Theoretical Foundations of Meta-Aggregation: Insights from Husserlian Phenomenology and American Pragmatism

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Table of Contents

Abstract of the thesis

The objectives of the thesis were: 1) to examine the Husserlian phenomenology and American pragmatism philosophical literature and to clarify the validity of the claims that the Joanna Briggs Institute's meta-aggregation is founded on Husserlian transcendental phenomenology and American pragmatism; 2) to develop an explicit coherent theoretical foundation for the Joanna Briggs Institute's approach to the meta-aggregation of qualitative studies based on insights from Husserlian phenomenology and American pragmatism.

The philosophical/theoretical perspective of the thesis was critical theory with a special focus on the philosophical works of Jurgen Habermas. Philosophical inquiry was used as methodology. Data collection involved critical reading of the Husserlian phenomenology and American pragmatism philosophical literature, the Joanna Briggs Institute's guidance on meta-aggregation and the international qualitative research literature regarding meta-synthesis of qualitative evidence - specifically meta-aggregation. Data analysis and synthesis used an integrative synthesis of ideas and theoretical framework development. Narrative (text) and graphical/visual approaches (tables; idea maps; diagrams) were used for the presentation of the results.

Chapter I of the thesis presents an introduction to the role of qualitative research and systematic reviews of qualitative evidence in evidence-based health care. Chapter II provides the details of the research questions/objectives, methodology, and methods. Chapter III of the thesis examines the Joanna Briggs Institute's meta-aggregation approach for synthesis of qualitative evidence. Chapter IV explores essential ideas of Husserlian phenomenology. Chapter V examines critically the validity of the claims that the Joanna Briggs Institute's meta-aggregation is founded on Husserlian transcendental phenomenology. Chapter VI explores fundamental ideas of American pragmatism as reflected in the works of Charles S. Peirce, William James, and John Dewey. Chapter VII examines critically the validity of the claims that the Joanna Briggs Institute's meta-aggregation is founded on American pragmatism. Chapter VIII provides an original explicit theoretical foundation for the Joanna Briggs Institute's meta-aggregation based on new insights from Husserlian phenomenology and American pragmatism.

Thesis Declaration

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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Catalin Tufanaru

30th October 2015

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Chapter I: Qualitative research synthesis and evidence-based health care

Introduction

The context of this thesis is the broad and expanding field of evidence-based health care. I use the term evidence-based health care to refer to health care that incorporates into the decision making process the expertise and experience of the decision makers (health care professionals and policy makers), the patients' unique circumstances, values and preferences, and the best available evidence (evidence from quantitative and qualitative research, and evidence from sources other than research, such as public discourse) regarding the feasibility, acceptability, meaningfulness, and effectiveness of interventions, practices, and policies (Pearson et al 2007). The origins, philosophy, principles and methods of evidence-based health care are comprehensively presented by Guyatt et al (2015), Pearson et al (2007), Porritt (2011), and Porritt & Pearson (2013), Gray (2009), and Greenhalgh (2014) among others.

This thesis explores an approach to qualitative research synthesis called meta-aggregation. Meta-aggregation is an approach to synthesis of qualitative research that is used in systematic reviews of qualitative evidence. In this chapter I provide a brief discussion regarding to the systematic reviews of qualitative research, the role of qualitative research, and the role of qualitative research synthesis in evidence-based health care.

Systematic Reviews

Systematic reviews aim to systematically identify, critically appraise, and summarize all relevant studies that match predefined criteria and answer predefined questions (Aromataris & Pearson 2014).

The defining characteristics of a systematic review are:

- clear explicit objectives and questions to be addressed;
- explicit unambiguous inclusion and exclusion criteria, declared a priori (in the review protocol), that indicate the eligibility of studies;
- a systematic comprehensive search to identify all relevant studies, both published and unpublished; critical appraisal of the methodological quality of included studies;
- systematic extraction data from the included studies;
- synthesis of the data and presentation of the synthesized data; and

- clear transparent reporting of the entire process of the review (Aromataris & Pearson 2014).

The details of the structured standardized steps involved in the systematic review are well known and clearly presented in the methodological literature (Aromataris & Pearson 2014; Stern et al 2014; Aromataris & Riitano 2014; Porritt et al 2014; Munn, Tufanaru, and Aromataris 2014).

Qualitative Research

Qualitative research refers to the exploration of human experiences, specifically the meaning of lived human experiences (Parse et al 1985). Qualitative research is research performed using a naturalistic approach of exploring the meaning of human interactions and activities in natural settings and focuses on the interpretation of phenomena, that is the interpretation of meaning (Denzin & Lincoln 2011; Leavy 2014). Essentially, qualitative research is interested in human interactions and language (Pope et al 2007).

There are three philosophical roots or foundations of qualitative research: the German philosophical tradition found in the works of Schleiermacher, Dilthey, and Gadamer, and called hermeneutics; the phenomenological philosophical tradition founded by Husserl; and the North American philosophical tradition of pragmatism (Brinkmann et al 2014).

The term qualitative research is an umbrella term that is used for an extraordinarily rich universe of diverse methodologies informed by different philosophical perspectives, and using different data collection methods and data analysis methods (Leavy 2014; Brinkmann et al 2014). Denzin and Lincoln (2011) discuss diverse theoretical paradigms and perspectives employed by qualitative researchers (such as positivist/post positivist; constructivist; feminist; ethnic; Marxist; cultural studies; queer theory) and a variety of research strategies (such as ethnography, phenomenology, grounded theory, action and applied research, and clinical research) (Denzin & Lincoln 2011). Lincoln et al (2011) consider five inquiry paradigms that differ in regard to ontological, epistemological, and methodological aspects: positivism; post positivism; critical theories; constructivism; participatory (Lincoln, Lynham, and Guba 2011). These paradigms differ in terms of:
- the aims of the inquiry;
- the nature of knowledge;
- knowledge accumulation;

- quality criteria;

- values;

- ethics;

- inquirer positioning;

- the voice of research subjects;

- the influence of researcher on others;

- the product of the inquiry process and how society uses the knowledge; and

- control over the research process (Lincoln, Lynham, and Guba 2011).

Qualitative health research has many important roles in the identification of health care needs from the patients' perspective; the identification of patterns of seeking health care; the exploration of the patients' experience of illness and of recovering from illness; the examination of the health care providers' experiences and practices; and the description of symptoms and syndromes, among others (Morse 2011). Qualitative health research explores the entire spectrum of diverse settings where patients receive care, such as all types of healthcare settings and also homes (Morse 2011).

Qualitative health research explores the lived experiences, perspectives, feelings, and views of patients and healthy individuals, of all types of healthcare professionals and also lay caregivers, of families, groups, and communities (Morse 2011). Qualitative health research explores all aspects of the entire range of activities and aspects related to disease prevention and screening, diagnosis, treatment, and rehabilitation (Morse 2011).

The origins, philosophy, principles and methods of qualitative research are comprehensively presented by Ashworth (2008), Leavy (2014), Brinkmann (2014), Bryman (2008), Burns & Grove (2009), Cohen et al (2007), Creswell (2007), Creswell (2009), Coyle (2007), Lyons & Coyle (2007), Crotty (1998), Pope & Mays (2006), Green & Thorogood (2009), Giacomini & Cook (2015), Fitzgerald & Field (2005), Flick (2014), Denzin & Lincoln (2011), Finlay (2011), Jackson & Borbasi (2008), Liamputtong (2009), Liamputtong (2010), Liehr & LoBiondo-Wood (2006), Mertens (2010), Neuman (2006), Polit et al (2010), Streubert Speziale (2006; 2007), Zichi Cohen (2006) and Van Manen (1990; 2014) among others.

I consider that it is essential to discuss here in this chapter only some fundamental aspects of qualitative research that have direct relevance to my thesis (the relevance of these concepts will

become clear in Chapter VIII, when I discuss the theoretical framework for meta-aggregation): the researcher's stances; the role of interpretation; similarity and contiguity relationships and the role of categorizing and connecting; types of categories (organizational, substantive, and theoretical categories); generalizability of results in qualitative research; abduction versus induction and deduction; the relationship between empirical observations and theory; the classification of theories based on their scope; the empirical content of statements; and the quality or validity issues in qualitative research. Only these aspects of qualitative research are discussed as these are the concepts that have direct relevance to my thesis.

Researcher's stances

There are different researcher's stances described in the methodological literature: detached observer; empathetic observer; faithful reporter; mediator of languages; reflective partner; dialogic facilitator (Blaikie 2010). The researcher as detached observer acknowledges that the researcher's values and preferences can threaten the objectivity of the research and tries to minimize it (Blaikie 2010). The researcher as empathetic observer aims to achieve objectivity however insists that it is necessary for the researcher to be able to place themselves in the participants' position (Blaikie 2010). The researcher as faithful reporter reports what the participants speak for themselves and presents the participants' point of view (Blaikie 2010). The researcher as mediator of languages is inspired by Gadamer's hermeneutics and recognizes that the researcher's interests and assumptions impact the results presented by researchers based on participants' accounts (Blaikie 2010). The researcher as reflective partner is motivated by the ideal of emancipation of the participants, as advocated by Habermas (Blaikie 2010). A version of the reflective partner position is that of conscientizer, one that involves conscienization as advocated by Freire; conscienization means learning to perceive social, political, and economic contradictions and taking action against oppression (Blaikie 2010). The researcher as dialogic facilitator borrows from different critical researcher's stances specifically from mediator of languages, reflective partner, and conscientezer and rather than acting as the expert, seeks to reduce the researcher's influence on the research by allowing voices of participants to be expressed and by allowing the participants to speak for themselves as much as possible (Blaikie 2010). Similar ideas are discussed by Schwandt (2007) who indicates three major categories of researcher's stances proposed by Elliot (1988) as important in judging the relationship between the researcher and the research participants in qualitative research,: researcher as detached objective expert; researcher as participant; and researcher as facilitator, critic, advocate and change agent. An interesting and comprehensive discussion of the

researcher's stances in qualitative research is provided by Leckie (2008) who explores the researcher's stances that are condidered harmful for research and for the relationship between the researcher and the research participants, and that are considered that should not be played by the researcher, and the researcher should discourage participants from thinking of the researcher in these particular roles, specifically researcher as a friend, researcher as a mentor, researcher as a negative agent, researcher as a parent, researcher as a professional, researcher as a social activist, researcher as a therapist.

Interpretation in qualitative research

Interpretation as clarification of meaning has a central role in qualitative research and diverse hermeneutics perspectives inform the use of interpretation in qualitative research (Schwandt 2007). In every qualitative study the researcher interprets its data because the data never speaks for itself (Schwandt 2007; Firmin 2008; Willig 2014). Without interpretation we cannot make sense of qualitative research data (Schwandt 2007; Firmin 2008; Willig 2014). The art of interpretation, or 'hermeneutics', as founded by Schleiermacher and Dilthey is always necessarily at work whenever we try to understand any communication, any text (Schwandt 2007; Willig 2014). How we generate interpretations and how we evaluate interpretations provided by others depends on our views about the nature and purpose of the act of interpretation (Schwandt 2007; Willig 2014). There are a myriad of views and perspectives in qualitative research that differ with regards to the role and nature of interpretation in qualitative research (Firmin 2008). However, essentially there are two orientations to the interpretation in qualitative research, the interpretation driven by suspicion and the interpretation driven by empathy (Willig 2014). Willig (2014) cites Ricoeur (1970), specifically his work called *"Freud and Philosophy. An Essay on Interpretation",* as the original philosophical source for the two orientations to interpretation (interpretation driven by suspicion and interpretation driven by empathy) suggested to be at work in qualitative research. The hermeneutics of Ricoeur is complex and I acknowledge that there are philosophical debates with regards to the proper understanding of Ricoeur's position on interpretation and also with regards to the proper understanding of Gadamer's commentaries on Ricoeur and the proper understanding of Habermas' commentaries on Gadamer, however, these issues are beyond the scope of this thesis. Those interested in these philosophical debates and especially those interested in the philosophical debates regarding the hermeneutics of suspicion and hermeneutics of trust may refer for futher details to Schwandt (2007), Freeman (2008), Lawn & Keane (2011), Grondin (2015), Keane & Lawn (2016), Piercey (2016).

'Suspicious' interpretation aims to reveal hidden truths (Willig 2014). Suspicious interpretation aims to bring out latent meaning which is contained within but not immediately obvious (Willig 2014). Suspicious interpretations are theory driven as in order to extract the meaning the interpretation uses theoretical concepts imported from outside the text with which to examine the text (Willig 2014). Suspicious interpretation is an approach to interpretation where the interpreter occupies the role of the expert who is viewed as capable of generating a superior understanding of the phenomenon under investigation (Willig 2014). Essentially, the suspicious interpretation is interpreter-oriented. 'Empathic' interpretation seeks to elaborate and amplify the meaning which is contained within the text and is manifest and the interpreter examines what presents itself and focuses on what is manifest and makes connections and explores patterns and relationships by looking at the text from different angles, and by moving between parts and the whole (Willig 2014). In empathic interpretation, the interpreter enters the phenomenon, gets inside the phenomena and tries to understand it from within, with empathy (Willig 2014). In empathic interpretation no ideas or concepts imported from outside the text are used, no ideas that are not contained within the text are used for interpretation (Willig 2014). The empathic interpretations are grounded in the data, in the text itself (Willig 2014). Essentially, the empathic interpretation is data-oriented or text oriented, as opposed to the suspicious interpretation that is interpreter-oriented. The aim in empathic interpretation is to better uncover or elucidate or clarify the meaning already present in the text and manifest, not to generate a new different and supposed superior or better understanding of the hidden meaning (Willig 2014).

Analyzing qualitative data

Similarity and contiguity refer to two fundamentally different kinds of relationships between things (Maxwell & Chimel 2014). Similarity-based relations involve similarity or resemblances or common features and their identification is based on comparison (Maxwell & Chimel 2014). In qualitative research, similarities and differences are used to define categories and to group and compare data by category (Maxwell & Chimel 2014). Thus, categorizing refers to the qualitative research procedures used for identifying, creating categories, grouping data, and presenting data based on categories (Maxwell & Chimel 2014). Contiguity-based relations refers to the connections between things, refers to the influence of one thing on another, the juxtaposition of things in time and space, the relations among parts, the relations between antecedents (or causes) and consequences(or effects), and the course of events in time (Maxwell & Chimel 2014). Thus, connecting refers to the qualitative research procedures used for exploring,

identifying, and presenting relationships of contiguity (Maxwell & Chimel 2014). Categorizing involves classifying data, connecting involves linking data (Maxwell & Chimel 2014). Both categorizing and connecting are essential in qualitative research, are complementary and mutually supporting; it is not enough to name and organize the data, it is important to uncover also connecting relationships (Maxwell & Chimel 2014).

An important distinction in qualitative research is that between organizational, substantive, and theoretical categories (Maxwell & Chimel 2014). Organizational categories are often established prior to data collection and their fundamental role is for sorting or organizing the data (Maxwell & Chimel 2014). Substantive categories are descriptive categories, these categories provide descriptions of participants' concepts or beliefs or experiences (Maxwell & Chimel 2014). Substantive categories are generated in order to stay close to the original data collected from participants (Maxwell & Chimel 2014). Categories that are generated using participants' own words and concepts are called 'emic' categories and these are substantive categories (Maxwell & Chimel 2014). However, there are also substantive categories that are not emic, that are not using participants' own words and concepts, and that are generated by researcher based on researcher's understanding of participants' concepts or beliefs or experiences (Maxwell & Chimel 2014). Theoretical categories are categories derived from existing prior theory or are developed from the data, represent the researcher's understanding rather than the participants' own concepts and are called etic categories, and are used in order to organize the data into an explicit theoretical framework (Maxwell & Chimel 2014).

Generalization, or generalizability, in research, refers to considerations regarding the relationships between the results that are based on a study of particular individuals, settings, and times, and other individuals, settings, times, other than those directly studied (Maxwell & Chimel 2014). In qualitative research as it is uncommon and unusual to use statistical probability samples the generalizability of results refers not to statistical generalizations (inferences from a statistical sample to the population sampled), rather the generalizability of results refers to empirical generalization based on representativeness, in other words based on the similarity between the individuals, settings, and times included in the study and other individuals, settings, and times, other than those directly studied, and this specifies the general conditions under which findings or theories are valid (Maxwell & Chimel 2014). Another approach to generalization of results in qualitative research is called transferability or case-to-case transfer, and this does not require the discovery of the general conditions under which findings or

theories are valid, rather this refers to the transfer of knowledge from a study to a new situation (Maxwell & Chimel 2014). Two other important concepts are internal generalizability and external generalizability (Maxwell & Chimel 2014). Internal generalizability refers to generalizing within the setting, or time studied, to persons, events, times, and settings that were not directly studied (Maxwell & Chimel 2014). Internal generalizability is concerned with the actual persons, settings, and times that the data represent, and their representativeness for the cases, settings, or individuals not directly studied within the same setting, or time (Maxwell & Chimel 2014). Internal generalizability is based on empirical generalization (Maxwell & Chimel 2014). External generalizability refers to generalization beyond the cases studied to other persons or settings that are outside the setting, or time studied, and this is based on the transferability of particular results or understandings to other cases (Maxwell & Chimel 2014). External generalizability as transferability in qualitative research is understood as referring to the ability to use observations from particular cases and circumstances in order to facilitate understanding in other different, however similar, cases and circumstances (Maxwell & Chimel 2014). According to Maxwell & Chimel (2014) one perspective in qualitative research views external generalizability as transferability based on generating a theory that explains the particular cases and circumstances in terms that can be transferred for the understanding of similar cases and circumstances. According to this specific view of Maxwell & Chimel (2014) it is considered that external generalizability as transferability in qualitative research is based on a theory that is an abduction as a distinct type of reasoning proposed by American pragmatist Pierce (Maxwell & Chimel 2014). Thus, according to this specific view discussed by Maxwell & Chimel (2014) (which may be not accepted by other qualitative researchers) essentially, external generalizability as transferability in qualitative research refers to the development of a theory, a theory that is developed by abductive reasoning (Maxwell & Chimel 2014).

