#14 (5) |

| |
|---|
| PATIENT RELATIONSHIP IS INDIVIDUAL: THE CASE IS THE FOCUS (14) |
| CLINICAL THINKING (CCT): LIKE LEARNING TO UNTIE A KNOT (14) |
| TENSION IS THE SENSATION & I'M ALWAYS DOING MECHANICAL THINGS (14) |
| VERIFICATION (14)<br>COMPARING THE PAST TO THE PRESENT (14) |
| ALL TOTAL BODY EASE IS ALWAYS THE GOAL (14) |
| PHD#15 (5) |
| YOU'RE DEALING WITH A HUMAN BEING: FLEXIBLE INDIVIDUAL APPROACH (15) |
| INTERACTING WITH THE CLIENT IS AN ONGOING DYNAMIC MULTILEVEL, MULTIMODAL APPROACH (15) |
| KNOWLEDGE OF PATIENT CASE TO MOVE FORWARD (15) |
| CONSCIOUSNESS, THE MIND AND SPACE (15) |
| GETTING BETTER FEELING BETTER (15) |

## Appendix 11 - All Code Summary

| Related codes (codes from each participant) | Themes from each participant as codes | Sub-theme | Final theme |
|---|---|---|---|
| DOWN TO BUSINESS TIME \| I am REALLY INTERESTED \| GET BELOW THE NICETIES, the surface \| DATA SATURATION / SAME OLD STUFF REALLY (in-vivo) \| PHYSICALLY GET ITCHY TO MOVE / READY TO GO / GONNA MOVE \| ACTUAL DOING PHASE \|^\| TIME TO DO WORK \| THAT'S WHY WE ARE HERE \| RELATIONSHIP \| BREAK THE TENSION / TAPS PATIENT - THINGS SOCIAL \|^\| Low on TIME & FEELING TIME \| MULTITASK \| GET SOMETHING DONE \| TIME x2 (relationship with the clinic & Appointment times) \|^\| Multitasking \| Time Conservation \| Time Saving \| Get the Information You Need Quickly \| Time \| Time Management \| Timeline | Down to Business – Getting on with the treatment (4) That's Why We Are Here (9) Time (8) Time Conservation / Duration (7) | DOWN TO BUSINESS, THAT'S WHY WE'RE HERE (4 sub codes) | PRACTITIONERSHIP: THE PROFESSIONAL PRACTITIONER CONTEXT IS INTRINSIC TO THE CONSULT |
| TECHNICAL KNOW HOW x2 \| WORK \| BUSINESS MODEL \| PRACTICAL POLICY \|^\| PROFESSIONAL APPROACH \| PATIENT PRACTITIONER \| TECHNICAL SIDE OF THINGS \| PROFESSIONAL OPINION \| PROFESSIONAL LOOKING \| INDUCTION TYPE 1 REASONING? \| PART OF THE JOB \| HEALTH PROFESSIONAL \| BIOMECHANICAL \|^\| CULTURE-WISE \| MENTORSHIP / GIVE BACK \| PROFESSIONAL / BIOMECHANICAL LANGUAGE \|^\| BIOMECHANICAL \| ANATOMICAL LANGUAGE \| PROFESSIONAL ACTIVITIES PROFESSIONAL ACTS \| DEFINING THE PRESENT \| PLAUSIBLE CONCENTRATING \| STRUCTURED APPROACH \| SPECIALISED or BOUNDED (SOCIAL) PROFESSIONAL ACT \| TRAINING, CONTEXT | Technical & Business (10) Professional Approach (7) Culture and Business: A Profession (11) Osteopathy Professional Acts (9) Thorough & Systematized (8) Interacting with Profession Knowledge and Expectations (13a) | PROFESSIONAL ACTS (6 sub codes) | |

| Related codes (codes from each participant) | Themes from each participant as codes | Sub-theme | Final theme |
|---|---|---|---|
| PROFESSIONAL \|^\| CLINIC CULTURE \| ANATOMICAL BIOMECHANICAL \| BIOPSYCHOSOCIAL MODEL HANDS-ON / INDUCE A CHANGE \| TIME WITH THE FAMILIES \| SEEKING MORE \| EFFECTIVE and INDUCING a change \| QUALITY INTERACTION \| THIS IS CHANGING \| TWO CONVERSATIONS IN A TREATMENT / SOCIAL CONVERSATION \| WHOLE PERSPECTIVE / BUILD A PICTURE \|^\| TOUCHY FEELY \| IT DEPENDS ON INDIVIDUALS \| FIRST HAND EXPERIENCE \| WHAT'S THE DIFFERENCE \| JUST AS A THERAPIST | Happy Practitioner (4) Concept of a profession (3) | CONCEPT OF A PROFESSION: HANDS-ON, QUALITY INTERACTION (2 sub codes) | |
| Passionate about beliefs & philosophies \| love your job \| adapt to new things \|^\| I'M SUPER PROFESSIONAL \| SKILL DEVELOPMENT AS A NOVICE TO PRIVATE PRACTICE \| HABITS & ROUTINES ROUTINE SUPPORTS CREATIVITY \| REFLECTING ON PROCESS \| I STRIVE TO MEET PATIENT EXPECTATIONS | Passion (2) The Practitioner – Elements of Professional Practice (12) | I'M PASSIONATE, I STRIVE TO MEET PATIENT EXPECTATIONS (2 sub codes) | |
| THIS WORK CHANGES YOU / ORGANIC AND AUTHENTIC \| EMOTIONALLY I HAVE TO DISCONNECT IN SOME WAY \| I'M REALLY PASSIONATE \| I NATURALLY ADOPT \| SILENCE IS OK \| ROUTINE FOR MY PROCESSES \|^\| CLINICAL EXPERIENCE \| LOOK AFTER MY OWN BODY \| LINKING HEALTH ISSUES \| STEERING CONVERSATION \| GOT INTO THE HABIT \| ROUTINE \|^\| GOOD TO DELIVER ARRAY WITHOUT EGO \| TO ME THE PRIMARY CONCERN \| I DO THIS DIFFERENTLY \| MISS THINGS\|^\|TAKES THE PRESSURE OFF ME \| I AM STILL GRASPING AND STRUGGLING \| RECOGNISES SCOPE OF PRACTICE | A Self-Reflective Practitioner (11) Practitionership (5) The Practitioner (10) Interacting with Profession Knowledge and Expectations (13b) | A PRACTITIONER IS REFLECTIVE WITH THEIR PRACTICE (4 sub codes) | |

| | | | |
|---|---|---|---|
| Mechanical \| Biomechanics \| Location \|^! Anatomy \| curves \| posture \|^\| MUSCULOSKELETAL MODEL \| BIOMECHANICAL THINKING \| BIOMECHANICAL / ANATOMICAL (10) \|^\| BIOMECHANICAL THINKING AND LANGUAGE PHYSICAL METAPHOR: PIVOT POINT & TENSION (BIOMECHANICAL) \| GIVING SPACE TO THE PATIENT PRAC INTERACTION \| JUST FELT THE TENSION BETWEEN THE TWO \|^\| CENTRAL PEAK / WHAT THE PRIMARY IS \| KEY TO HOW SHE IS FEELING OVERALL \| THEY'RE WORKING WELL TOGETHER \| THINGS MECHANICAL \| FELT MORE MECHANICAL<br>WHAT'S IMPACTING HER LIFE AT THE MOMENT \| FUNCTION IN LIFE \| What's GOING on? \| SOCIAL – PURPOSE \| HOW WELL SHE'S COPING \| Put the pieces together in her body \|^\| SOCIAL CONTEXTUAL PRACTICE /SOCIAL ACT / SOCIAL SHARING \| correlation with the rest of the body \|^\| holism, Whole person, interrelated \| General Sweep \| Judgment \|^\| HOLISM / HOLISTIC x2 WHOLE MECHANISM \| QUALITY OF THE WHOLE PERSON CLINICAL INTUITION AND EXPERIENCE \| MY MIND OUTSIDE \|^\| PROFESSIONAL GAZE \| PROFESSIONAL LOOKING \| READING OF THE WHOLE SITUATION \| ADAPTING TECHNICAL \| NORMAL FAMILIAR ACTS | Mechanical (1) Biomechanical (2) Musculoskeletal Model (10) Clinical Thinking Underpins Judgment (6a)<br>Tension Is the Sensation & I'm Always Doing Mechanical Things (14) Biomechanics Impact the Whole Person (5)<br>Function in Life (4) Holistic (7) General Sweep (1) Quality of The Whole Person (10) Reading of the whole situation (8) | BIOMECHANICAL THINKING (4 sub codes)<br>TENSION THE SENSATION IS BIOMECHANICS OF THE WHOLE PERSON (2 sub codes)<br>FUNCTION IN LIFE (holistic thinking) Structure & function are interrelated!! (5 sub codes) | HOLISTIC BIOMEHANICS |
| Related codes (codes from each participant) | Results (themes from each participant as codes) | Sub-theme | Theme |
| HONOURING THAT INNATE INTELLIGENCE \| BEING MORE FOCUSED WHILE MAINTAINING MY OWN STILLNESS IS THE ART \| GET A LITTLE DISTRACTION - GET HIS FOCUS OFF \|^\| Balance \| | Consciousness, The Mind and Space (15) Nature (1) Wonderland (4) | CONNECTING WITH NATURE, THE WONDERLAND: | COMMUNICATION IS MORE THAN VERBAL: CONNECTING TO |