Induction, deduction and abduction are the three fundamental types of logical reasoning that are used in qualitative or quantitative research (Reichertz 2014). In qualitative research it was believed for a very long time that induction was the fundamental logical operation, however, currently, abduction as proposed by Peirce was suggested by Reichertz (2014) as the fundamental logical operation in qualitative research. It is acknowledged that, however, some qualitative researchers may disagree with this view expressed by Reichertz (2014). The best example for this radical change in understanding in qualitative research is provided in the methodological literature regarding grounded theory. Thus, abduction as a fundamental approach to reasoning used in qualitative research is explored at great length in the qualitative

research literature dedicated to grounded theory and the current dominant understanding is that abduction, not induction, is the essential characteristic of grounded theory (Reichertz 2007; Locke 2007; Bryant & Charmaz 2007; Strubing 2007). Deduction begins with a valid known rule or a general law and asserts that a particular case will behave in a certain way (Reichertz 2014). Induction starts with particular cases, observes individual cases, and attempts to determine general rules or laws that may be applicable to all similar cases (Reichertz 2014). Abduction starts with observations without presuppositions and without theories, and generates a theory, in other words a rule or an explanatory hypothesis that explains the observations (Reichertz 2014).

An important issue in qualitative research is the relationship between empirical observations and theory. In deductions, we use general theoretical laws or rules or assumptions and infer statements with regards to observable empirical phenomena, and the reasoning is that *if the general theoretical statement is true then we expect to observe a particular empirical case to happen* (Kelle 2014). In inductions, we use the empirical observations and infer a general rule that is a theoretical statement (it is not a theory) developed by generalizing from empirical facts, and the reasoning is that *observed empirical cases have specific characteristics therefore it is reasonable to assume that all similar cases have the same specific characteristics* (Kelle 2014). In abduction, empirical observations are used in order to develop a theory, and this theory is an abductive hypothesis as proposed by Peirce, and this theory proposes an explanation for the empirical observations and the reasoning is that *the empirical phenomenon [P] can be explained if we accept the theoretical statement (an explanatory hypothesis) regarding the relationship between antecedent conditions and observed empirical phenomena [A leads to P] and if we assume that the antecedent conditions [A] happened* (Kelle 2014). An abduction is a statement about antecedent conditions that shows that the theoretical explanation is applicable to the observed empirical case (Kelle 2014).

An important concept in research is that of the scope of a theory. There are three fundamental types of theories that are differentiated based on the their scope: grand theories that make universal claims, under all circumstances; middle-range theories that do not claim to provide explanations under all circumstances, however claim to provide explanations in many circumstances; and working hypotheses that are the least abstract form of theory (Kelle 2014). Grand theories also called macro theories are the most abstract level of theory, are very broad abstract statements that are not easily tested (McKenna & Slevin 2008; Liehr & Smith 2006). Middle range theories also called midrange theories are not as abstract and not as broad as

grand theories, have fewer concepts and variables within their structures, lie between grand theories and working hypotheses, and are specific and precise enough to allow testing (McKenna & Slevin 2008; Liehr & Smith 2006).

The theoretical statements used in qualitative research may have high or low empirical content. Statements or propositions with high empirical content are those that can be empirically tested (Kelle 2014). The theoretical statements that are usually used in grand theories are statements or propositions with low empirical content, are statements that are difficult, if not impossible, to be tested empirically (Kelle 2014).

Quality in qualitative research

The complex issues of rigor or quality at different stages of the qualitative research (for example data collection, data analysis, presentation of the results) are comprehensively explored by Barbour (2014). There are diverse approaches for the exploration or evaluation of quality in qualitative research and a recent comprehensive discussion is provided by Cho & Trent (2014). The most influential criteria for quality or rigor in qualitative research were identified by Guba and Lincoln in 1985 in terms of credibility, transferability, dependability, and confirmability. Credibility, essentially refers to the idea that the research is performed in such a way that it makes sense and that research is conducted in such a way that there is true connection between the participants' experiences and the interpretations reported as findings of the research (Cho & Trent 2014). Transferability refers to the ability to transfer research findings from one group to another as transfer of understanding if contexts are similar (Cho & Trent 2014). Dependability refers to the existence of a research trail that presents in a transparent way the entire research process and decisions (Cho & Trent 2014). Confirmability refers to the impact of the influence of researcher on research (Cho & Trent 2014).

I consider that two other approaches are interesting, the approach proposed by Barone and Eisner (2012), and the approach proposed by Richardson (2000). Barone and Eisner (2012) propose evaluative criteria for art-based research: incisiveness (research gets to the essence of an issue); concision (use of the appropriate amount of 'material' to achieve the purpose); coherence (parts 'hang' together); generativity (enables us to 'see' or 'act' on a phenomenon); social significance (ideas that 'count'); and evocation and illumination (defamiliarizing a phenomenon so that it can be seen in a way that is different from the taken for granted ways) (Barone & Eisner 2012 cited in Cho & Trent 2014). Another interesting approach is proposed by

Richardson (2000) who suggest five criteria for the examination of validity/quality of ethnographic texts: substantive contribution (contribution of the text to understanding); aesthetic merit (artistic characteristics of the text); reflexivity; impact; and expression of reality (the text seems a true reflection of reality, of the lived experience) (Richardson 2000 cited in Cho & Trent 2014). Reflexivity refers to such things as self-awareness and self-exposure of the author of the text, including the motivations and the point of view of the author (Richardson 2000 cited in Cho & Trent 2014). According to this approach, a text has impact if it affects me, if for example it influences me to action (Richardson 2000 cited in Cho & Trent 2014).

Lincoln (2009) proposed a very powerful concept, that is authenticity of research, with multiple dimensions, such as ontological authenticity (the research produces 'awakening' on the part of the inquirer and participants), catalytic authenticity (the research findings provides the stimulus to meaningful action), and tactical authenticity (gaining of a sense of power as research can be used to speak truth to power) (Lincoln 2009 cited in Mertens 2014).

Qualitative research synthesis

Booth et al (2012) offer a brief history of research synthesis and provide a description of twelve different types of reviews including the qualitative systematic review (qualitative evidence synthesis). They specify that essentially a qualitative systematic review examines themes across qualitative studies and integrates the findings from qualitative studies (Booth et al 2012). Booth et al (2012) mention twelve qualitative approaches to synthesis including examples such as narrative synthesis, meta-synthesis, and meta-ethnography. Paterson (2012) provides a historical overview of the evolution of qualitative synthesis. According to Paterson (2012), the first phase of the evolution of qualitative synthesis from 1980 to 2000 refers to the development of meta-ethnography by Noblit and Hare. The second phase consists in the introduction of meta-study in 2001. The third phase after 2001 refers to the inclusion of qualitative research in systematic reviews and the development of critical appraisal tools and computer software for qualitative synthesis (Paterson 2012). The development of meta-aggregation as a distinct qualitative synthesis approach occurred in this phase of the evolution of qualitative synthesis. The fourth phase consists of the introduction of diverse approaches for the integration of qualitative and quantitative research in research synthesis.

There is a rich methodological literature regarding systematic reviews of qualitative research, and without any claim of comprehensiveness or exhaustiveness of search, I consider that a

representative set of views are those found in publications by Jensen & Allen (1996), Sandelowski et al (1997), Popay et al (1998), Evans & Pearson (2001), Evans (2003), Finfgeld (2003), McCormick et al (2003), Pearson (2004), Lloyd Jones (2004), Thorne et al (2004), Walsh (2005), Zimmer (2006), Bondas & Hall (2007), Downe (2008), Finlayson & Dixon (2008), Weed (2008), and Flemming (2010).

Essentially, synthesis of qualitative research refers to the use of qualitative methods for the synthesis of results from multiple qualitative studies (Major & Savin-Baden 2010; Paterson 2012; Pope et al 2007; Sandelowski & Barroso 2007; Suri 2014; Saini & Shlonsky 2012). There are many differences between different approaches for synthesis of qualitative research and details about different approaches for qualitative synthesis, such as meta-summary, meta-synthesis, grounded formal theory, meta-interpretation, meta-study, and meta-ethnography, and comparisons between these different approaches are provided by Saini & Shlonsky (2012), Paterson et al (2001), Noblit & Hare (1988), Sandelowski & Barroso (2007), Timulak (2014), and Suri (2014). The meta-aggregation approach for qualitative research synthesis is discussed in Chapter III of this thesis. Some of the essential differences between meta-aggregation and other approach for qualitative synthesis are discussed in Chapter VIII of this thesis, in the context of providing a new theoretical framework for meta-aggregation.

The arguments in favour of and also those against the synthesis of qualitative research are well known and clearly presented in the methodological literature (Major & Savin-Baden 2010; Paterson 2012; Pope et al 2007; Sandelowski & Barroso 2007; Timulak 2014; Suri 2014). The main arguments in favour of synthesis of qualitative research are summarized as follows:

- It is a solution for the information explosion;
- It may address the problem of knowledge fragmentation;
- It may identify gaps in the research literature; and
- It may contribute to evidence-based practice and policy (Major & Savin-Baden 2010).

The main arguments against the synthesis of qualitative research are summarized as follows:

- the synthesis is not meaningful given the great variety among qualitative methodologies and methods used in different studies; and
- the context of research is stripped (Major & Savin-Baden 2010).

The current mainstream consensus expressed by qualitative researchers is that the synthesis of qualitative research is meaningful and not just possible but necessary for evidence-based practice and policy; however, there are many debates with regards to the assumptions and the methods used (Suri 2014).

Conclusion

This chapter has set out the context of the thesis in the broad field of evidence-based health care and specified the defining characteristics of a systematic review, discussed the role of qualitative research and qualitative research synthesis in evidence-based health care, and explored some fundamental aspects of qualitative research such as the researcher's stances, the role of interpretation, the types of categories and the quality or validity issues in qualitative research.

Chapter II: Research questions and objectives, methodology, and methods

Introduction

In this chapter I set out the research questions and objectives and provide some details with regards to the focus of the research, the philosophical/theoretical perspective of the research the data collection methods, the research methodology and data synthesis.

Research Questions

Question 1: What is the validity of the claims that Joanna Briggs Institute's approach to meta-aggregation is founded on Husserlian Transcendental Phenomenology and American Pragmatism?

Question 2: What are the essential characteristics of a coherent theoretical foundation for Joanna Briggs Institute's meta-aggregation based on insights from Husserlian Phenomenology and American Pragmatism?

Research Objectives

Objective 1: To examine the Husserlian Phenomenology and American Pragmatism philosophical literature and to clarify the validity of the claims that the Joanna Briggs Institute's meta-aggregation is founded on Husserlian Transcendental Phenomenology and American Pragmatism.

Objective 2: To provide an explicit coherent theoretical foundation for the Joanna Briggs Institute's meta-aggregation based on insights from Husserlian Phenomenology and American Pragmatism.

Philosophical/Theoretical perspective of the research

The philosophical/theoretical perspective for my research was critical theory; critical theory in general but with a special focus on the philosophical works of Jurgen Habermas. The justification for the decision to use critical theory, specifically the philosophical works of Jurgen Habermas as philosophical/theoretical perspective for my thesis is that I strongly believe that the

research evidence is never neutral and I consider that the discussion with regards to what research methods best produce the best forms of evidence is a matter of power.

Methodology and Methods

- *Research methodology*: Philosophical inquiry.
- *Data collection methods*: critical reading of the Husserlian Phenomenology and American Pragmatism philosophical literature, the Joanna Briggs Institute's guidance on meta-aggregation, the international qualitative research literature regarding meta-synthesis of qualitative evidence and specifically meta-aggregation.
- *Data analysis and synthesis methods*: integrative synthesis of ideas and theoretical framework development (theoretical foundation for meta-aggregation).
- *Format for presentation of the results*: narrative (text) and graphical/visual presentation of results (for example, tables; idea maps; diagrams).

Focus of the research: Qualitative meta-aggregation

The Joanna Briggs Institute's approach to the synthesis of qualitative evidence, known as meta-aggregation, was developed by a group of qualitative researchers led by Pearson (Pearson 2004; Pearson et al 2011). Meta-aggregation is a method of research synthesis that was specifically designed to mirror the process of systematic reviews of quantitative effectiveness research evidence and at the same time to be appropriate for the synthesis of qualitative research evidence and sensitive to the specifics of qualitative research (Pearson et al 2011).

Pearson et al (2011) suggest Husserlian phenomenology as the philosophical foundation for meta-aggregation. Lockwood and Pearson (2013) discuss the Husserlian ideas of bracketing, reduction, and the identification of essences, and indicate that the Husserlian phenomenological roots of meta-aggregation are specifically in Husserlian Transcendental Phenomenology.

Interestingly, in an article published in 2011, Hannes and Lockwood claim that meta-aggregation is founded on American pragmatism (Hannes and Lockwood 2011). In their article, Hannes and Lockwood focus on philosophical works of three American pragmatists, specifically Peirce, James and Dewey, and after a concise presentation of some aspects of pragmatism as interpreted by the three philosophers, they claim that the Joanna Briggs Institute's meta-aggregation approach is founded on pragmatism because of its focus on the practical usefulness of the results of synthesis (Hannes and Lockwood 2011).

Meta-aggregation was already used in numerous systematic reviews of qualitative evidence generated by diverse qualitative research methodologies and methods performed by reviewers from different countries and cultures; these reviews were published in the Joanna Briggs Institute' Database of Systematic Reviews and Implementation Reports. This is a strong argument in favour of the claim that PhD methodological research that examines the theoretical/philosophical foundations of meta-aggregation is a priority for methodological research.

The philosophical/theoretical perspective of the research: Critical theory and Habermas's philosophy

Research evidence is never neutral and the discussion with regards to what research methods best produce the best forms of evidence is a matter of power (Denzin 2011). Many qualitative researchers now question what impact their research will produce in terms of domination and discrimination and they pursue the ideal of amelioration of societies (Lincoln & Denzin 2011). Qualitative researchers are now more sensitive to relations of oppression and to the issues of power within the research process, and these issues are more or less explicitly considered in research projects (Leavy 2014).

Critical theory

Critical theory is concerned with power and oppression and one goal of critically-oriented qualitative research is to empower and emancipate participants and to use the results of the research in some way for the improvement of participants' lives (Spencer et al 2014). Qualitative research that is guided by critical theory is characterized by an awareness of power relationships, an anxiety that results from the research may unintentionally contribute to the perpetuation of oppression and imbalance of power, the use of critical reflexivity by researcher to continuously monitor and question the researcher's impact on the research and the impact of research on researcher, an acceptance of the idea that research is conducted not for knowledge's sake but for a better life for participants, and for the transformation of society (Bhavnani et al 2014).

Essentially, common themes in critically oriented qualitative research are:

- the aim of research is to create change for a better society, for the benefit of those oppressed; the results of research and the research process can remove oppression through empowerment;

- the researcher is viewed as an advocate, an activist;

- the control over the research is shared by the researcher and the participants;

- validity of research is best judged by the ability of the research to inspire action for change and emancipation; and

- the voices of the participants are clearly presented in the research as it is the researcher' voice (Lincoln, Lynham, and Guba 2011).

Fundamentally, critical theory is an approach to the analysis of society that involves a political evaluation of the society for the purpose of guiding political practice (Edgar 2006). Critical theories are reflective theories that aim to produce enlightenment in members of society in such a way that they are able to discern their true interests and are able to emancipate themselves from any kind of coercion (Geuss 1981). The essence of critical theory is the attitude of questioning established beliefs and practices, and doubting and examining the taken for granted assumptions for the purposes of change towards something different (Bronner 2011).

Habermas's philosophy

Details about the life and philosophical works of Habermas are provided by Ingram (2010), Outhwaite (2009), and Edgar (2005) among others. Habermas' critical theory has declared intention of the emancipation of the members of society from unnecessary domination in all its forms (McCarthy 1978). Habermas proposed in his early work that there are three cognitive (or knowledge-constitutive) interests that are the conditions for the survival and growth of humans and these are technical cognitive interest; the cognitive interest; and emancipatory cognitive interest (Edgar 2006; Habermas 1978). The empirical-analytic sciences incorporate a technical cognitive interest; the historical-hermeneutic sciences incorporate a practical interest; and the critically oriented sciences incorporate an emancipatory cognitive interest (Edgar 2006; Habermas 1978). The technical cognitive interest refers to the technical control over processes (Habermas 1978). The practical cognitive interest refers to communication and understanding of meaning (Habermas 1978). The emancipatory cognitive interest refers to power and emancipation (Habermas 1978).