| | | | |
|---|---|---|---|
| Relationship \| it never doesn't \| Rhythm/ patterns \| Patient involvement \| Nature \|^\| it's INNATE \| INNER MESSAGE \| BODILY AWARENESS \| WONDERLAND \| BE SILENT AND EXPERIENCE IT \| GREATER CONNECTION \| SURRENDER \| Something SIGNIFICANT, QUITE POWERFUL \| I JUST KNEW \| HER TISSUES DIDN'T TELL ME \| THE BODY DOESN'T LIE \| I THINK WHAT'S GOING ON INSIDE HER BODY - LOOKING IN AND HOW I CAN HELP HER TISSUES \| GOLDEN NUGGETS from hands on \| LET THE TISSUES TELL ME TAP INTO THE NATURAL RHYTHMS AND ENERGIES \| CENTRE AND PREPARE FOR THE TREATMENT PHASE \| THE BODY'S READY TO GIVE ME INFORMATION \| WHEN YOU'RE LISTENING, YOU NEED TO BE A BIT QUIET \| GENTLY MAKE SOME CHANGES \|^\| WHAT I KNOW I CAN FEEL \| SENSE OF SOME THINGS \|^\| Flow \| Tuning \| Sensing \|^\| OBJECTIVE DATA ANOTHER FORM OF REFLECTION \| KEEPING IN TOUCH WITH HOW THE WHOLE BODY \| ROUTINE: FEEDBACK OF WHAT THE TISSUES ARE FEELING LIKE \| I WAS QUITE SURPRISED (pts response to ttt) \| INITIATION OF TREATMENT FOR THEM: PATIENT STARTS TO RELAX \|^\| QUITE A COMFORTABLE POSITION \| BODY IS LIKING \| WE'RE COMFORTABLE TOGETHER \| THE BODY IS QUITE SETTLED AND BALANCED \| REALLY GREAT TO SEE \| VERY OFTEN YOU GET IT RIGHT \|^\| REASSURANCE \| HANDS ON \| 'FEEL GOOD' \| ENJOYMENT OF TECHNIQUE | | THE INNATE INTELLIGENCE, the patient? (3 sub codes) | THE WONDER, THE PASSION, THE NATURE OF THE WHOLE PERSON |
| PROFESSIONAL RELATIONSHIP / RAPPORT \| TRAVELLED WITH A PATIENT \| YOUR PATIENTS WITH YOU ON THAT JOURNEY \| YOU'RE THE BOSS / | My Hands are telling me tissues sensation (5) Sensing (3) Tuning (1) In touch with the body (11) We're comfortable and happy, got the outcome right (5) Therapeutic Tx (7) Professional Rapport (10) History/Background/Context (4) Patient relationship is | MY HANDS ARE TELLING ME: they connect to the patient (6 sub codes) THE PROFESSIONAL RELATIONSHIP IS | |