A concise comparative summary of the three types of cognitive (or knowledge-constitutive) interests is presented in **Table 1**. It is important to note that in his later work Habermas changed his focus from power and emancipation and changed his discourse from power as problematic in all circumstances and as compromising the autonomy of individuals and groups, to the recognition that justified power is necessary in society and that only unjustified or illegitimate power, or the abuse of power, is problematic; he accordingly moved in his discourse from emancipation to communicative action (Edgar 2006). I consider that the framework of the three cognitive (or knowledge-constitutive) interests is still relevant to this thesis, as the practical cognitive interest is the supposed cognitive interest in qualitative research, and is linked to the essential role of hermeneutics, however I acknowledge that my main interest is oriented towards Habermas's theory of communicative action and Habermas' discourse ethics.

Table 1. A comparative summary of Habermas' three types of cognitive (or knowledge-constitutive) interests

	Empirical-analytic sciences	Historical-hermeneutic sciences	Critically oriented sciences
Cognitive interest	*Technical* **cognitive interest** (technical control over processes)	*Practical* **cognitive interest** (attainment of possible consensus among actors in the framework of a self-understanding derived from tradition) (Preservation and expansion of the intersubjectivity of possible action-orienting mutual understanding)	*Emancipatory* **cognitive interest** (Release the subject from dependence on power)
Possible knowledge	Information that expands our power of technical control	Interpretations that make possible the orientation of action within common traditions	Analyses that free consciousness from its dependence on power
Social organization medium	Work	Language	Power relationships
Rules for establishing meaning	Rules according to which we apply theories to reality	Rules of hermeneutics	Self-reflection

Habermas insisted on the importance of action being viewed as the intentional and meaningful activity of persons and proposed a fundamental distinction between communicative action and strategic action (Edgar 2006). Communicative action refers to meaningful interaction between persons with the goal of shared understanding and agreement (Edgar 2006).

In communicative action there is communication for co-ordination between persons (Habermas 1984). Communicative action is based on free and open discussion by all relevant persons with the decision being dependent on the strength of the better argument, never based on manipulation or coercion (Edgar 2006). In strategic action there is no goal of shared understanding, and there is potential for manipulation (Edgar 2006). Strategic action aims to obtain success and efficiency (Habermas 1984). Habermas discussed also the concepts of social action, which occurs between persons in the social world, and instrumental action, that is action intended to manipulate the natural world (Edgar 2006). In strategic action as a form of social action, one person takes an instrumental attitude to other persons, in order to control and manipulate them, and ignore the necessity of mutual shared understanding and agreement, even if it is not necessarily malevolent (Edgar 2006). Instrumental action is applied in appropriate ways when is used on physical objects in the natural world, however, instrumental action is applied inappropriately in the social world when is used as strategic action on human persons (Edgar 2006). A concise summary of Habermas' different types of actions and their relations with different types of knowledge and cognitive interests is provided in **Table 2** (modified after Ingram 2010). A concise summary of Habermas' different types of actions performed in the social world and the natural world is provided in **Table 3** (modified after Brand 1990).

Table 2. A summary of Habermas' different types of actions and their relations with different types of knowledge and cognitive interests (modified after Ingram 2010)

Knowledge	Science	Action	Interest
Empirical-analytic	Natural, and social and behavioural sciences	Instrumental Action plus Communicative Action	Technical interest oriented toward prediction and control
Historical-hermeneutic	Historical, cultural, and literary sciences	Communicative Action	Practical interest oriented toward reaching mutual understanding and agreement with respect to shared norms and values for purposes of social cooperation
Reflective critical	Social and self-evaluation (critical theories as ideology critique)	Communicative Action	Emancipatory interest

Table 3. A summary of Habermas' different types of actions performed in the social world and the natural world (modified after Brand 1990)

	Action oriented to manipulation and control for the goal of success and efficiency (goals attained with the least use of resources, the lowest cost, the speed of the achievement**)**	**Action oriented to shared understanding and agreement for the goal of co-ordination between persons**
Persons in the Social World	Strategic Action	Communicative Action
Physical Objects in the Natural World (use of technology)	Instrumental Action	

A fundamental concept proposed by Habermas is that of discourse. For Habermas, discourse refers to the process that allows all participants free participation with the goal of clarification of assumptions and claims made by all participants in communication by the ways of free unconstrained discussion and critical analysis that allows arguments to be accepted or rejected (Edgar 2006). Habermas differentiated discourse from everyday communication, we use everyday communication in order to share information, opinions, emotions, perspectives, and so on, however, in discourse we critically examine beliefs and arguments and consider the arguments as problematic and in need for justification, and we challenge the views, or perspectives, or arguments that are taken for granted and are not challenged in usual everyday communication (Edgar 2006). Essentially, discourse refers to communication that provides the opportunity for all participants in communication to give their rational justification for their beliefs or claims or views (Edgar 2006).

Habermas proposed an approach to ethics called discourse ethics, and suggested that solutions for problems should be explored, proposed, and accepted or rejected by persons affected by the solutions (Edgar 2005; 2006). Habermas indicated the conditions that should be fulfilled by the process guided by discourse ethics: all those affected by the solutions are allowed to participate in a truly open and rational debate that is focused only on the force of better arguments; decisions are validated through open and intersubjective argumentation; nobody can force his opinions upon anyone else; no person is coerced into withholding or withdrawing their participation; everyone can question anything; anything can be challenged and questioned; everyone can freely express their attitudes, desires and needs; the participants' consent for agreement on a specific decision is based on the recognition of the consequences of the decision and the preference for those consequences over the consequences of any other decision; and the decisions can be challenged anytime is a real need to question them, if there is necessary, for example if there is new evidence that inform the debate (Edgar 2005; 2006).

One of the three cognitive interests proposed by Habermas is the practical cognitive interest (Habermas 1978). The practical cognitive interest refers to the communication and understanding of meaning (Habermas 1978). Thus, practical cognitive interest is linked to hermeneutics viewed as the art of interpretation as founded by Schleiermacher, Dilthey, and Gadamer. Habermas recognizes the essential role of language and the problems related to the interpretation of meaning (Edgar 2006). Habermas debated with Gadamer the role and the essence of hermeneutics, and the debate was complex and ran for a long time, however, Habermas accepted Gadamer's position that interpretation is influenced by one's language and cultural traditions, however, Habermas remained critical with regards to the relativism implied by Gadamer's position (Edgar 2006; How 1995). The issues of hermeneutics are fundamental for the discussion of the role of interpretation in qualitative research including qualitative research synthesis, therefore, in Chapter VIII of the thesis, in the context of presenting the new theoretical framework for meta-aggregation, I provide a brief discussion regarding interpretation based on ideas from Schleiermacher's work and Gadamer's works.

Data collection methods (reading of the relevant philosophical and methodological literature)

The Joanna Briggs Institute's guidance on meta-aggregation, the international qualitative research literature regarding meta-synthesis of qualitative evidence and specifically meta-aggregation were examined.

The English translations of Edmund Husserl's own published works (Husserl 1967; 1999; 1931; 1960; 1965; 1970; 1980; 1983; 1989; 2006) and also commentaries from internationally recognized phenomenological scholars were explored (Embree et al. 1997; Moran 2000, 2005; Moran & Cohen 2012; Spiegelberg 1975, 1981, 1982; Woodruff Smith 2007; Bernet et al 1993; Cerbone 2006; de Muralt 1974; Detmer 2013; Dreyfus & Wrathall 2009; Farber 1967; Fine 1995; Follesdal 2009; Hintikka 1995; Kersten 1989; Kockelmans 1967; Levinas 1967; McKenna 1997; Mohanty 1995; Mohanty 1997; Reeder 2010; Scanlon 1997; Schmitt 1967; Simons 1995; Smith & Woodruff Smith 1995; Sokolowski 1974; Gallagher 2012).

As in previous commentaries regarding pragmatism as a philosophical foundation for meta-aggregation, only the works of three American pragmatists were examined - specifically Charles Sanders Peirce, William James and John Dewey, and as these three pragmatists are considered to be the classical pragmatists, the focus of this thesis is on these three American pragmatists. The philosophical works by Peirce, James and Dewey (Peirce, James and Dewey in Haack 2006; Peirce in Buchler 1955; James 1907; Dewey 1939, 1963, 1930) and commentaries from internationally recognized scholars were used (Moore 1961; Shook and Margolis 2006; Scheffler 1974; Thayer 1968, 1973; Bacon 2012; Bergman 2009; Burke 2013; Fann 1970; Hildebrand 2013; Hookway 2012, 2013; Malachowski 2013; Misak 2004, Misak 2013).

The philosophical literature regarding critical theory and the philosophical works of Jurgen Habermas and commentaries from internationally recognized scholars were examined (Habermas 1978, 1984, 2002, 1993, 1982, 1991, 1973; Outhwaite 1996, 2009; Aboulafia et al 2002; Brand 1990; Cormier 2001; Honneth & Joas 1991; How 1995; Ingram 2010; McCarthy 1978; Pusey 1987; Bronner 2011; Geuss 1981).

The research methodology (philosophical inquiry)

In an article with the suggestive title, "*Reinstating the 'Queen': understanding philosophical inquiry in nursing*", Pesut & Johnson (2008) present an argument in favour of using philosophical inquiry for the advancement of nursing inquiry. I consider that philosophical inquiry is of great importance not only to nursing inquiry but to any field of inquiry, including methodological inquiry related to research synthesis and the reason for this is found in the three main dimensions of philosophical inquiry: identifying philosophical presuppositions used in a specific field of inquiry, the use of classic philosophical problems to inform the debates in a specific field of inquiry, and the use of philosophy for the examination of a specific field of inquiry (Pesut & Johnson 2008).

Three levels of philosophical inquiry were proposed by Grace & Perry (2013) in the context of nursing, however, these apply also in the methodological field of inquiry with regards research synthesis: "critical consciousness" that question the taken for granted assumptions; analysis and application of philosophical perspectives, for example to critique and develop new research methodologies; and the generation and application of new knowledge, for example the generation of new theoretical frameworks to guide research. With regards to "critical consciousness", Grace & Perry (2013) suggest that their English term "critical consciousness" should be understood as the English translation of Paulo Freire's term "conscientizacao" as used in his book "*Pedagogy of the oppressed*" (Grace & Perry 2013). Given that critical theory and especially Habermas's philosophy is the theoretical framework for this research, I used philosophical inquiry from this specific point of view. I consider that there is consistency between the use of Habermas' critical theory as a theoretical framework for my thesis and the use of philosophical inquiry - especially "critical consciousness" (Freire's "conscientizacao") - as a starting point to the first level of inquiry.

An important application of philosophical inquiry is the critical comparison of theoretical methodological positions informed by specific philosophical ideas to the respective philosophical ideas (Pesut & Johnson 2008, p.117). I use philosophical inquiry to explore the connections between research synthesis methodological positions informed by Husserlian phenomenology and American pragmatism and these philosophies.

Philosophical inquiry may help us to clarify concepts and to analyse arguments (Pesut & Johnson 2008). My intention was to provide new insights that help illuminate the concepts and,

by examining the arguments, to determine their validity and to be in a better position to construct my own arguments. Specifically, my aim was to make explicit the philosophical assumptions used to justify the meta-aggregative approach to research synthesis, to clarify the possibilities related to the use of Husserlian phenomenology and American pragmatism for the purpose of informing the meta-aggregative approach, and to provide explicit justification for my own methodological position through a clearly articulated argument.

One important aim of philosophical inquiry is to integrate ideas in a coherent whole (Pesut & Johnson 2008). In this research I bring together into one theoretical framework, the diverse philosophical ideas informing this theses, that is critical theory and specifically Habbermas' philosophy, Husserlian phenomenology and American pragmatism.

Philosophical inquiry uses as 'data' the ideas proposed and debated, not empirical data from research (Pesut & Johnson 2008). The 'methods' and 'instruments' used in philosophical inquiry are not the methods and instruments of empirical research but the human abilities to think and reason (Pesut & Johnson 2008). Therefore, in my thesis I used my skills of critical thinking as 'tools' for my philosophical inquiry.

Three "tools" are proposed for philosophical inquiry: analysis (examination of the concepts and assumptions, and of their origins), critique (examination of arguments), and synthesis (re-conceptualization and new understanding) (Grace & Perry 2013). In this thesis I used analysis in those chapters that explore the Husserlian phenomenology, the American pragmatism, and meta-aggregation; I used critique in those chapters that explore the connections between Husserlian phenomenology and meta-aggregation, and the connections between American pragmatism and meta-aggregation; and I used synthesis in the final chapter when I propose my theoretical framework that brings together in a coherent whole new insights regarding the connections between Habermas' critical theory, Husserlian phenomenology, American pragmatism, and meta-aggregation.

At the end of philosophical inquiry it is essential to examine the 'validity' of claims and it was proposed that one way to test the claims is to use "tests of logic" (Pesut & Johnson 2008, p.117). I propose that the claims resulted from my philosophical inquiry may be explored using the tools of critical thinking. I used these tools to examine the arguments proposed by others,

and I applied the same tools when I developed my own arguments. Specifically, I was inspired by Paul & Elder (2012), Fisher (2004), Walton (1989), and Toulmin (2003).

I explored the concepts, assumptions, diverse points of view, and their implications, and I considered criteria and standards such as clarity, accuracy, relevance, depth, breadth, and logic (Paul & Elder 2012). I used suggestions from Fisher's method of argument analysis, specifically the identification of "argument indicators" or "inference indicators", that is conclusion indicators and reason indicators (Fisher 2004), for the arguments constructed by others and when I developed my own arguments. I used the idea of reasonable appeal to authority, specifically the authority of experts, that is the cognitive authority of those whose perspectives are considered plausible or valid, as discussed by Walton (1989). I also used the perspectives or commentaries of philosophers recognized for their expertise with regards the interpretation of Habermas' philosophy, Husserlian phenomenology, and American pragmatism, and I used the perspectives or commentaries of qualitative researchers recognized for their expertise, and I based my arguments on the presupposition that their commentaries are valid.

I used the Toulmin's approach for argumentation (Toulmin 2003), however, without explicit presentation of visual diagrams. In figure 1 there is a visual graphical representation of the Toulmin's model of argumentation. I examined the arguments constructed by others by considering the claims, the data, the warrants, the qualifiers, the backings, and the rebuttals, as proposed by Toulmin (2003). I tried to use the same approach when I developed my own arguments.

In **Figure 1**, the *claim or conclusion* refers to the assertion, or the opinion, preference, or view or judgment. The *data or information* refers to the facts on which the claim is based. Data may be represented by observations, records, experience, expert opinion, authoritative reference sources and so on. The *warrant* refers to the justification for the use of data to infer the conclusion. The warrant is the rule or the principle that justifies the inference from information to claim. There are different types of warrants: a priori warrants (rules; principles; definitions); institutional warrants (textbooks; guidelines; standards of practice); empirical warrants (for example, personal experience); evaluative warrants (values; beliefs). The *backing* refers to the assurances that the warrant posses authority. The *backing* is the justification for the warrant. The *rebuttal* refers to conditions when the warrant may be defeated. The *rebuttal* refers to circumstances when the authority of the warrant may be put aside. The *qualifier* expresses the

degree of the force of the conclusion. The qualifier is signalled by words such as necessarily, probably, presumably.

Interestingly, Habermas presents the essence of the Toulmin's model of argumentation in Volume 1 of his book "*The theory of communicative action*" (Habermas 1984, p.25-26) and cites the full text of Toulmin et al (1984) that summarizes the argumentation on Toulmin's model (Toulmin, Rieke, and Janik, An introduction to reasoning, p.106 cited by Habermas 1984, p.410-411).

Figure 1. Visual graphical representation of the Toulmin's model of argumentation (graphical representation based on Toulmin 2003)
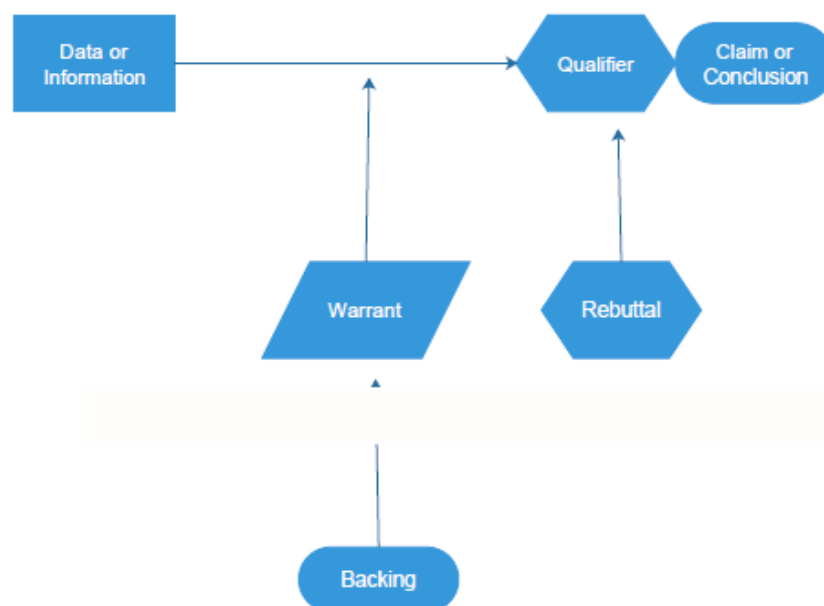
Data synthesis (theoretical framework development)

A framework is an abstract logical structure of concepts and theories or statements (Burns & Grove 2009; Liehr & Smith 2006). A theoretical framework is a framework already existing in the literature, ready for use (Liehr & Smith 2006). A conceptual framework is created by researchers, it is not found in the literature (Liehr & Smith 2006). One purpose of this thesis was to develop a theoretical framework for meta-aggregation. Thus, I developed a new conceptual

framework based on new insights from Husserlian phenomenology and American pragmatism. The framework that I developed is a conceptual framework, it is a new framework, not existing yet in the methodological literature. I developed this conceptual framework to be used in future as a theoretical framework, as a ready for use framework.

Frameworks contain concepts and theories or statements and relational statements (Burns & Grove 2009). Relational statements may be expressed in literary form as sentences, or in diagrammatic form such as a conceptual map (Burns & Grove 2009). A conceptual map for a framework diagrams the interrelationships of the concepts and statements (Burns & Grove 2009).

Essentially, a framework that includes a conceptual model has the following elements: concepts; definitions for concepts; statements linking the concepts; and a conceptual map linking the concepts (Burns & Grove 2009). The steps of the process of constructing a framework are: selecting and defining concepts; developing statements relating the concepts (relational statements); expressing the statements in hierarchical fashion (more general statements first and more specific statements following); developing a conceptual map that expresses the framework (Burns & Grove 2009). In order to develop a conceptual map of the framework the concepts are arranged on the page in sequence of occurrence from left to right, considering the causal influences and positioning the concepts that express outcomes on the far right (Burns & Grove 2009). The concepts are linked by using arrows that express relationships and sequences (Burns & Grove 2009). Theoretical substraction refers to the process of examining if the framework is logically adequate (Burns & Grove 2009). The following aspects should be considered when theoretical substraction of a framework is performed:

- if a conceptual model is presented;
- if the conceptual map adequately explain the phenomenon of concern;
- if definitions for concepts are validated by reference to literature; and
- if the propositions are logical and defensible (Burns & Grove 2009).

In Chapter VIII of the thesis I present a new conceptual framework (including a conceptual map for the framework) for meta-aggregation.

Conclusion

This chapter has set out the research questions and objectives of the research and described the Habermas's critical philosophy as the philosophical/theoretical perspective of the research,

the reading of the relevant philosophical and methodological literature as a method of data collection, the process philosophical inquiry as the theoretical basis of the research, and theoretical framework development as the data synthesis approach to the research.

Chapter III: Meta-aggregation

Introduction

In this chapter I present those general aspects of meta-aggregation that I consider essential for the purposes of my thesis. I acknowledge that some new aspects of meta-aggregation that are in a very dynamic state of experimentation and change (the examination confidence in the findings by using the CONqual approach) are not presented in this chapter and are not discussed in my thesis. These issues are explored in the most recent methodological literature regarding meta-aggregation (Munn et al 2014; Lockwood et al 2015) and represent new views that change and expand the core traditional meta-aggregation approach as described by Pearson et al (2011). Also, I acknowledge that I am aware that the issues related to the credibility of findings, issues that are part of the core traditional meta-aggregation approach, are currently being reconsidered in ongoing methodological research, and therefore are not presented in this chapter and are not discussed in my thesis. I consider that no harm is produced to the thesis. I decided that I would examine in different, future research the new approach to credibility/plausibility of findings and the new CONqual approach.

I present just the general characteristics of meta-aggregation as a form of qualitative research synthesis without any consideration given to the theoretical or philosophical foundations of meta-aggregation. The claims regarding the Husserlian phenomenological roots of meta-aggregation are presented in Chapter V. The claims regarding meta-aggregation's roots in American pragmatism roots of are presented in Chapter VII. Other considerations regarding meta-aggregation are discussed in Chapter VIII.

Meta-aggregation in synthesizing qualitative evidence

A comprehensive presentation of all theoretical and practical aspects of meta-aggregation is provided by Pearson et al (2011) in their book dedicated to meta-aggregation. Extensive discussions about meta-aggregation are also provided in the Joanna Briggs Institute's published methodological guidance (JBI Reviewer's Manual 2008, 2011, 2014) and other methodological publications (Hannes & Lockwood 2011; Hannes & Pearson 2012; Lockwood et al 2015; Lockwood & Pearson 2013; Lockwood 2011; Korhonen et al 2013).

Given my understanding of the mentioned methodological literature regarding meta-aggregation I summarize the essential characteristics of meta-aggregation as follows:

- Meta-aggregation is used in order to produce statements that are useful for action;
- The meta-aggregation process is based on identification of meaning of the findings from individual studies;
- In meta-aggregation, findings from individual studies are categorized into categories, and this categorization of findings is based on similarity of meaning;
- In meta-aggregation, categories are synthesized into synthesized findings that represent the meaning of categories;
- In meta-aggregation, meaning and truth are discovered through the mediation of words used in language;
- The meta-aggregation process is not linear and mechanical but iterative and interpretative;
- In meta-aggregation, the focus is on the essence of the meaning of findings;
- In meta-aggregation, it is acceptable to synthesize together findings from qualitative studies using different methodologies, assumptions and methods;
- In meta-aggregation, a visual representation is used to show that a synthesis is performed that reflects the meaning of individual findings; and
- Interpretation of findings in meta-aggregation is related to power.

Primary qualitative research aims to uncover meaning of human experience and meta-aggregation as a form of qualitative research synthesis aims at synthesizing meanings captured in primary research studies (Pearson et al 2011).

The meaning of human experience captured through diverse research approaches (different methods for data collection and data analysis) is expressed ultimately in words in studies considered for meta-aggregation, and meta-aggregation uses the findings reported in linguistic expressions in primary studies in order to access the meanings of experiences reported by participants in research and to produce a synthesis of meanings from all these studies as a whole included in the synthesis (Pearson et al 2011).

Meta-aggregation is an approach that was specifically designed to mirror the process of rigorous systematic reviews of quantitative evidence and at the same time to be sensitive to the specifics of qualitative research (Pearson et al 2011; Hannes & Lockwood 2011).

Meta-aggregation is a form of qualitative research synthesis that focuses on processed data, that is an approach to interpretation of processed data (the author's interpretations reported in the primary qualitative studies, not the primary raw qualitative data collected from participants) extracted from qualitative studies (Pearson et al 2011; JBI Reviewer's Manual 2014).

Meta-aggregation is an interpretive process focused on the integration of findings from independent but related studies; the interpretation in meta-aggregation is not oriented towards re-interpretation of data for generation of new different meaning but rather the interpretation in meta-aggregation is focused on integrating accurately the meaning already existing in author's interpretations provided in studies (Pearson et al 2011).

Meta-aggregation is interested in identifying the essences of meaning expressed in studies considered for synthesis, therefore each study is carefully explored as a source of findings that can provide guidance for practice, that is essences extracted from findings that can be used to provide recommendations for action (Pearson et al 2011).

Meta-aggregation focuses on generating synthesized findings (statements) that are practical and usable for action, policy and practice, that is statements that can guide actions, policy and practice, therefore indications for action, not mere theoretical statements (Pearson et al 2011; Hannes & Lockwood 2011; Hannes & Pearson 2012; Lockwood et al 2015; Lockwood & Pearson 2013; Lockwood 2011; Korhonen et al 2013).

The meta-aggregation process
Essentially, meta-aggregation is a three-step synthesis process:
- step one, identification of data for synthesis (called extraction of findings and illustrations);
- step two, synthesizing findings into categories; and
- step three, synthesizing categories into synthesized findings (Pearson, 2004; Pearson et al 2011; JBI Reviewer's Manual 2014; Hannes & Lockwood 2011; Hannes & Pearson 2012; Lockwood et al 2015; Lockwood & Pearson 2013; Lockwood 2011; Korhonen et al 2013).

In meta-aggregation the first step of the process is the extraction of appropriate data for synthesis and the fundamental units of extractions are called findings and these represent the conclusions or interpretations offered by the authors of the primary qualitative studies and variously presented as conclusions, themes, or metaphors or any kind of summarizing interpretations (Pearson et al 2011; JBI Reviewer's Manual 2014; Hannes & Lockwood 2011; Hannes & Pearson 2012; Lockwood et al 2015; Lockwood & Pearson 2013; Lockwood 2011; Korhonen et al 2013). Findings that are extracted from primary qualitative studies (findings are verbatim text extractions) are accompanied by the texts such as direct quotations, or statements or any other form of textual data that demonstrate the origins of findings and these texts that are extracted alongside verbatim extracted findings are called illustrations (Pearson et al 2011; JBI Reviewer's Manual 2014; Hannes & Lockwood 2011; Hannes & Pearson 2012; Lockwood et al 2015; Lockwood & Pearson 2013; Lockwood 2011; Korhonen et al 2013).

Meta-aggregation is an explicit interpretative process that involves as a first step after the extraction of findings and illustrations, a process of categorization, that is a process of synthesizing (grouping) the findings into reviewer-defined categories based on the examination of the similarity of meaning of all extracted findings considered as a whole (Pearson et al 2011; JBI Reviewer's Manual 2008; JBI Reviewer's Manual 2011; JBI Reviewer's Manual 2014; Hannes & Lockwood 2011; Hannes & Pearson 2012; Lockwood et al 2015; Lockwood & Pearson 2013; Lockwood 2011; Korhonen et al 2013).

Once reviewer-defined categories are clarified meta-aggregation as interpretative process continues with another synthesis step, that is a process of synthesizing (grouping) of categories into synthesised findings (statements that represent the collective meaning of categories that are synthesized into respective synthesized findings) based on examining of the similarity of meaning of all categories considered as a whole (Pearson et al 2011; JBI Reviewer's Manual 2008; JBI Reviewer's Manual 2011; JBI Reviewer's Manual 2014; Hannes & Lockwood 2011; Hannes & Pearson 2012; Lockwood et al 2015; Lockwood & Pearson 2013; Lockwood 2011; Korhonen et al 2013).

With the exception of the fundamental principle that in meta-aggregation the synthesizing (grouping) is guided by the similarity of meaning there are no fixed normative practical rules for setting up categories, for assigning findings to categories, and for synthesizing categories into synthesized findings, rather these practical rules are established in each meta-aggregative

review by the review team (Pearson et al 2011). Reviewers are required to document and explicate all their decisions regarding the rules and processes followed for the synthesis, that is how they explored the similarity of meaning, why they grouped categories into synthesized findings and so on (Pearson et al 2011).

Meta-aggregation is not a linear and mechanical process of adding up the findings from independent studies, rather it is an iterative and interpretive process that involves careful reading and re-reading of the studies that facilitates interpretation of findings in the context of all other findings and grouping of findings and categories based on similarity of meaning not merely the superficial similarity of words used (Pearson et al 2011). Qualitative research involves interpretation, however frequently this interpretive nature of qualitative research is not explicitly reported and it is not transparent in the published qualitative literature, and this may leave uncovered the essential idea that interpretation is power, that is that being able to interpret qualitative research findings gives power to the interpreter (Pearson et al 2011). I acknowledge that this lack of transparency of interpretive nature of qualitative research may be explained probably for most cases by the words or page limits imposed by journals on articles; these words or page limits eliminated in the past the possibility of providing audit trails for the research, for example explicit, unambiguous, rich, comprehensive, illuminating notes, memos, or research diaries, however, increasingly there are opportunities to provide online suplimentary documents.

Meta-aggregation as a research synthesis approach that focuses on processed data adopts an pluralistic, inclusive view, that values all interpretations of diverse perspectives regarding the human experience, and therefore may be used for the synthesis of meaning explored in any qualitative research studies of good quality using any qualitative research methodologies, guided by any philosophical perspectives, and using any data collection and any data analysis methods (Pearson et al 2011; JBI Reviewer's Manual 2014).

Meta-aggregation is visually represented by a visual textual representation of the steps of synthesis and units used in synthesis (extracted findings; grouping of findings into categories; grouping of categories into synthesized findings) that shows that meta-aggregation uses the original findings extracted from research studies in order to generate a synthesis representing the collective meaning of those findings (Pearson et al 2011; JBI Reviewer's Manual 2008; JBI Reviewer's Manual 2011; JBI Reviewer's Manual 2014). In **Figure 2** a concept map of the

connections between qualitative research, meta-aggregation, and policy and practice is presented, suggesting that primary qualitative research studies explore the meaning of human experience and that meta-aggregation is a form of synthesis of findings from primary qualitative studies for the purpose of generating synthesized findings that provide guidance for action, policy, and practice. In **Figure 3** a visual representation of meta-aggregation process is presented, suggesting the move from findings to categories and finally to synthesized findings.

Figure 2. Concept map of the connections between qualitative research, meta-aggregation, and policy and practice
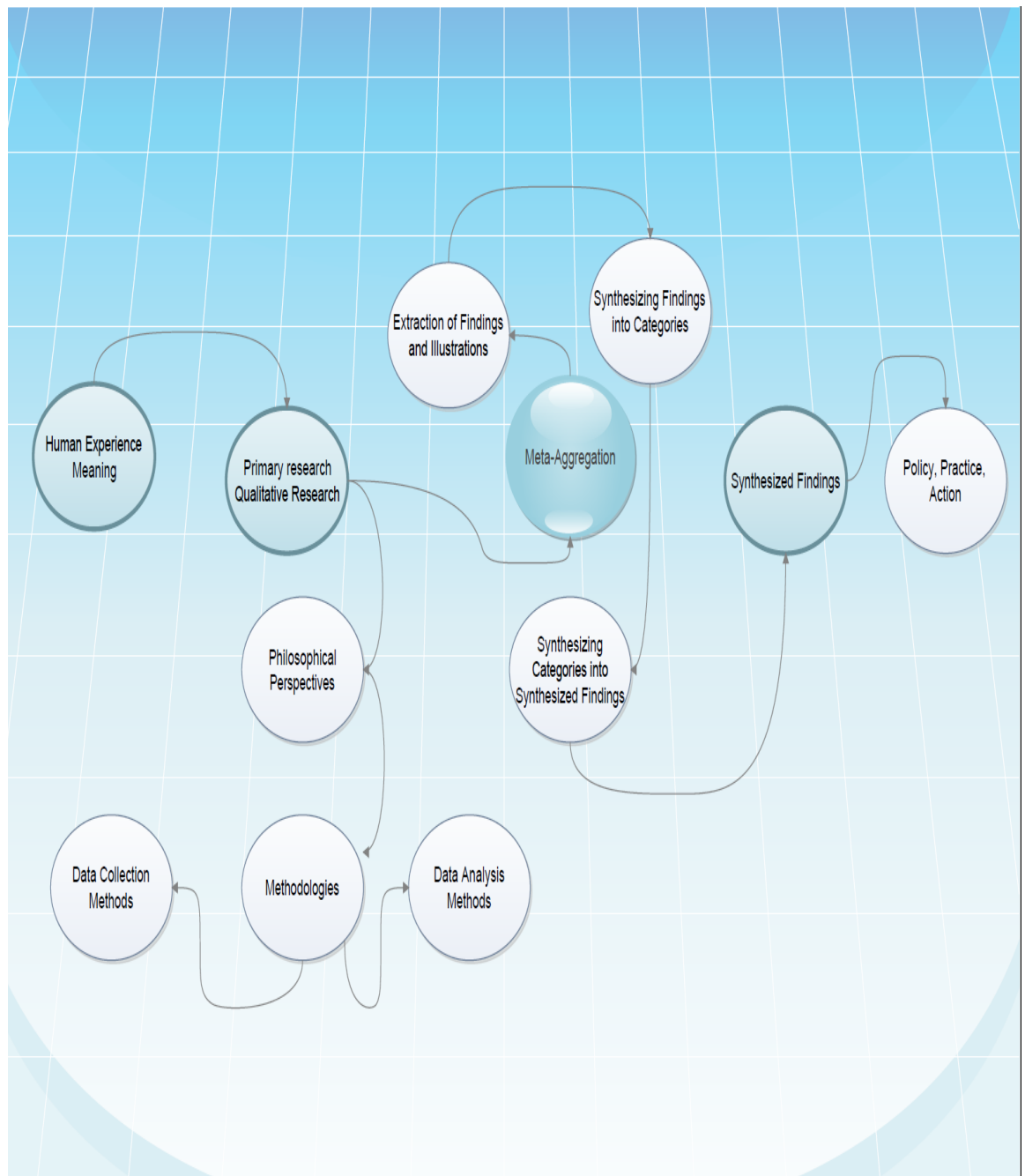
Figure 3. Visual representation of meta-aggregation process showing the move from findings to categories and finally to synthesized findings
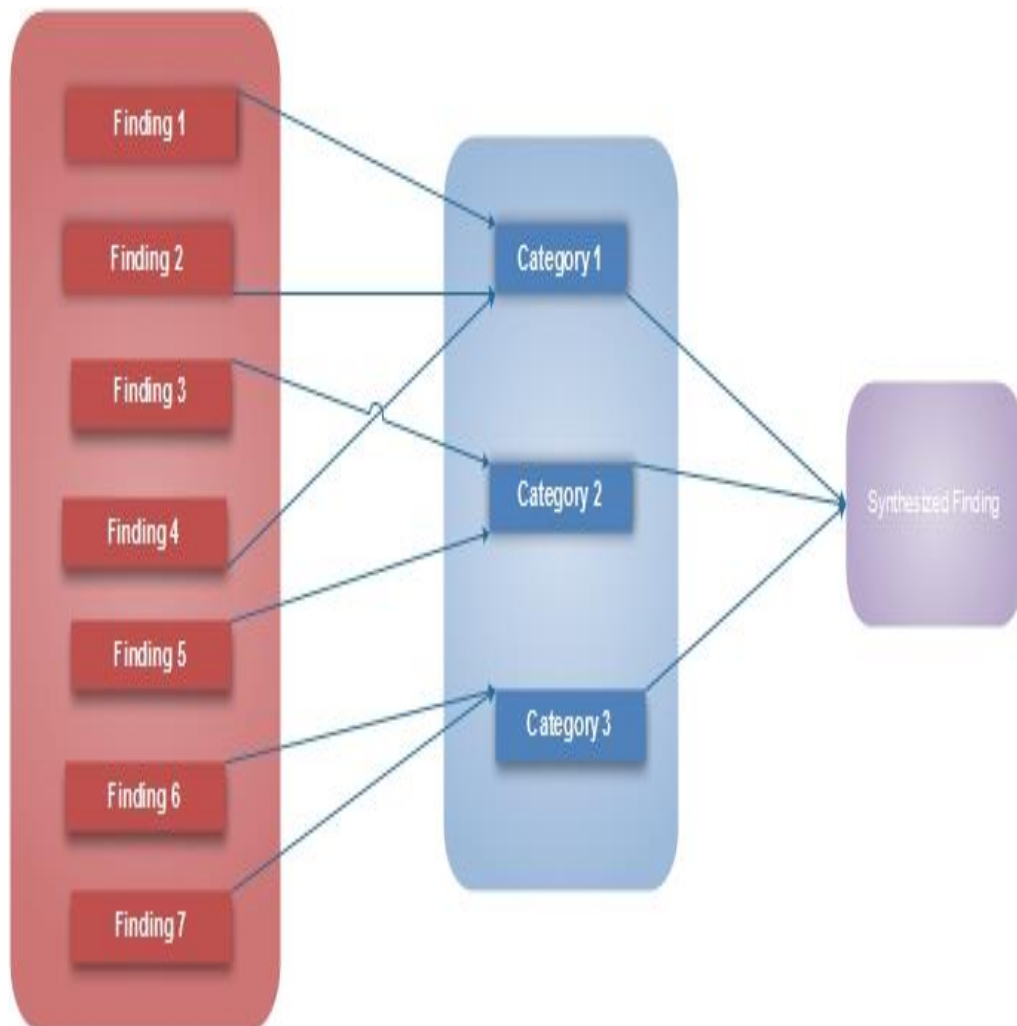
Conclusion

This chapter described the Joanna Briggs Institute approach to meta-aggregation as an approach to interpretation of processed qualitative research data, and as a three-step synthesis process involving the extraction of findings from primary qualitative studies (verbatim text extractions), the synthesis of findings into categories, and the synthesis of categories into synthesized findings.