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|---|---|---|---|
| EMPOWERING PATIENT PROFESSIONAL CHAMELEON \| COMPLIANCE \|^\| BACK GROUND \| CONTEXT – VERY LONG HISTORY \| you're actually BUILDING UP, it's all about YOUR RELATIONSHIP WITH THE PATIENT \| IT'S JUST TWEAKING ME \| Routine, normal pattern, check it off \|^\| PHYSICAL CUES - PATIENT PATS PRACTITIONER \| INDIVIDUALIZED: WITH HER IN PARTICULAR \| YOU KNOW YOU ARE TREATING SOMEONE DIFFERENT EVERY TIME \| RELATIONSHIP BOTH WAYS: EMPATHY BUILDING \| LISTENING & ATTENTIVE \|^\| HAVE TO CREATE SPACE WITH MY HANDS AND MY HEART - COMPASSIONATE HANDS \| ONGOING DIALOGUE WITH THE TISSUES \| YOU ARE CONSTANTLY MONITORING THE PATIENT'S WELL-BEING \| PHYSICAL CUES \| PROFESSIONAL LANGUAGE Express \| listening \| convey \| Easy rapport \| Educates & teaches \|^\| PUT IN THE NOTES \| FEEDBACK \| A CONVERSATION WITH THAT ASSESSMENT \| INTERVENTION AND REASSESS / PALPATORY FEEDBACK \| MULTI-MODE COMMS \| CHECK-IN \| BIOMECHANICAL LANGUAGE \| COMMUNICATION MORE THAN VERBAL \| SENSORY COMPONENT \|^\| HANDS ON IS COMMUNICATION \| PROFESSIONAL PROCESS \| MODIFIED SOCIAL ACT \| RAPPORT | individual: The case is the focus (14) Interacting with the client is an ongoing dynamic multilevel, Multimodal approach (15) | A JOURNEY WITH THE INDIVIDUAL CONNECTING WITH THE PATIENT PROFESSIONALLY (4 sub codes) | |
| | Communication (2) Communication More Than Verbal (7) Rapport (8) | COMMUNICATION MORE THAN VERBAL (3 sub codes) | |
| Related codes (codes from each participant) | Themes from each participant as codes | Sub-theme | Final theme |
| TWO-WAY INTERACTION \| CARE ABOUT EACH OTHER \| TRUST AND RAPPORT AND RELATIONSHIP (TIME) \| SPECIAL TO BE PART OF THAT \| VULNERABILITY \| MELD INTO THE COMMUNITY \|^\| IT'S IMPORTANT FOR THE PATIENT TO HAVE | Caring Relationship Is Two Way (5) Rapport & Trust Support Comfort Facilitates Consult (13) | TRUST AND CARE IS TWO-WAY AND THE FOUNDATION OF | INDIVIDUALIZING THE INTERACTION WITH THE PATIENT DEVELOPS COMFORT AND |

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| TRUST IN ME \| INTERACTION BETWEEN PATIENT IS TWO-WAY \| I WANT THE PATIENT TO KNOW I CARE ABOUT THEM \| I WANT THEM TO FEEL AS COMFORTABLE AS THEY CAN \| DISCUSS, TALK & DESCRIBE THEIR STORY WITHOUT ME INFLUENCING THAT AT ALL | | THE CONSULT (2 sub codes) | LEADS TO TRUST - THE FOUNDATION OF THE CONSULT |
| I LET THEM TELL ME WHY \| BODY RESPONSE \| FOCUSSING ON THE TISSUES / RECHECKING \| THE CHANCE TO CORRECT ME LISTENED TO THEM \| FEEDBACK \|^\| PATIENTS EXPECT \| PERSONAL INTERACTION \| HOW IMPORTANT A PATIENT'S THOUGHTS AND MINDSETS ARE | I Let Them Tell Me, Correct Me (9) The Patient Participates (12) | I LET THEM TELL ME (2 sub codes) | |
| COMFORTABLE / comfort \| ANNOYING \| DISTRACTION \| SURPRISED (prac comfort zone) \|^\| COMFORTABLE ZONE – risk \| COMFORTABILITY - Physical \| COMFORTABLE - holistic | Physical and Mental comfort supports the Flow of the Consult (6) Comfortable (10) | COMFORTABLE: MENTAL AND PHYSICAL / PRACTITIONER AND PATIENT (2 sub codes) | |
| Depends on the circumstances\| used to the routine \| Adapt \|^\| WHOLE BODY EXPERIENCE \| ADAPTING BROADER PICTURE \| HABIT \| CALM AND CASUAL \| MULTIFUNCTION TECHNIQUE \| PATIENTS WORKING WITH ME / PATIENTS CONTRIBUTING \|^\| YOU'RE DEALING WITH A HUMAN BEING: FLEXIBLE INDIVIDUAL APPROACH \| VARIATION ON TECHNIQUE DUE TO PT BEING A CHILD \| THAT FRAMEWORK IS QUITE IMPORTANT \| CONSENT \|^\| FAMILIAR RELATIONSHIP \| PATIENT DIRECTS CONSULT \| NOT USUAL PRACTICE / SOCIAL ACTS / SOCIAL FLEXIBILITY \| CLEAR DELINEATION | Adapt (1) Adapting Broader Picture (9) You're dealing with a human being: Flexible individual approach (15) Adapting Practice – The Patient Influences (6) | YOU'RE DEALING WITH A HUMAN BEING: ADAPTING TO THE BROAD PICTURE (4 sub codes) | |