Chapter IV: Husserlian Phenomenology

Introduction

In this chapter I explore the first component of *Objective 1* (*"To examine the Husserlian Phenomenology and American Pragmatism philosophical literature and to clarify the validity of the claims that the Joanna Briggs Institute's meta-aggregation is founded on Husserlian Transcendental Phenomenology and American Pragmatism"*). Specifically I examine Husserlian Phenomenology. In this chapter I explore only Husserlian Transcendental Phenomenology, and I don't explore other approaches to phenomenology (for example, Hermeneutic Phenomenology or Existential Phenomenology). I acknowledge that there are diverse phenomenological approaches other than Husserlian Transcendental Phenomenology, however, the discussion of these other approaches is beyond the scope of this thesis. A comprehensive presentation of the history of phenomenology including discussions of contributions of different phenomenologists and diverse phenomenological approaches is provided by Spiegelberg (1982). In this chapter I explore only Husserlian Transcendental Phenomenology, therefore, when I use the term phenomenology without any other qualifier, I refer to Husserlian Transcendental Phenomenology. Details about the life and philosophical works of Husserl are provided by Moran (2000), Smith & Woodruff Smith (1995), Kocklemans (1967), Bernet et al (1993), and Spiegelberg (1982) among others. Husserl explored the nature of meaning, evidence, and truth, and the relations among these fundamental aspects (Detmer 2013). Interestingly, two important philosophers of the Frankfurt School of critical theory, Theodor Adorno and Max Horkheimer, both wrote their doctoral dissertations on Husserl (Detmer 2013). Phenomenology is a philosophical movement interested in examining and describing the lived phenomena, specifically describing the essence of phenomena (Reeder 2010). The essence of something is the universal features of that thing as we experience it (Reeder 2010).

The Husserlian approach

Husserlian phenomenology is a scientific approach that uses the synthesis between the "first-person standpoint of the artists" that explores the realm of subjectivity and "the evidence-based truth-orientation of the scientists" that seek objective rigorous examination of the world (Detmer 2013, p.11). Husserl argued for the necessity of scientific exploration of lived experience as fundamentally expanding the narrow conception of science as limited to natural sciences (Husserl 1983; Detmer 2013). Husserl rejected the reductionist and alienating view that only factual knowledge experimentally derived by natural sciences is genuine knowledge and

defended the need of scientific exploration of human experience and of values, meanings, and emotions, that is human subjectivity by means of phenomenology as a rigorous science (Detmer 2013).

Fundamentally, phenomenology is best defined as the study of the essential structures of human experience, specifically the description of the objects explored in consciousness and of the ways of experiencing these objects (Husserl 1983; Detmer 2013). Phenomenology pursues the goal of providing descriptions of the essential structures of the objects of experience based on insights from lived experience, from the first-person perspective, that is, from the stand-point of subjectivity, regardless of the field of inquiry based on insights from lived experience (Husserl 1983; Detmer 2013).

The essence of phenomenology is its focus on objects of the experienced world as given, as they are provided in experience, not influenced by theoretical or conceptual debates guided by artificially constructed concepts, and described with accuracy and rigor (Detmer 2013). Phenomenology's principle of principles is that phenomenology explores only what is given as it is given in intuition in consciousness (Husserl 1983; Moran & Cohen 2012).

Phenomenology asks us to put aside, at least temporarily if we are not able to exclude for good, all taken for granted traditional or familiar views or beliefs or speculative ideas or theoretical assumptions or concepts that block our access to see as given what is given in experience (Husserl 1931; Husserl 1980; Husserl 1983; Husserl 1989; Husserl 1999; Detmer 2013). Phenomenology aims to provide an accurate description of what is given in experience as is given (Detmer 2013).

Objects explored by phenomenology are not only the physical objects of sense experience but all objects experienced by consciousness including all those considered in thinking and imagination, such as values, feelings, and so on (Detmer 2013). Thus, it is possible to explore phenomenologically the experience of love, and hate, friendship, and empathy, but is also possible to explore mathematical objects.

Phenomenology, by careful, attentive examination of the objects experienced in consciousness allows us to discern the essential characteristics or features of these objects, that is to identify those characteristics that define the objects as objects of a specific kind (Detmer 2013).

Phenomenology identifies those essential characteristics that cannot be removed from experienced objects without changing the essence of those objects (Detmer 2013). Experienced objects are objects of a specific kind because they have essential characteristics and if these essential characteristics are removed then those objects cease to be objects of a specific kind and become objects of a different essence or kind.

A fundamental phenomenological idea is that while many experiences are related to senses, the meaning of experiences are not given or mediated by senses and are not objects of sense experience (Detmer 2013). Meaning is not a sensory experience and sense experience is not necessary for the exploration of meaning (Detmer 2013). Thus, for example, when reading something the meaning is beyond the sensory experience of the written text (Detmer 2013).

Another phenomenological fundamental idea is that meaning is not always, or exclusively or primarily, linguistic and that meaning expressed in language is just an attempt to express in language the meaning of the lived experience (Detmer 2013). According to phenomenology, we experience the world as meaningful and there is always meaning experienced in the lived experience even when the meaning is not expressed or communicated to others linguistically (Detmer 2013).

Another phenomenological fundamental idea is that according to Husserl, we should be able to describe and understand objects experienced in consciousness before we are trying to explain those objects and construct theories about those objects (Detmer 2013). Thus, it is necessary to explore first the essential characteristics of objects, that is what is essential and necessary and what is only accidental and contingent, before we build theories about those objects (Detmer 2013).

For Husserl, transcendental phenomenology refers to phenomenology as eidetic science that explores the essences of objects as given in intuition and examined in the essential intuition of eidetic reduction by means of imaginative variation, thus concerned with what is essential, universal, and necessarily a priori, without concerns regarding the contingent empirical facts of the world (Moran & Cohen 2012). Transcendental phenomenology is not concerned with the empirical facts of the world, rather it is interested in a priori essences (Moran & Cohen 2012).

Husserl uses the term attitude to refer to a mindset or a stance of consciousness (Moran & Cohen 2012). Different attitudes with the exception of the attitude called natural attitude are adopted or changed depending on diverse particular purposes (Moran & Cohen 2012). Natural attitude is not naturally or purposefully adopted (Moran & Cohen 2012). Natural attitude is characterized by its taken for granted belief in the reality and existence of the world and of the things in the world (Husserl 1983; Moran & Cohen 2012). In natural attitude, the lived experience is that the objects, the things, and the entire world are out there, simply there for us, real, actual, there is no doubt about things as existing in reality, that is objective real things (Husserl 1983; Moran & Cohen 2012). According to Husserl, all scientific research is performed in natural attitude, as all these inquiries accept the world as real and actual (Moran & Cohen 2012). It is this natural attitude that it is 'unplugged' or 'disabled' in the phenomenological epoche (Moran & Cohen 2012). In philosophical attitude, the world is put into question, as opposed to be taken for granted, and also knowledge about the world is questioned, in contrast with the naive living of the natural attitude (Husserl 1983; Moran & Cohen 2012).

Husserl uses the term epoche for a procedure of putting out of action, or cancelling, or unplugging, or excluding, or bracketing, or putting into parenthesis, or putting out of play, or disregarding of beliefs or judgments (Husserl 1983; Moran & Cohen 2012). The phenomenological epoche refers to the procedure of putting out of action or excluding the taken for granted belief in the reality and existence of the world and of the things in the world that characterize the natural attitude (Husserl 1983; Moran & Cohen 2012; McKenna 1997). Epoche is also called bracketing (Moran & Cohen 2012).

The phenomenological epoche means that I am moving from psychological subjectivity to transcendental subjectivity, from the world simply there existing for me, to the world experienced by me without any claim with regards to the reality and existence of the world and the things in the world (Husserl 1983; Moran & Cohen 2012; McKenna 1997). It is important to understand that epoche and reduction are different procedures, that is epoche refers to the procedure of disconnecting or unplugging the natural attitude, and reduction refers to the procedure of moving from particular to the essence by using imaginative variation (Moran & Cohen 2012).

Phenomenology is defined as a science of essences, that is not concerned with matters of fact but with invariant essences of things (Husserl 1983; Moran & Cohen 2012). Phenomenologically, what is essential is what is invariant, universal, and necessary, and

discovered in imaginative variation (Moran & Cohen 2012). Phenomenology is an eidetic science. The term eidetic is used to refer to the exploration of universal and necessary characteristics, that is essences, not matters of contingent fact (Moran & Cohen 2012; Scanlon 1997).

Eidetic insight, also called eidetic intuition, or eidetic seeing, refers to the identification of essences (essence is also called eidos by Husserl) of experienced objects in consciousness by the means of imaginative variation, that is the grasping of what is invariant and universal (Husserl 1931; Moran & Cohen 2012).

Imaginative variation is also called eidetic variation or imaginative free variation or ideation, or free variation, or free arbitrary variation, or free phantasy (Moran & Cohen 2012). Imaginative variation is the phenomenological procedure that explores the essences of objects, that is invariant across all imaginable possible variations, regardless of the nature of objects examined in consciousness, that is essences of material things, of values, feelings, properties, or relations, and regardless of the way of the objects are given, that is in perception, in imagination, or in memory (Husserl 1960; Moran & Cohen 2012). Essences explored in imaginative variation refer to what is invariant, universal, essential, and necessary, these essences are not descriptions of matters of fact, these essences are not descriptions of particular facts (Husserl 1960; Moran & Cohen 2012; Scanlon 1997). In the eidetic method any particular experienced instance is treated as if it were an object of mere imagination, therefore it is important to note that given its focus on essences, eidetic method cannot replace observational or experimental sciences (Scanlon 1997). Eidetic method is not concerned with empirical facts, however, the eidetic method can help us explore and clarify the concepts used in empirical natural and social sciences (Scanlon 1997).

It is important to note that fundamentally, phenomenology as a descriptive science, is interested in eidetic descriptions, descriptions of possibilities, and that however, phenomenology may be used for factual descriptions (descriptions of actual matter of fact) (Embree 2011). It is important to note also that even if fundamentally phenomenology is a descriptive science, that is interested primarily in the description of phenomena, however, phenomenology may be used in order to explore different types of explanations, including explanations about causes, and explanations about purposes (Embree 2011).

An important concept in phenomenology is that of empathy that refers to the possibility of personal experience of another person's consciousness or subjectivity, or mind, that is the possibility of one person accessing the first-person experiential life of another person (Moran & Cohen 2012). Essentially empathy means the ability of a person to grasp, or comprehend, or experience the conscious life or personal mind experience or lived psychic states, or lived experiences of another human person (Moran & Cohen 2012). For Husserl and also for another phenomenologist, Edith Stein, in empathy we experience directly the other person's emotions, desires, and thoughts, that is we experience directly the other person's consciousness, and thus empathy is the basis of intersubjective human experience (Coplan & Goldie 2011). Thus, fundamentally, empathy is not an inference, it is not reasoning, it is an experience, it is a first-person experience of the lived experience of another person (Moran & Cohen 2012). In empathy I experience now the empathized experience in my first-person lived experience as actually present in my conscious experience (Moran & Cohen 2012).

Mereology as the field of inquiry concerned with the relations between wholes and parts was formally established by the Polish mathematician and logician Stanislaw Lesniewski, however, Husserl explored the essences of the relationships between parts and wholes, and although he never used the term mereology it is appropriate to consider that Husserl pioneered the domain of mereological inquiry (Moran & Cohen 2012).

Husserl used the term pieces for independent parts, that is those parts that can be presented separately from their wholes, for example the roots or leaves of a tree can be imagined or considered apart from the tree as a whole (Sokolowski 1974). Husserl used the term moments for non-independent parts, that is parts that cannot be presented separately from their wholes, for example the hue, saturation, and brightness of colour, or colour that cannot be presented apart from extension (Sokolowski 1974).

Also, Husserl discussed the difference between a mediate part and an immediate part. A mediate part is a part of a whole only by being part of another moment which in turn is a part of the whole, for example, brightness is mediately a part of extension through colour (Sokolowski 1974). Depending on how many intermediaries are needed, a given moment may be *nearer to* or *more remote from* its whole compared to another moment (Sokolowski 1974). An immediate part is a part that needs no intermediaries to be united to its whole (Sokolowski 1974).

Phenomenology - being concerned with essences, that is invariant characteristics - is concerned with moments, that is non-independent parts that cannot be presented separately from their wholes (Sokolowski 1974). Eidetic sciences, such as phenomenology, explore eidetic moments and describe the structures of parts and wholes (Sokolowski 1974).

A fundamental phenomenological idea is that a linguistic expression expresses a meaning (Moran & Cohen 2012). What is expressed by a word or a proposition is a meaning that can be understood in the same sense by different persons at different times and different places, that is there is an identity of meaning that is preserved (Edie 1976). Thus, there is an identity of meaning regardless of persons, languages, or spatio-temporal specifics (Edie 1976). The same identical meaning can be experienced again, the same thought can be thought again, and the same identical meaning can be translated into another language (Edie 1976). The same meaning is apprehended by different persons when meaning is apprehended regardless of the uniqueness of each person and this is the fundamental basis of the possibility of communication between human beings (Gurwitsch 1974).

Meaning is what we experience, and meaning is what we attempt to express in language (Edie 1976). Words are not the meaning, rather, they are used to define, clarify and communicate the meaning (Edie 1976). The bearer of meaning is not a word or a sentence but the human intentional experience (Mohanty 1997). Meaning of experiences is never exhaustively expressed in any words as meaning always transcends words, and words are used only as vehicles or means of transmitting the meaning of experiences (Edie 1976; Kelkel 1997; Reeder 2010).

We see through words the meaning they express, therefore we have to go beyond the mere words used to their meaning that is rooted in lived experience (Edie 1976). We therefore see or hear the word, but we go beyond the word and connect with the meaning expressed by the word (Koukal 2001; Kelkel 1997). For Husserl, words or linguistic expressions are signs of an inner mental process (Bernet et al 1993). Words are used to express the inner experience, the inner mental life (Bernet et al 1993). Language is used in the service of thinking and ideally we take no notice of language. We forget that we use a language to 'see through' words and beyond the words and attend to the meaning intended (Bernet et al 1993; Kelkel 1997).

It is important to emphasize that phenomenology teaches us to go beyond the words and concepts used for describing a lived experience, and to go to the experience itself that is only partially captured linguistically and to realize that the words give us access to the inner state of the person using the words, giving us access to the experience itself (Reeder 2010).

As a means of summarizing the discussion of Husserlian phenomenology I provide the following synthesis based on Spiegelberg's discussion of the essentials of the phenomenological method.

Spiegelberg's discussion of the essentials of the phenomenological method
Essentially these are the steps of the phenomenological method:
- investigating particular phenomena (with three operations, phenomenological intuiting, phenomenological analysing, and phenomenological describing);
- investigating general essences (eidetic intuiting); apprehending essential relationships;
- watching modes of appearing;
- exploring the constitution of phenomena in consciousness; suspending belief in the existence of the phenomena; and
- interpreting the meaning of phenomena (Spiegelberg 1982).