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| SOLUTION TALORED TO THE INDIVIDUAL \| TREATMENT STYLES \| RISK \| DIFFERENT JOURNEY \| AS THEY OPEN UP MORE + AS I THINK = ANOTHER RABBIT HOLE \| NEUTRAL POINT is a PERSON SPECIFIC CONCEPT \|^\| I JUST TAKE THE BEST ELEMENTS FROM EVERYTHING \| HAPPY \| I'M JUST A BIT STIFF (re acute/non-acute variation) \| CLINICAL CONVERSATION \| VALUE SPACE (more about individualising and adapting with comfort the outcome) | Individualization of case / consult (11) Comfort / Outcome (3) | SOLUTION TAILORED TO THE INDIVIDUAL (2 sub codes) | |
| Related codes (codes from each participant) | Themes from each participant as codes | Sub-theme | Final theme |
| HIGHEST LEVEL PRIORITY \| AM I SAFE TO TREAT THIS PERSON? \|^\| RED FLAG / RISKS \| RISK \|^\| HARDCORE \| PRIORITISING PRIORITY \| IM ALWAYS ON THE LOOKOUT \| IT NEEDS TO BE ACKNOWLEDGED \| A BIG FLAG \| CERTAIN DANGER \|^\| LOOK AT THINGS FOR YOURSELF \| LIFE THREATENING - THINKING RED FLAGS \| BACKGROUND THINKING \|^\| RISK PROCESS \|^\| **T**HE KEY QUESTION: IS IT A RED FLAG OR RELATIVELY COMMON INJURY PAST KNOWLEDGE INFORMS PRACTICE \| WHAT ELSE HAPPENED \| GLEANED ENOUGH INFORMATION HERE \| DATA FROM MULTIPLE SOURCES \| EXAMINATION: DEPENDENT ON THE HISTORY \| YES NO ANSWERS ARE GUIDING WHAT YOU DO NEXT \|^\| THE PAST IMPACTS THE PRESENT \| PATTERN / HABIT PATTERNS OF PRESENTATION \| TRUTH - WILLIAM JAMES \| HOPING OUTCOME SUCCESS RATE \| MAKING HEADWAY \| A GUAGE \| CONFIRMATORY FACTORS \| VERIFIES NORMAL \| SOUNDING BOARD | Am I Safe to Treat This Person? (8) \| Risk (10) \| I'm Always on the lookout (4) Pattern Expected / Not Expected (7) Dialogue (12a) Thinking and judgment guide the consult (13a) | ALWAYS ON THE LOOKOUT: AM I SAFE TO TREAT THIS PERSON? (6 sub codes) | CLINICAL THINKING AND JUDGMENT ARE CRITICAL TO PRACTICE: THEY ARE CONTINUOUS |
| | Knowledge of patient case to move forward (15) Truth (10) | TRUTH IS AN ACT TO STEP FORWARD (2 sub codes) | |