Phenomenological intuiting refers to attentive focusing on the object examined in conscious experience; phenomenological analysis involves the explorations of the different aspects of the phenomena (Spiegelberg 1982). Phenomenological description essentially refers to providing an account of the essential characteristics of the phenomena that clearly distinguishes the phenomena from other phenomena (Spiegelberg 1982). Investigating general essences or eidetic intuiting means that in phenomenology we are looking at particulars as examples, as particular instances and these are considered as exemplifying general essences (Spiegelberg 1982). A fundamental insight from phenomenology is that it is not possible to see examples or particulars as examples or particulars without seeing the essence which is exemplified (Spiegelberg 1982). According to phenomenology we don't see only particulars, we are able to grasp also the essences that are represented in particulars (Spiegelberg 1982). Apprehending essential relationships refers to the examination of the internal relations within one essence and exploring if its components are essential to it by using free imaginative variation (Spiegelberg 1982). If the fundamental structure remains unaffected by omissions or substitutions then the omitted or replaced components are unessential (Spiegelberg 1982). If omission or substitution changes the structure then the components have relative essential necessity (Spiegelberg

1982). If omission or substitution changes radically the whole essence then components have absolute essential necessity (Spiegelberg 1982). Also, essential relations between multiple essences are established by the same procedure of imaginative variation (Spiegelberg 1982). Watching modes of appearing refers to the exploration of the degrees of clarity and distinctness with which the objects are given in the experience and exploring the constitution of phenomena in consciousness refers to the exploration of the way in which a phenomenon establishes itself and takes shape in our consciousness (Spiegelberg 1982). Suspending belief in existence means that we suspend the judgment regarding the existence or non-existence of the objects experienced in intuiting consciousness, that is facilitating genuine intuiting without the assumptions about the world and its things that are taken for granted in the naive natural living (Spiegelberg 1982). Interpreting meaning refers to hermeneutical explorations, that is interpretation going beyond what is immediately given (Spiegelberg 1982).

It is important to discuss also in this chapter some relevant ideas from Spiegelberg's and Giorgi's works on phenomenology as these relate to the theoretical framework for meta-aggregation proposed in Chapter VIII. The relevance of these ideas will become clear when I present the theoretical framework for meta-aggregation.

The phenomenological method described by Spiegelberg refers to first-person phenomenology, phenomenology performed by one person of her/his own first-person experience. Interestingly, Spiegelberg (1975) argued that a different type of phenomenology, a phenomenology through vicarious experience (that explores phenomenologically the experiences of others) is possible. Phenomenology through vicarious experience is phenomenology of the experience lived by others not the phenomenology of the first-person lived experience (Spiegelber 1975). Spiegelberg argued that a phenomenologist may use a procedure that is initiated by a phenomenologist and kept under her/his control, a phenomenological procedure called imaginative self-transposal that involves the phenomenologist seeing the world from the perspective of another person, by adopting imaginatively the other person's frame of mind, the result being vicarious imagination not perception (Spiegelber 1975).

Giorgi's descriptive phenomenological method

The American phenomenologist Amedeo Giorgi developed a descriptive phenomenological method in psychology inspired by Husserlian phenomenology (Giorgi 2009). Giorgi used ideas from Husserlian phenomenology to inform his phenomenological approach for use in primary qualitative research. He defended the possibility to perform phenomenological research by using descriptions of experiences from others obtained in natural attitude and noted that support for his approach is provided in the works of Spiegelberg, specifically Spiegelberg's proposal of the imaginative self-transposal (Giorgi 2009). Giorgi argued that even if descriptions of experiences are obtained from others, however the meaning is intuited in its essential characteristics in phenomenologist's consciousness (Giorgi 2009). Using the human scientific (psychological) phenomenological reduction, everything in the raw data obtained from others is taken to reflect how things were experienced by those describing them and no claim is made that things really happened as described (Giorgi 2009).

The phenomenologist's past personal experiences and knowledge regarding to the explored phenomenon are bracketed; that is are not used and are purposefully ignored in order to see the raw data with fresh eyes (Giorgi 2009). In Giorgi's approach the imaginative variation is used, however there is no intention to discover universal essences, rather middle range generalization based on concrete descriptions of experience are obtained (Giorgi 2009). Giorgi notes that he is not searching for Husserlian essences through the method of free imaginative variation rather he seeks the structure of the concrete experiences by identifying the higher-level eidetic invariant meanings that belong to that structure (Giorgi 2009). In Husserlian phenomenology the goal is to identify universal essences, however, in the phenomenological approach proposed by Giorgi the structures of experiences are not universal essences rather these structures are general structures in the sense that the findings transcend the particular situation in which they were obtained (Giorgi 2009).

Giorgi notes that the structures of experiences obtained by the scientific phenomenological method are concrete descriptions that are eidetically raised to a level of general invariance that is not to abstract to be a useful description of the experience and that are not as specific as the original descriptions. These are not universal descriptions, they are descriptions of the unity found in the concrete data, or descriptions of essential characteristics for the phenomenon to manifest itself in a particular way (Giorgi 2009). These are not universal essences, rather these are considered as generalizations akin to middle range theories (Giorgi 2009).

Conclusion

This chapter described the essential aspects of Husserlian phenomenology relevant to this thesis, such as bracketing, reduction, and essences, and discussed the Spiegelberg's idea regarding phenomenology through vicarious experience by imaginative self-transposal, and some fundamental aspects of Giorgi's descriptive phenomenological method.

Chapter V: Meta-aggregation and Husserlian phenomenology

Introduction

In this chapter I address *Question 1* (*What is the validity of the claims that Joanna Briggs Institute's approach to meta-aggregation is founded on Husserlian Transcendental Phenomenology and American Pragmatism?*) and the second part of *Objective 1* (*To examine the Husserlian Phenomenology and American Pragmatism philosophical literature and to clarify the validity of the claims that the Joanna Briggs Institute's meta-aggregation is founded on Husserlian Transcendental Phenomenology and American Pragmatism*) of my thesis.

Specifically, in this chapter I examine the validity of the claims that Joanna Briggs Institute's approach to meta-aggregation is founded on Husserlian Transcendental Phenomenology. I examine the arguments provided by Pearson et al (2011), Lockwood (2011), Lockwood & Pearson (2013), and Lockwood et al (2015).

The Husserlian basis of meta-aggregation

Essentially, the argument provided by Pearson et al (2011), Lockwood (2011), Lockwood & Pearson (2013), and Lockwood et al (2015) is that in meta-aggregation reviewers use bracketing and reduction in order to uncover essences of phenomena and these are essentially ideas from Husserlian phenomenology.

In meta-aggregation, bracketing refers to the reviewer's attempts to put aside her/his own prior beliefs, biases, prejudices, previous experience and knowledge, and any ideas or theories, or concepts from outside the respective examined studies with regards to the phenomena of interest examined in the included studies, in order to let the findings themselves reveal the meaning grounded in themselves, without any interference from the reviewer (Pearson et al 2011; Lockwood 2011; Lockwood & Pearson 2013; Lockwood et al 2015).

Husserlian bracketing refers to the procedure of putting out of action or excluding the taken for granted belief in the reality and existence of the world and of the things in the world that characterize the natural attitude.

In natural attitude, the lived experience assumes that the objects, the things, and the entire world are out there, simply there for us, real, actual, there is no doubt about things as existing in

reality – they are objective, real things. Bracketing is not used to negate the general thesis of the natural attitude but to put it in brackets, to suspend it.

In meta-aggregation bracketing refers to the suspension or bracketing of all ideas that are not directly presented as findings in the primary studies. In meta-aggregation the reviewer attempts to put aside her/his own prior beliefs, biases, prejudices, previous experience and knowledge, and any ideas or theories, or concepts with regards to the phenomena of interest examined in the included studies. The reviewer's focus is on the findings extracted from the primary studies. The reviewer extracts the findings as given, without any re-analysis or re-interpretation based on prior beliefs, biases, prejudices, previous experience and knowledge, and any ideas or theories, or concepts with regards to the phenomena of interest. It is obvious that in meta-aggregation bracketing is used not to put aside the natural attitude but to put aside beliefs, biases, prejudices, previous experience and knowledge, and any ideas or theories, or concepts, therefore I conclude that bracketing is used for different purposes in Husserlian phenomenology and in meta-aggregation, however, I consider that it is reasonable to think that there is no doubt that meta-aggregation by using bracketing is clearly inspired by Husserlian phenomenology.

In meta-aggregation, reduction refers to the examination of findings in order to identify the essence of the phenomena described by the findings by distinguishing the essential characteristics from the non-essential characteristics (Pearson et al 2011; Lockwood 2011; Lockwood & Pearson 2013; Lockwood et al 2015).

The eidetic reduction in Husserlian phenomenology is the approach used to make the transition from particular instances to universal ideal essences. The eidetic reduction in Husserlian phenomenology uses imaginative variation in order to subject the experienced instances to different variations. The goal is to explore the essence, what is identical despite all imaginable variations.

It is obvious that in meta-aggregation reduction is used not to identify universal a priori essences but to identify the essence of phenomena, therefore I conclude that reduction is used for different purposes in Husserlian phenomenology and in meta-aggregation, however, I consider that it is reasonable to think that there is no doubt that meta-aggregation by using reduction is clearly inspired by Husserlian phenomenology.

In meta-aggregation, the essence is viewed as the common meaning of the phenomena described by the findings, the essential characteristics of the phenomena (Pearson et al 2011; Lockwood 2011; Lockwood & Pearson 2013; Lockwood et al 2015).

Essences, in Husserlian phenomenology are about what is universal and necessary, what is a priori. Essences explored in pure transcendental phenomenology are not empirical facts about natural world or cultural world. In transcendental phenomenology the variation in imagination or phantasy is used in order to separate what is essential from what is accidental. The intuited essence is represented by what is universal and a priori necessary. These phenomenological essences are ideal, not about the empirical world, not about the collection of facts. For Husserl the essence is not about empirical realities. These essences are not to be discovered in the world of particulars but in the pure transcendental consciousness. For Husserl the essence is about possibility independent of empirical experience. It is obvious that in meta-aggregation the concept of essence is used not to identify universal ideal a priori essences but to identify the essence of phenomena from the empirical world, therefore I conclude that the concept of essence is used with different meanings in Husserlian phenomenology and in meta-aggregation, however, I consider that it is reasonable to think that there is no doubt that meta-aggregation by using the concept of essence is clearly inspired by Husserlian phenomenology.

Conclusion

In Chapter III of the thesis I presented my understanding of fundamental aspects of Husserlian phenomenology, including the discussion of bracketing, reduction, and essences. Also, I presented a brief discussion of some aspects of Giorgi's descriptive phenomenological method. Given my understanding of Husserlian phenomenology as described in Chapter III, and given the arguments presented in this chapter with regards the nature of bracketing, reduction, and essences as considered in meta-aggregation and in Husserlian phenomenology, I consider that the claims made by Pearson et al (2011), Lockwood (2011), Lockwood & Pearson (2013), and Lockwood et al (2015), that meta-aggregation is founded on Husserlian Phenomenology are valid. Given that there are significant similarities between meta-aggregation and Giorgi's approach with regards to the use in of ideas from Husserlian phenomenology, specifically the use of bracketing for the purposes of setting aside prior beliefs, biases, prejudices, previous experience and knowledge, and any ideas or theories, and the use of reduction in order to identify not universal ideal essences but essences as general structures of phenomena from the empirical world, and given that Giorgi's descriptive phenomenological method is considered to

be founded on Husserlian Phenomenology (Giorgi 2009), I conclude that from my point of view there are no doubts that meta-aggregation is founded on Husserlian phenomenology.

Chapter VI: American Pragmatism

Introduction

In this chapter I explore the first component of *Objective 1* of my thesis (*To examine the Husserlian Phenomenology and American Pragmatism philosophical literature and to clarify the validity of the claims that the Joanna Briggs Institute's meta-aggregation is founded on Husserlian Transcendental Phenomenology and American Pragmatism*).

Specifically, in this chapter I examine American Pragmatism. The term pragmatism was introduced in philosophy by William James in 1898 (Bacon 2012). In her book, "*The American Pragmatists*", philosopher Cheryl Misak discuss the contributions of many pragmatists including Chauncey Wright, Charles Sanders Peirce, William James, John Dewey, and also Clarence Irving Lewis, Richard Rorty, and Hilary Putnam (Misak 2013). According to Misak the founders of American pragmatism are Chauncey Wright, Charles Sanders Peirce, and William James. The most important representative of the middle period of American pragmatism is considered to be John Dewey (Misak 2013). Philosopher Michael Bacon refers to Peirce, James and Dewey as the classical pragmatists (Bacon 2012). Bacon refers to the works of several philosophers as representing the 'new pragmatism', including Richard Rorty, Hilary Putnam, Jurgen Habermas, Susan Haack, Cheryl Misak, Robert Brandom, and Huw Price (Bacon 2012).

As in previous commentaries regarding pragmatism as philosophical foundation for meta-aggregation only the works of three American pragmatists were examined, specifically Charles Sanders Peirce, William James and John Dewey, and as these three pragmatists are considered to be the classical pragmatists, the focus of this thesis is on these three American pragmatists. I will examine in different, future research the potential contribution of the philosophical works of other pragmatists to meta-aggregation.

Details about the life and philosophical works of Peirce are described by Misak (2013), Hookway (2013), and Bacon (2012). Peirce's pragmatism is examined comprehensively by Hookway in his book "*The Pragmatic Maxim. Essays on Peirce and Pragmatism*" (Hookway 2012), and by Misak in her book "*Truth and the end of inquiry. A Peircean account of truth*" (Misak 2004). Peirce's pragmatism, James's pragmatism, and the connections between the two perspectives are explored by Burke in his book "*What Pragmatism was*" (Burke 2013). Peirce's ideas about

communication and semiotics are explored by Bergman in his book "*Peirce's philosophy of communication. The Rhetorical underpinings of the theory of signs*" (Bergman 2009). James's pragmatism is explored comprehensively by Cormier in his book "*The truth is what works. William James, Pragmatism, and the seed of death*" (Cormier 2001).

Details about the life and philosophical works of James are also described by Misak (2013), Malachowski (2013), and Bacon (2012). Details about the life and philosophical works of Dewey are provided by Misak (2013), Hildebrand (2013), and Bacon (2012).

Misconceptions about pragmatism

It is important to refute first some of the misconceptions about pragmatism. The most common misconceptions about pragmatism were explored comprehensively by Burke (2013, p.143-160). Probably the most common misconception is that pragmatism means being interested in what is practical; according to this misconception pragmatism means that practical considerations are the most important in all kind of decision-making situations (Burke 2013). Related to this misconception, there is another common one that presents pragmatism as essentially characterized by a focus on what works, or what gets things done (Burke 2013). Also, related to this misconception, another one presents pragmatism as just utilitarianism (Burke 2013). Another common misconception is that pragmatism promotes ideological neutrality for the sake of what is recognised to be practical by all involved parties (Burke 2013). A common dangerous misconception is that pragmatism means accepting opportunistic expediency even by ignoring all kinds of accepted principles, for example principles related to morality or ethics (Burke 2013). Related to this misconception, there is another common one that presents pragmatism more interested by the consequences or ends over the means used, as if ends justify means (Burke 2013).

The essential characteristics of pragmatism

Pragmatism is not a set of fixed shared common ideas – it is a philosophical tradition with common themes explored sometimes in similar ways but sometimes in conflicting ways by different philosophers (Bacon 2012). However, philosopher Thomas Burke synthesized ideas from Peirce and James and proposed a summary of the essential characteristics of pragmatism (Burke 2013). Pragmatism is characterized by a specific normative conception of belief and a methodological principle (the pragmatic maxim) regarding meaning (with two aspects, one operational and one inferential) (Burke 2013). Being a pragmatist means to acknowledge and

hold the normative pragmatic conception of belief and the methodological pragmatic principle regarding meaning (Burke 2013).

Pragmatism is characterized by a certain conception of belief, that is our beliefs about the world determine how we act in the world, and beliefs are tentative and speculative. All beliefs are like betting, however, beliefs are based on experience and are used to guide action and beliefs are expressed in terms of rules of action (Burke 2013). Pragmatism is characterized by a methodological principle regarding meaning, specifically the pragmatic maxim, with two aspects of the methodological principle, an operational aspect and an inferential aspect (Burke 2013. The operational aspect of the pragmatic maxim requires an operational approach to meaning, and the inferential aspect of the pragmatic maxim requires an inferential approach to meaning (Burke 2013). The operational aspect of the pragmatic maxim emphasizes the exploration of the meaning of a belief by the exploration of the potential tangible effects of actions that are implied by the meaning of the belief (Burke 2013). The inferential aspect of the pragmatic maxim emphasizes the potential consequences of holding a given belief (Burke 2013). Pragmatism is characterized by defining the meaning of beliefs by specifying the rules of action involved in the meaning of the belied in such a way as to allow the testing of the belief (Burke 2013). Essentially, pragmatism is a theory of meaning and is interested in meaning as expressed in actions (Thayer 1968; Scheffler 1974; Moore 1961).

Philosopher Michael Bacon indicates that according to pragmatist Cheryl Misak one commitment that is shared by many pragmatists is the focus on connecting philosophy to the practices of everyday life (Bacon 2012). Essentially, pragmatism assumes that our everyday life and practice enables us to find the solutions to the problems we encounter in our everyday life and practice (Bacon 2012). Essentially, pragmatism starts from real life not from abstract theories, and is focused on real life practices in their real life complexity, and explores these real life practices in order to improve them (Bacon 2012). Pragmatism is not about practical success, pragmatism is not about getting results, rather pragmatism is about connecting meaning with action, that is it is about exploring everyday practice in real life and discovering the consequences of actions (Bacon 2012).

It is considered an inaccurate generalization, if not a mistake, to accept the idea that the essence of pragmatism claims that meaning and truth are determined by criteria of practical usefulness (Thayer 1968).

It is important to state unequivocally that a pragmatic approach is concerned with clarifying ideas or concepts and that it is an approach that translate the meaning of ideas into practical consequences that may result as a consequence of acting in a specific way in specific circumstances. Thus, it is an approach that explores the conceivable practical effects of beliefs, however, it is not characterized by the idea that the meaning and truth are determined by criteria of practical usefulness (Thayer 1968). Usefulness and practicality are not exclusive preoccupations of pragmatism and the preference for what is useful over what is useless is not something valued or pursued only by pragmatism and that therefore practicality or usefulness are not useful demarcation criteria between pragmatic views and different non-pragmatic views (Thayer 1968). The preference for what is useful and what is practical it is not essential for the characterization of pragmatism (Thayer 1968). An approach that values practical usefulness is not considered a pragmatic approach just because it values practical usefulness (Thayer 1968).

Essentially in pragmatism the meaning of an idea may be explained by describing the ways in which we would act and the conceivable experiences we would expect from applying the respective idea, that is pragmatism translates meanings into acts that may be observable (Moore 1961; Thayer 1968). Pragmatism proposes that ideas are clarified by spelling out the connections between hypothetical actions and associated conceivable consequences, specifiable in sets of if-then propositions, each one such if-then proposition specifying consequences as a result of some hypothetical action (Scheffler 1974). The meaning of the belief is explained by the actions that are inspired by the belief and the consequences that are expected if actions are pursued. From a pragmatic point of view this means that if I hold a specific belief I am prepared to act in a specific way if I want to see specific consequences and that if I want to pursue specific purposes then I should act in the manner suggested by the belief (Scheffler 1974).

It is possible to express the essence of pragmatism as proposing that the immediate interpretation of an idea is the action or the line of conduct determined by the idea (Moore 1961). Thus, the immediate way of examining the meaning of an idea is to observe the actions or specific lines of conduct it inspired or gave rise to (Moore 1961).

The pragmatism of Charles Sanders Peirce

For Peirce, the essence of pragmatism is that hypotheses are proposed in such a way that can be tested or verified (Peirce in Buchler 1955; Fann 1970). His pragmatism is a theory of meaning (Scheffler 1974) and a method of determining the meaning of concepts in terms of their consequences experienced as a result of applying them (Bacon 2012).

Peirce's pragmatism, as a method of establishing the meaning of concepts, is based on the experimental approach used in the natural sciences or laboratory sciences and the meaning of a statement is one which would be experienced if an experiment is carried out (Peirce in Buchler 1955; Bacon 2012). For Peirce pragmatism is a theory of meaning, that is the practical experiential consequences constitute the meaning of a concept (Peirce in Buchler 1955; Bacon 2012). The meaning of a concept is analysable by considering practical considerations, and meanings are expressed using statements of the form: *If I act in manner X, then I will have experience Y* (Moore 1961). The meaning of an idea cannot be stated completely in terms of actual actions pursued therefore practical considerations refer to all conceivable occasions of acting in way *X*, they refer to any conceivable, or possible, ways of acting in manner X, whether such actions actually do occur or not (Moore 1961; Thayer 1968).

It is extremely important to note that Peirce emphasized the inseparable strong connection between the meaning of beliefs and the purposes of actions, that is the meaning of beliefs is explained in the consequences of actions suggested by the beliefs, and the actions required for fulfilling specific purposes are indicated by the meaning of beliefs (Moore 1961). In other words: *If I conduct myself in manner X, then I will have experience Y* (meaning of beliefs explained in the consequences of actions suggested by the beliefs), and *If I want to have experience Y, then I will conduct myself in manner X* (actions required for fulfilling specific purposes are indicated by the meaning of beliefs) (Moore 1961).

The essence of pragmatism as proposed by Peirce is captured in the pragmatic maxim, that is, the meaning of a concept is represented by the practical effects of acting in accordance with it (Peirce in Buchler 1955; Bacon 2012). Philosopher Christopher Hookway presents three formulations for Peirce's pragmatic maxim in terms of applying the maxim for clarifying meaning (Hookway 2012, p.165-181).

Formulation I of the pragmatic maxim in terms of applying the maxim for clarifying meaning is the following: *If the circumstances are [C] and you have desires [D], then you ought to perform an action of type [A]* (Hookway 2012, p.169).

Formulation II of the pragmatic maxim in terms of applying the maxim for clarifying meaning is the following: *If [E] were experienced to be the case, then the object [A] would behave in way [B]* (Hookway 2012, p.170).
Formulation III the pragmatic maxim in terms of applying the maxim for clarifying meaning is the following: *In circumstances [C], if I were to do [A], then I would experience [E]* (Hookway 2012, p.172).

For Peirce there are three aspects of understanding: identify the objects the term refers to; provide a definition of the term; know what to expect if hypotheses containing the term are true, that is know the consequences of hypotheses containing the term (Misak 2004). Pragmatic meaning is the set of consequences or predictions which can be derived from the hypothesis (Misak 2004) and the consequences with which pragmatism is concerned are predictions, that the predictions of the form that *if the hypothesis is true then if you were to do [A] then consequences [B] would result* (Misak 2004).

Abduction was considered the essence of Pierce's pragmatism (Fann 1970). A comprehensive discussion of the complexities of his theory of abduction is provided by Fann (1970). Peirce's approach to abduction is discussed also by philosopher Christopher Hookway (2012) and by philosopher Cheryl Misak (2004).

Abduction is a distinctive type of reasoning and should not be confused with the two traditional types of reasoning, that is induction and deduction (Fann 1970). In induction we generalize from a number of individual cases to the whole class of similar cases, that is we infer from a sample of cases to a whole or a general principle or law (Fann 1970). Induction refers to inferring a rule or principle based on repeated verification of predictions based on a hypothesis (Fann 1970). For Peirce, deduction refers to inferring the probable consequences from a hypothesis (Fann 1970) and in abduction we can infer a hypothesis to explain why we observed what we did (Misak 2004).

Whenever we observe something there are some hypotheses or explanations that make the observations probable and abduction provides us with candidates for explanations (Misak 2004). Peirce's abduction is inference to a possible explanation (Hookway 2012). Abduction refers to the process of selecting a hypothesis to be tested (Hookway 2012). Abduction involves adopting a hypothesis as being suggested by the facts, which is likely in itself, and renders the facts likely (Hookway 2012). Abduction for Peirce refers to adopting or proposing of a hypothesis, involves an inference from data to an explaining hypothesis, that is an inference from observation of data to proposing a general rule or principle or a hypothesis that accounts for data (Fann 1970).

An abduction is an explanatory hypothesis, that is a hypothesis that accounts for the observed facts (Fann 1970). The process of abduction is the process of proposing a hypothesis that offers an explanation for the observed facts and that is considered a likely rule for predicting the observed facts (Fann 1970).

There are three main considerations (necessary criteria) that should guide the choice of a hypothesis in abduction: the hypothesis must explain the observed facts; the hypothesis must be testable or verifiable by testing or experimentation; considerations of economy of research (cost of verifying the hypothesis, the value of the hypothesis, and the effects of the hypothesis on other actions, activities or decisions) (Fann 1970). The cost of verifying a hypothesis refers to money, time, all efforts implied in testing (Fann 1970). The value of the hypothesis refers to the simplicity of the hypothesis (a simpler hypothesis in terms of number of concepts and intuitive nature is preferred to a complicated one, as per Ockham's razor) and the likelihood of the hypothesis (Fann 1970). Another aspect of economy of research refers to caution, that is break a hypothesis in the smallest testable parts and test one part at a time (Fann 1970). Another aspect of economy of research refers to breadth, that is a hypothesis that explains more facts should be tested first (Fann 1970).

Knowledge is obtained through our interaction with the world, and the beliefs that we hold at any specific moment in time were caused by past inquires in such a way that the beliefs hold at any specific moment are considered accepted for now, that is we consider these beliefs as reliable, established or grounded for now and accepted to guide our actions (Bacon 2012).

Peirce's position is one of fallibilism, as alternative to dogmatism and scepticism: even if we accept the current beliefs as good guides for actions, and these beliefs were examined and confirmed in past inquiries, these beliefs are open to new inquiries in future, therefore these beliefs may change and may be revised (Bacon 2012).

The reliable judge of beliefs is not the individual but the community of inquirers that collectively explore the validity of beliefs and provides its verdicts with regards to how secure are the beliefs (Bacon 2012). Beliefs are not considered in isolation, but are considered in the context of all other beliefs, that is any belief is part of a network of interconnected beliefs (Bacon 2012).

For Peirce, reasoning is not considered like a chain that is no stronger than its weakest link, but reasoning is viewed as a cable comprised of multiple fibres that are intimately connected, and even if individual fibres may be weak or damaged, the cable as a collective, unified structure is strong, therefore, even if individual beliefs are not secure, or even if individual beliefs have to be revised, sometimes radically, it is the complex network of interconnected beliefs that is secure and stable (Bacon 2012). This idea of knowledge as a collective structure that is secure despite the fact that it is comprised of multiple individual beliefs that may be not secure is the clearest expression of Peirce's fallibilism and anti-scepticism that characterizes his pragmatism (Bacon 2012).

Each inquiry is provoked by doubt and finalizes with a belief that is secure called a "true belief", on which we are prepared to act upon. However, by calling the secure belief a true belief we do not claim that the belief is in fact true (Bacon 2012). According to Peirce, proper inquiry that is verified by a community of inquirers may produce a consensus with regards to declaring a belief as a true belief. By testing and testing again, and by revising beliefs, inquirers will uncover the truth, with truth being viewed as that belief that is ultimately agreed upon by all genuine inquirers that explored the same issue (Bacon 2012).

Clarity of meaning is obtained by careful examination of empirical consequences that follow from the belief, and essentially the meaning refers to the difference it makes to practice (Bacon 2012). For Peirce, the meaning of beliefs is intimately related to action - we have gained maximum understanding of the meaning when we know the precise actions involved by the meaning and when we know what we should do given the beliefs (Hookway 2013; Bacon 2012).

A fundamental issue is the connection between meaning, interpretation, and action. For Peirce, the only unconditional, unambiguous proof of interpretation is the action, that is I provide my actions or my intentions to act in a specific way as my ultimate proof of understanding of meaning (Hookway 2013). I provide my changes in actions as the ultimate proof of my interpretation of meaning (Hookway 2013).

From a pragmatic point of view, as proposed by Peirce, the ultimate, the only secure interpretation of meaning relates to being able to specify the actions involved by the meaning (Peirce in Buchler 1955; Hookway 2013). If I am able to act based on the interpretation of meaning this means I have a good grasp of the meaning, this is a proof that I have a good understanding of the meaning (Peirce in Buchler 1955; Hookway 2012). Thus, fundamentally, in pragmatism, as proposed by Peirce, real understanding of meaning consists in using the belief in practice, in actions, and this use of belief in practice is the proof of the ultimate interpretation of meaning (Peirce in Buchler 1955; Hookway 2012).

Peirce indicated the possibility of diverse, more and more profound, more subtle understanding of meaning as an unlimited process of interpretation or semiosis, and the semiotician Umberto Eco coined the term unlimited semiosis to refer to the infinity of semiosis suggested by Peirce (Bergman 2009).

For Peirce, in its theory of signs (called semeiotics, not semiotics as it is now called) the interpretation is ultimately reflected by the effects on the interpreter, and the highest type of interpretation is considered to be uncovered in the effects on interpreter's thoughts and actions (Misak 2013). Thus, the ultimate form of interpretation refers to the interpreter's changes in feelings, thinking, and dispositions for actions or actual actions as a result of interpretation of the meaning (Bergman 2009).

The pragmatism of William James

For James the essence of pragmatism is captured in the extended interpretation of the pragmatic maxim by including all kinds of practical consequences of all kind of beliefs, not exclusively considering only those which can be observed as immediate tangible effects, but any kind of consequences in the life of believer (Bacon 2012). James included in his pragmatism also moral and religious experiences and all kind of beliefs no matter how intangible or remote from everyday these beliefs may be, and considered the application of the pragmatic maxim to all aspects of life (Bacon 2012).

His pragmatism refers to an attitude, that is exploring the consequences of ideas; pragmatism refers to the examination of the meaning by considering its practical consequences (James 1907). For James, pragmatism is the approach that explores theories, any theories, by examining them as 'instruments' at work, in practice (James 1907).

He insisted on the importance of morality and advocated for the necessity of purposeful, responsible, intelligent action that aims to improve the world and considers the distinction between good and bad (Bacon 2012).

James insisted that no individual belief and its consequences should not be considered in isolation, but should be examined with regards its consistency or lack of consistency with other beliefs, potentially with all other relevant beliefs (Malachowski 2013). Each new belief may disturb the existing beliefs, and therefore we should examine the disruption that a new belief may cause to all our existing beliefs (Malachowski 2013). If there are beneficial consequences related to a new belief, these consequences should be balanced against the negative consequences produced by the disruption of the totality of existing beliefs (Malachowski 2013). Thus, only those beliefs should be held that are associated with better positive consequences for life considered as a whole, that is those beliefs that will improve the whole network of all beliefs considered as a whole (Malachowski 2013). The soundness of our beliefs is revealed in the practical consequences of adopting the beliefs and acting in practice, however, the soundness of beliefs is not to be judged based on individual separate consequences, the soundness of beliefs is confirmed by the whole of life, that is the consequences of the beliefs in the context of all beliefs in the context of whole life (Malachowski 2013; Bacon 2012).

A theory that is true is a theory that in the long run will bear positive consequences, it is a theory that works and will work (Cormier 2001). For James, a theory is not considered true because it works once or several times, in particular conditions, rather a theory that is true will bear consistently positive consequences, a theory that is true will work in the long run and considering all consequences as a whole (Cormier 2001; Bacon 2012). Thus, if a theory has some positive consequences at a specific moment in time this fact is not allowing us to declare that it is a true theory. If a belief has some benefits for us at a specific moment in time this fact is not allowing us to declare that it is a true belief. Essentially, for James it is unequivocally incorrect to hold as true the statements that *if it is useful or beneficial for me here and now then it is true*, and *if it works here and now then it is true*, rather for James what is fundamental with

regards truth is that there is only one secure way to identify the truth and this is the practical understanding of consequences of beliefs or theories when acted upon and the observation of all consequences of beliefs in the context of all relevant beliefs in the whole of life, thus truth is confirmed in the long run by the consistency between the beliefs considered as parts of a complex network of relevant interconnected beliefs and their consequences explored in the past, acted upon in the present, and re-confirmed or refuted in future experiences (Cormier 2001; Bacon 2012).

A very important idea for James was that of insufficient support for a belief and the willingness to act based on such a belief. James clearly didn't support the idea that one is free to believe whatever one wishes, however he strongly advocated for the right to believe something even if momentarily there is insufficient evidence to justify the belief and he considered that it is better to risk and hold momentarily beliefs supported by insufficient evidence than have no beliefs and that it is better to risk and pursue a course of action based on that belief and if the belief proves to be a true one that belief will enables us to successfully pursue the intended consequences (Bacon 2012).

Another important idea for James was that each of us has a different perspective about the world and therefore it is important to embrace a pluralistic attitude, thus acknowledging and respecting diverse alternative perspectives, and being aware that each of us individually we are not in possession of the whole truth (Bacon 2012).

The pragmatism of John Dewey

For Dewey the essence of pragmatism is that consequences are used as the necessary tests for the validity of propositions (Dewey 1939). Inquiry is necessary whenever we encounter a problem and we must solve it, and beliefs and theories are tools whose meaning and value are tested in actions, in the consequences of their use (Bacon 2012). For Dewey the meaning of terms, concepts or propositions should be judged by their experimental consequences in inquiry, and he believed that there is no exploration of meaning without examining the consequences (Hildebrand 2013).

Dewey rejected the idea of fixed a priori independent standards of validity for claims and insisted that only observed consequences of actions are the true tests or standards of validity of claims (Dewey 1930).

He proposed that we should use the test of consequences, that is observations of clues and tests found within concrete acts, not fixed general rules, ideal immutable rules, rules that are external and independent of concrete acts (Dewey 1930). For Dewey experimentation as used in laboratory science is the model of inquiry that should be followed in all areas of human life, that is to test and determine the consequences of adopting the tested ideas (Bacon 2012). Claims are tested by communities of inquirers, therefore all proposed ideas and theories should be submitted to the communities of inquirers for test and confirmation (Bacon 2012).

Our confidence in our beliefs is only provisional and there is no fixed truth, rather inquirers are continuously in a process of investigating the truth and, in agreement with Peirce, he considered that the truth is the opinion that is ultimately agreed to by all who carefully investigate the matter of interest (Bacon 2012). Dewey, in agreement with Pierce, was not interested in searching for certainty, rather he insisted on the fundamental value of beliefs that are currently accepted and stable and that currently can be used, however, understanding and acknowledging that these beliefs are not absolute or permanent (Bacon 2012).

Dewey was interested in the conditions that make a society a democratic one, and criticized as an undesirable society, a society where there are barriers to free interaction and free communication of experience between its members (Dewey 1963). He advocated the re-adjustment of institutions in society through interaction in order to assure participation on equal terms of all its members (Dewey 1963) and insisted on the necessity of power to join freely and fully in activities of common interest, noting that this is based on the possibility of learning and expanding one's views and the ability of constantly reviewing one's perception of meaning (Dewey 1963).