| Related codes (codes from each participant) | Themes from each participant as codes | Sub-theme | Final theme |
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| Treatment strategy \| Questioning strategy \| PHASES OF TREATMENT Phases \|^\| I WONDER / FINDING OUT THINGS \| PULL APART / LAST TIME WE/ Catches us up to the present \| RESERVATION \| CLEAR LINKS TO PAST & FUTURE and CLEAR PRESENT \| TO MAKE SURE - RIGHT SORT OF TRACK VERIFICATION \| CONFIRMED / I KNOW WHAT I'M DOING / CLARITY \| MANIPULATION – MANUAL TX \|^\| TIME MANAGEMENT: HONE IN ON WHAT I THINK IS A CLINICALLY RELEVANT (judgment) \| MULTIFUNCTION TECHNIQUES VERIFYING ACTIONS \| I KNEW PREVIOUS HISTORY: THE PAST GIVES CONFIDENCE IN THE PRESENT \|^\| PAID OFF (pushing clinical boundaries) \| CLINICAL STRATEGY \| BODY OF KNOWLEDGE | Treatment Phases (1) I Wonder, I Work It Out, I Know What I'm Doing (9a) Thinking and judgment guide the consult (13b) Clinical Thinking Underpins Judgment (6b) | THINKING LINKING PAUSING ACTING IS CONTINUAL (4 sub codes) | |
| OPEN SHARING OF KNOWLEDGE \| IT TRIGGERS / I DON'T CONSCIOUSLY \| CLINICAL SITUATION switch \| BRAIN POWER \| COMPUTING IN THE MIDDLE GROUND \| GETTING INFORMATION \| THINK OUT LOUD \| SHOULDN'T PRE-PLAN TOO MUCH \| SUBCONSCIOUSLY \|^\| MOST TREATMENTS HAVE A SIMILAR FRAMEWORK \| CCT - LIKE LEARNING TO UNTIE A KNOT \| IT'S JUST THE AMOUNT OF BRAIN SPACE \| MULTIFUNCTION: FEELING FOR ASYMMETRY / TISSUES' REACTION TO MY TOUCH \| WHEN THE PATTERN MAKES SENSE IN MY HEAD \|^\| Thought process: complaint resolution = case history + exam + treatment \| Osteopathic specific – uncomfortable \| delving \| blockages \|^\| GAZE AVERSION \|^\| MENTAL BANDWIDTH | Brain Processing (3) Clinical Thinking (CCT): Like Learning to Untie A Knot (14) Thought Process: Complaint Resolution (2) Outcomes I Wonder, I Work It Out, I Know What I'm Doing (9b) Negotiated Outcome (7a) | REASONING PROCESS IS CONTINUAL THROUGHOUT (5 sub codes) | |

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| have YOUR OWN HANDS ON AND YOUR OWN EYES LOOK AT A CERTAIN AREA \| JUST TO GET AN IDEA / I CAN PICK UP TO FURTHER \|^\| CONDIITONAL or PROVISIONAL \| GOOD ENOUGH NOW CHANGING / PLAN FOR NEW DATA \| FORMULATED SOME QUESTIONS \| MULTIFUNCTION / MULTIROLE \| ALL THIS INFORMAITON \| ANYTHING THAT INTERESTED ME \|^\| no further information to be gained \| GENERAL OVERALL ASSESSMENT \| MOTION RESTRICTION \| CHAIN \| REASSESSMENT CYCLE \|^\| CURIOSITY – HOW THAT WAS GOING ASSESSMENT DRIVES ACTION \| INTENTION \| HISTORY TO EXAM? COLLECT SOME DATA \| DUAL ROLE / MULTIROLE TECHNIQUE | Tentative (7) Data, Assessment, Verification: A Plan (12) Data Gathering (3) Treatment Is an act of Assessment (11) | DATA GATHERING AT EVERY STAGE IS SUBJECT TO VERIFICATION AND JUDGMENT (4 sub codes) | |
| CLEAR PATHWAY \| CLEAR SIGHT TO MANAGE A DIAGNOSIS \| DIAGNOSIS \| ABDUCTIVE THINKING \|^\| THERAPEUTIC PICTURE \| GOOD TO GIVE OPTIONS \| SPECIFIC = BETTER OUTCOME \| NEGOTIATING A CLEAR PLAUSIBLE OUTCOME \|^\| I CAN RETEST – VERIFICATION \| THAT'S WHAT I THINK IS GOING ON – THAT'S MY BEST WORKING DIAGNOSIS \| IT'S CRUCIAL FOR A PATIENT TO EXPLAIN WHAT YOU ARE DOING \| PUT THE PATIENT IN THE MENTAL PHYSICAL SPACE TO RECOVER FROM THE CONDITION | Clarity of Action or Truth (7) Plausible Therapeutic Picture (8) Crystalizing the Acts in The Present (13) | VERIFICATION SUPPORTS CLARITY OF ACTION (3 sub codes) | VERIFICATION: KNOWING OF THE CASE IN THE PRESENT |
| MAKE SURE \| VALIDATE INTERACTION \| ABILITY OF TISSUES \| ASSESSMENT JUDGMENT ACTION CYCLE \| OBVIOUS TO MY HANDS \|^\| MATCH SENSATIONS / VERIFICATION WITH SENSATION \| WHAT I HAD NOTICED \|^\| STEPPING STONE x2 / VERIFICATION/ RE-VERIFICATION GUAGE \| COMMUNICATING WITH THE PATIENT'S TISSUES / | Verification (8) Sensation, feedback, action and outcome (12) Checkin' in (10) \| Verify (10) \| Stepping Stones (10) Big Information (response to treatment) (4a) | CHECKING AND VERIFYING (4 sub codes) | |

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| TISSUE TEXTURE ASSESSMENT \| SOFTENED \|^\| ACKNOWLEDGING \|'OH YEAH!' \| GO BACK AND LOOK / A SHIFT AND A CHANGE \| BIG information : When the pt responded to the technique, the major data was the palpatory feedback. *'It just goes zuub!'* TESTING TREATMENT OUTCOME \| CONSTANT CHECKING BACK – palpatory \| THE HISTORY? REALLY IMPORTANT, YEAH \|^\| KEEPING AN EYE TRACKING HEALTH and RIGHT CARE \| PAYING CARE CLOSE ATTENTION \| WHETHER THINGS ARE IMPROVING \| WHAT'S GOING ON: REASSESSING \| IT ALWAYS CHANGES \| UP-TO-DATE \|^\| Prior Knowledge \| Time, Temporal, Sequence \| Prediction | Verification (14) \| Comparing the Past to The Present (14) Up-To-Date with Client: Oversight Of The Case (5) Time Duration (1) | COMPARING PAST AND PRESENT: OVERSIGHT OF THE CASE (4 sub codes) | |
| Related codes (codes from each participant) | Themes from each participant as codes | Sub-theme | Final theme |
| EXPECTATIONS ARE TWO WAY \| STRUCTURED TREATMENT PLAN \| EMPOWER PT TO LOOK AFTER SELF \| COMPLIANCE \|^\| PATEINT WANTS ANSWERS \| WE NEED TO FIND OUT \| MANAGING UNCERTAINTY \| CAUSE AND EFFECT \| OVERVIEW AND FUNNEL \| CLARITY \| DEFINE or SET THE SCOPE OF CASE THEY KNOW (it works) \| REQUIREMENTS OF THE PATIENT \| MEETING CLIENT NEEDS & EXPECTATIONS \|^\| "SWEET" (patient quote) \| PATIENT IS EXPECTING ME \| INCLUDING PATIENT FEEDBACK \| PT KNEW WHAT WAS COMING \| PATIENT PREPARATION \|^\| THEY KNOW THAT'S THE THERAPEUTIC PROCESS \| BODY COULDN'T QUITE COPE \| QUITE IN TOUCH WITH HER BODY \| THE PATIENT CAN NOTICE A CHANGE \| RESPONDS WELL | The Patient: Initiative, Education & Empowerment (11) Define scope of case (8)<br><br>The Patient (10) & (3) Patient in Touch (5) | EXPECTATIONS ARE TWO-WAY (2 sub codes)<br><br>THE PATIENTS KNOW (3 sub codes) | AN OUTCOME IS EXPECTED, NEGOTIATED AND ENACTED AS THE PLAN |

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| HAPPY \| WHOLE \| BUILDING ON GOALS \| NAVIGATE THROUGH PAIN AND IMPAIRED FUNCTION OUTCOMES \|^\| ALL TOTAL BODY EASE \| TO GIVE ME SOME SPACE/SPACE = EASE \| 'I GOT IT' \|^\| HELP WITH LOTS OF THINGS \| FACTORS OUTSIDE OF TREATMENT THAT MAKE PATIENT FEEL BETTER \| CONGRATULATING HER \| IMPROVE OVERALL HEALTH | To Navigate Through Pain and Impaired Function (6) All total body ease is always the goal (14) Improve Overall Health: Multiple Factors Make Patient Feel Better (5) | GOALS TO HELP WITH OVERALL HEALTH IMPROVEMENT (3 sub codes) |
| CONTEXT \| INFORMATIVE ANSWER \| IT DEPENDS AGAIN ON THE PATIENT - DEPENDING \| PATIENTS PREFER \| EDUCATION \| TEAM APPROACH \| GOAL BASED APPROACH \| BENEFICIAL FOR THE PATIENT \| TREATMENT EFFECT \| PATIENT HAVE AN IDEA OF \| TIME ADAPTABILITY \| INDIVIDUAL BUT THE SAME \| CHANGE THINKING \| NOT CONFRONTING \| COMFORT WITH TREATMENT PROCESSES \| TREATMENT STRATEGY PLANNING \|^\| BENEFIT \| TIME FLEXIBILITY \| TECHNIQUES THAT WORK FOR THEM \| WHAT WORKED FOR YOU? REACTED \|^\| ANYTHING OF CONCERN - NEEDS TO MOVE \| KEEP IT IN CHECK / OVERCOME \| HEALTH PROFESSIONAL ROLE \| EFFICIENCY \| KNOW EXACTLY WHAT / TIME FOR ACTS \| I WANT YOU WORKING BEST AS YOU CAN \| I LIKE GETTING RESULTS | Negotiated Outcome (7b) Expect an outcome (3) I Want You Working Best as You Can (9) | NEGOTIATING AN OUTCOME TO HAVE PATIENT WORKING AS BEST AS THEY CAN (3 sub codes) |
| MAIN GOAL: THERAPEUTIC CHANGE \| PATIENT FEELS CHANGE \| CREATE SPACE OUTCOME \| ABSOLUTELY SPECIFIC \|^\| I'VE HAD TO JUST KEEP HER TOGETHER \| "yeah I can walk" \| THE QUALITY OF HOW THEY MOVE \| ANTICIPATING AND CONFIRMING \| GET SOME RELIEF \| WITNESS … OF WHATS GOING ON IN THAT PERSON AS A WHOLE \| | Therapeutic Change (8) Witness – It Is Key to Treatment That There Is an Outcome Relevant to the Patient Claims (4) Getting Better Feeling Better (15) | THERAPEUTIC CHANGE IS THE GOAL: WITNESS THE OUTCOME (3 sub codes) |

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| PATIENT DIRECT / CENTRED FEEL VALIDATED \| YOU JUST HAVE TO WORK IN TOGETHER \| CREATE ENVIRONEMNT FOR BODY TO FIND ITS WAY \|^\| They Tend To Relax \| Exercises Are Like Medicine \| Engaging With Tissues / Body Where It Is At \| Its A Dysfunction \| First Of All I'll Feel The Change In The Tissues Under My Hand \| It's Multifactorial - Holistic | | | |
| Related codes (codes from each participant) | Themes from each participant as codes | Sub-theme | Final theme |
| AUTOPILOT - BODY REMEMBERS \| GENERAL APPROACH THAT IS TAILORED \| TREAT, REASSESS, MOVE ON OR TREAT \| PRIORITY / PRIORITISING \| I KNOW WORKS \| TIMEFRAME - GET MORE THINGS DONE \| CONSERVATION \| PUT THAT IN THE MEMORY BANK \| 'PRIOR KNOWLEDGE' \| MY HANDS KNOW WHAT THEY'RE GONNA DO \| TREATMENT STRATEGY \| AVOIDS WASTING TIME STREAMLINE \| STRUCTURE / PATTERN APPROACH \|^\| MULTITASK \| TIME \| EXPERIENCE GROWS | Get More Things Done (3) Time effectiveness as a Key Element to Practice (6) | MANAGING TIME TO GET MORE THINGS DONE (2 sub codes) | MANUAL TECHNIQUE DELIVERY AND PROFICIENCY |
| TECHNIQUE \| HANDS-ON JOB \| NURTURED \| 'POSITIVELY REINFORCE' \|^\| THE LANGUAGE I USE IS POSITIVE \|^\| Visualization \| manipulation \| Wobble \|^\| its treating symptomatically \| HOW STILL I SAT \| I PAY ATTENTION TO THAT \| TRUE TO THEMSELVES \| INTUITIVE KNOWLEDGE \| POSITIONING \| IT JUST VARIES \| ENCOURAGE ANYTHING POSITIVE REINFORCE IT \|^\| CHOOSING TECHNIQUES \| TOUCH IS IMPORTANT \| WE'LL ADAPT / PROVISIONAL \| THINKING TECHNIQUE \| CONSIDERATIONS IN DELIVERING TECHNIQUES \|^\| TRIAL AND ERROR \| A CLEAR PURPOSE \| GET IT RIGHT MORE OFTEN \| THAT'S WHAT NEEDS TO MOVE \| IT'S NOT DONE | Therapy Technique Approach (6) Dialogue (12b) Technique (2) How Still I Sat (4) Considerations in Delivering Techniques (13) Technique Consideration (5) Smooth Action (12) Big Information (response to treatment) (4b) | STRATEGEMS FOR DELIVERING TECHNIQUE (8 sub codes) | |

LIGHTLY |^| I LOVE MEDITATION HOLISTIC TREATMENT | FLOW | TREATMENT ORDER TECHNIQUE PLANNING |^| ATTENTION AND CONTROL