Dewey insisted on the importance of the development of human beings by using all available resources for this purpose, however he noted that this can be achieved only in democratic societies and communities that preserves individual's identity and provides meaningful choices, and assures the participation as equals to public life by providing the necessary resources, and by providing the mechanism for mutual recognition of diverse interests of its members (Bacon 2012).

Praising the emancipatory aspect of inquiry he noted the important political dimension of inquiry, that is in affirming the rights of the individual and in challenging the power of institutions by demanding the test of concrete real experience for the justification for institutions (Bacon 2012). Dewey viewed democracy as a method of social inquiry, applying intelligence to public and political questions. This is where citizens that are affected by a particular problem can engage in real democratic dialogue and in critical debate and inquiry; be able to counteract deceptive and authoritarian persuasion; be able to engage in independent critical thinking; have their interests and their reasons are considered alongside the interests and reasons of all other interested parties; and be able to participate in generating the solutions to the problem (Bacon 2012; Hildebrand 2013). He cautions against blind reliance on traditions and asking us to remind ourselves of the different taken for granted assumptions that should be critically and consciously examined (Bacon 2012).

Dewey insisted on the practical nature of inquiry as related to daily life and committed to the real problems of life (Hildebrand 2013). He advocated a focus on what is temporary and contingent and proposed that philosophy should turn its attention from the immutable to the concrete (Bacon 2012). Dewey considered that pragmatism should be concerned with and should be applied to all human problems, including moral, political, and social problems (Bacon 2012). He criticised philosophers for their lack of interest in the real problems of everyday life and urged them to use everyday experience as the practical staring point of philosophy, and to dedicate themselves to finding solutions to the real world problems, thus assuring that philosophy by connecting theory and practice has social relevance and contributes to the construction of a better society, for a better human life (Bacon 2012; Hildebrand 2013). He insisted that human life is improvable through intelligent human effort (Hildebrand 2013) and emphasized the connections between values and practical activity, and proposed that the validity of moral beliefs and judgments should be judged by the actions they bring about (Bacon 2012).

It is relevant to note that Habermas was familiar with the philosophical works of Peirce, James and Dewey, and according to his own commentaries was influenced mostly by Peirce's pragmatism (Habermas 2002).

Habermas notes that for Peirce, reason and understanding were embodied in the activities of a community of investigators and he emphasizes the anti-elitist, democratic, and egalitarian attitude found in the work of all the pragmatists (Habermas 2002).

Habermas considers that the greatest strengths of pragmatism are the combination of fallibilism with anti-scepticism (Habermas 2002). He praises Peirce, James, and Dewey for their unambiguous orientation to solve problems in the specific local contexts where problems were faced (Habermas 2002).

Conclusion

This chapter has described and discussed the American pragmatism of Peirce, James, and Dewey as characterized by a specific conception regarding beliefs and a methodological principle (the pragmatic maxim) regarding meaning.

Chapter VII: Meta-aggregation and American pragmatism

Introduction

In this chapter I address *Question 1* (*What is the validity of the claims that Joanna Briggs Institute's approach to meta-aggregation is founded on Husserlian Transcendental Phenomenology and American Pragmatism?*) and to the second part of the *Objective 1* (*To examine the Husserlian Phenomenology and American Pragmatism philosophical literature and to clarify the validity of the claims that the Joanna Briggs Institute's meta-aggregation is founded on Husserlian Transcendental Phenomenology and American Pragmatism*) of my thesis.

Specifically, in this chapter I examine the claims that Joanna Briggs Institute's approach to meta-aggregation is founded on American Pragmatism. I examine the validity of the claims provided by Hannes & Lockwood (2011), Hannes & Pearson (2012), Korhonen et al (2013), Munn et al (2014), Hopp & Rittenmeyer (2015), and Lockwood et al (2015).

Essentially, the core of the argument provided by Hannes & Lockwood (2011), Hannes & Pearson (2012), Korhonen et al (2013), Munn et al (2014), Hopp & Rittenmeyer (2015), and Lockwood et al (2015) is that pragmatism is interested in the practical consequences expressed in statements of meaning and that meta-aggregation is interested in providing statements that can be used to guide practice and action, therefore meta-aggregation is founded on pragmatism.

Is meta-aggregation grounded in pragmatism?

In meta-aggregation, the focus is on producing synthesized findings that are practically oriented, that are practical and usable in real life circumstances - that is recommendations that can guide specific decision-making, can suggest specific actions, and that careful consideration is given to the practical consequences suggested by the synthesized findings (Hannes and Lockwood 2011; Hannes & Pearson 2012; Munn et al 2014; Korhonen et al 2013; Hopp & Rittenmeyer 2015; Lockwood et al 2015).

Recommendations arising from meta-aggregation are said to be recommendations applicable to practice, are specific, detailed and measurable (Lockwood et al 2015).

It was emphasized that meta-aggregation clearly preserves a link between the original data and synthesized findings and that the recommendations for practice are transparently linked to the data (Lockwood et al 2015). The overall goal of meta-aggregation is on producing synthesized findings that may inform practice-level theory or suggest lines of action that are directly relevant for the practitioners and the problems encountered by practitioners in everyday real life circumstances (implicitly these are useful for the practitioners' client s or patients, and for policy makers) (Lockwood et al 2015; Hannes and Lockwood 2011).

Synthesized findings are viewed as expressing the belief that if one acts in a specific way then specific anticipated consequences may result (Hannes and Lockwood 2011). Hannes and Lockwood contend that synthesized findings generated by meta-aggregation are proved true when verified in practice, in real life conditions (Hannes and Lockwood 2011). They are not considered fixed definitive beliefs rather they are considered to be confirmed beliefs that are secure enough to provide suggestions regarding possible lines of action (Hannes and Lockwood 2011).

As discussed in Chapter VI of the thesis, the essence of American pragmatism is expressed by a specific normative conception of belief and a methodological principle (the pragmatic maxim) regarding meaning (with two aspects, one operational and one inferential). An approach may be considered pragmatic if it acknowledges and holds the normative pragmatic conception of belief and the methodological pragmatic principle regarding meaning.

As discussed in Chapter VI, the essence of the pragmatic normative conception of belief is that our beliefs about the world determine how we act in the world, and that our beliefs are tentative and provisional, are not fixed and definitive, and that however, these beliefs if based on experience and considered secure enough are used to guide action.

As discussed in Chapter VI, the essence of the pragmatic methodological principle regarding meaning, specifically the pragmatic maxim, is expressed in the operational aspect of the pragmatic maxim and the inferential aspect of the pragmatic maxim. The operational aspect of the pragmatic maxim emphasizes the exploration of the meaning of a belief by the exploration of the potential tangible effects of actions that are implied by the meaning of the belief.

The inferential aspect of the pragmatic maxim emphasizes the potential consequences of holding a given belief. Thus, from a pragmatic point of view meaning is explored by considering practical considerations, and meanings are expressed using statements of the form *If I act in manner X, then I will have experience Y*. Also, pragmatism emphasized the inseparable strong connection between the meaning of beliefs and the purposes of actions, that is meaning of beliefs is explained in the consequences of actions suggested by the beliefs, and the actions required for fulfilling specific purposes are indicated by the meaning of beliefs. Thus, essentially, we can summarize the operational aspect of the pragmatic maxim and the inferential aspect of the pragmatic maxim as follows: *If I conduct myself in manner X, then I will have experience Y (meaning of beliefs explained in the consequences of actions suggested by the beliefs)*, and also, *If I want to have experience Y, then I will conduct myself in manner X (actions required for fulfilling specific purposes are indicated by the meaning of beliefs)*.

Conclusion

Given my understanding of American pragmatism as described in Chapter VI, and given the arguments presented in this chapter with regards to the nature of meta-aggregation, I consider that the claims provided by Hannes & Lockwood (2011), Hannes & Pearson (2012), Korhonen et al (2013), Munn et al (2014), Hopp & Rittenmeyer (2015), and Lockwood et al (2015) that meta-aggregation is founded on American pragmatism are valid, and I conclude that I have no doubts that meta-aggregation is founded on American pragmatism.

Chapter VIII: A new theoretical framework for a meta-aggregative approach to qualitative evidence synthesis

Introduction

In this chapter I discuss and integrate ideas and understandings from the analysis of the methodological literature regarding qualitative research and the synthesis of qualitative research, meta-aggregation, Husserlian phenomenology, American pragmatism, and Habermas' philosophy. Drawing on this analysis provides the opportunity of developing a new theoretical framework for meta-aggregation and to clarify the nature of meta-aggregation and the position of meta-aggregation relative to other approaches to qualitative research synthesis.

This research has explored the issues discussed in the methodological literature regarding the systematic review of qualitative research as presented by some representative qualitative researchers (without any claim of comprehensiveness or exhaustiveness of search) such as Jensen & Allen (1996), Sandelowski et al (1997), Popay et al (1998), Evans & Pearson (2001), Evans (2003), Finfgeld (2003), McCormick et al (2003), Pearson (2004), Lloyd Jones (2004), Thorne et al (2004), Walsh (2005), Zimmer (2006), Bondas & Hall (2007), Downe (2008), Finlayson & Dixon (2008), Weed (2008), and Flemming (2010). One purpose of this exploration was to examine if ideas from Husserlian phenomenology and American pragmatism were used to inform the debates regarding qualitative research synthesis and to find such relevant philosophical ideas to inform my theoretical framework. No such aspects could be identified in the examined literature. However, based on my exploration of the methodological literature regarding qualitative research including the literature regarding the synthesis of qualitative research, and the philosophical literature regarding interpretation, I found useful ideas that I used in order to clarify the specific characteristics of meta-aggregation and to clarify the position of meta-aggregation compared to other approaches.

Towards a new model for meta-aggregation; Interpretation as the foundation of qualitative research synthesis

The methodological literature is clear that interpretation lies at the core of the human sciences therefore the synthesis of qualitative research is fundamentally an interpretation. This is in consonance with the commentary by Pearson et al (2011) that "*all qualitative research involves human interpretation*", and that the analysis of findings in meta-aggregation is "essentially an interpretative process", specifically, an "interpretation of secondary or processed data" (Pearson

et al 2011, p.23-24). According to Pearson et al (2011) the analysis of findings in meta-aggregation is "essentially an interpretative process" and "thus an understanding of interpretation (and its challenges) is fundamental to selecting an appropriate methodological approach to synthesis" (Pearson et al 2011, p.23-24). Interpretation as the essence of social and human sciences is founded on hermeneutics as proposed by Schleiermacher and Dilthey (Collini 1992). Details about hermeneutics are provided by Blaikie (2007, 2010), Malpas & Gander (2015), Grondin (1994, 1995), Ormiston & Schrift (1990), Warnke (1987), Weinsheimer (1985), and Palmer (1969).

Schleiermacher, Gadamer, interpretation, and meta-aggregation

Synthesis in my proposed framework is founded on Schleiermacher's classical hermeneutics with its focus on empathy, identification with the writer, and the idea that interpretation of the text should be guided by the writer's intended meaning (what Umberto Eco calls the *intention of the author*, the *intentio auctoris,* Eco 1992). Synthesis in my proposed framework is founded on Schleiermacher's classical hermeneutics not on Gadamer's hermeneutics I prefer to say that in my proposed framework interpretation is viewed as exegesis. For Gadamer, interpretation is translation (Gadamer 2004, 1985, 1979). For Schleiermacher, interpretation is not translation (Schleiermacher 1990). For Schleiermacher, hermeneutics is about the understanding of a text, it is not about translation; hermeneutics is not translation, because translation is re-expressing the meaning. I prefer to use the old term exegesis to signal that synthesis as interpretation is founded on Schleiermacher's classical hermeneutics that was proposed as the interpretation of religious texts, however I use the term exegesis for the Schleiermacher's approach of interpretation for all types of texts not only religious texts. I recognize that this hermeneutical ideal may be considered by some as utopian or impossible, however, I consider that this approach of empathic reconstruction of the writer's original intended meaning should be considered as the ideal theoretical approach for meta-aggregation. I consider that reviewers should make all efforts in order to empathically reconstruct the writer's original meaning. I consider that the only acceptable alternative, however, considered as second best, a degradation of the ideal, is what Umberto Eco calls *intention of the text (intentio operis)*. I consider that the third alternative, the intention of the interpreter, the intentio lectoris, the interpretation that is reader-oriented is not an acceptable alternative in my proposed framework for meta-aggregation.

Eco's intentio auctoris, intentio operis, and intentio lectoris

Eco makes the distinction between intention of the text (or *intentio operis*)*,* the intention of the author (the *intentio auctoris*), and the intention of the interpreter (the *intentio lectoris*) (Eco 1992). In my proposal, synthesis is not interpreter-oriented, rather is fundamentally author-oriented, is oriented towards the intention of the author (the *intentio auctoris*). However, if the ideal theoretical approach for meta-aggregation of empathic reconstruction of the writer's original intended meaning is considered too ambitious by reviewers, then I consider that the only acceptable alternative is what Umberto Eco calls intention of the text (*intentio operis*). Eco gives as a brilliant explanation for the essential position of *intentio operis*: "One could object that the only alternative to a radical reader-oriented theory of interpretation is the one extolled by those who say that the only valid interpretation aims at finding the original intention of the author. In some of my recent writings I have suggested that between the intention of the author (very difficult to find out and frequently irrelevant for the interpretation of a text) and the intention of the interpreter who (to quote Richard Rorty) simply 'beats the text into a shape which will serve for his purpose', there is a third possibility. There is an *intention of the text*." (Eco 1992, p.25) [My Note: Reference in the text is to Richard Rorty's Consequences of Pragmatism, University of Minnesota Press 1982]. Eco's *intentio operis* is summarized by the concise expression *Let the text reveal its intention*. I agree with Eco that "a text can have many senses" and that, however, a text cannot have every sense" (Eco 1992, p.141). Therefore, the interpretation-synthesis should be guided by the findings themselves and should avoid over-interpretations as "there is always "the transparent intention of the text, which disproves an untenable interpretation" (Eco 1992, p.78). Eco noted that each interpretation is just one possible interpretation, and that this idea is in line with the essential idea of unlimited semiosis proposed by Peirce (Eco 1990; Eco 1992). Eco insisted that is difficult to determine that an interpretation is a good interpretation, however, emphasized that it is less difficult to determine that an interpretation is a bad interpretation, that it is an overinterpretation, it is an interpretation not supported by the intention of the text (Eco 1992; Collini 1992). Eco discussed what he calls "the rights of texts and the rights of their interpreters" and concluded that "the rights of the interpreters have been overstressed", therefore he proposed the intention of the text as a dialectical link between *intentio operis* and *intentio lectoris*." (Eco 1992, p.23)

Schleiermacher's hermeneutics

For Schleiermacher hermeneutics is about understanding (Schleiermacher 1990). Hermeneutics is the art of understanding (Schleiermacher 1990). There are three different circumstances: understanding is shared by the writer of the text and the reader of the text; the writer's understanding is reconstructed by the reader; and reader's understanding that the author could recognize as acceptable meaning (Schleiermacher 1990). Understanding the meaning of a text is a reconstruction of the meaning that considers the text as expressing the soul of the writer (Schleiermacher 1990). The task of understanding is to understand the text as well or even better than the writer of the text (Schleiermacher 1990). Careless interpretation of a text forces the text to support a meaning (Schleiermacher 1990). Artful interpretation continuously corrects and refines itself, without forcing the text to support a meaning (Schleiermacher 1990). Understanding of the text by the reader is based on empathy, on ability to connect to the writer, to resonate with the writer, to intuit the other, to "understand the writer intimately [unmittelbar] to the point that one transforms oneself into the other" (Schleiermacher 1990,p.98). Understanding is the reconstruction of the writer's mental life (Ormiston and Schrift 1990). The original meaning of the text is reconstructed by the reader by projecting oneself inside the writer's mind (Ormiston and Schrift 1990). Interpretation of the text should be guided by the writer's intended meaning (Ormiston and Schrift 1990). Ideally the interpretation of the text means that the interpreter, the reader is able to understand the text of an author as the author understood the text (Scholtz 2015). As according to Schleiermacher, any translation can only approximate the sense of the original text, and as interpretation of the text is considered by Schleiermacher as ideally recovering the original meaning of the text as intended by the original author of the text, I consider that the term 'translation' should not be used as a metaphor or analogy for the interpretation of the text (findings) and for the synthesis process performed in meta-aggregation (Scholtz 2015). For Schleiermacher, ideally the interpreter identifies with the writer and imaginatively is able to re-live the experiences and thoughts that generated the text and therefore the interpreter is able to reconstruct the original intentions of the writer, that is, the interpreter is able to reproduce the meaning of the text as intended by the writer (Warnke 1987). For Schleiermacher, the task of hermeneutics is to understand the mind of the writer that discloses in the text, to understand the soul of the writer manifested in the text, to be able to re-construct the meaning as if I as reader or interpreter I were the author, to be able to re-construct the author's meaning of the text (Grondin 1994). This ideal of understanding the meaning as intended by the author may seems utopian or unattainable, however, it may be considered as

the continuous reminder that it is always worthwhile to perform an ever deeper interpretation (Grondin 1994).

Gadamer's hermeneutics

Gadamer rejected Schleiermacher's conception of hermeneutics as recovering the original meaning of the text as intended by the original author of the text and emphasized that understanding is historically situated or conditioned and insisted on the 'situatedness' of understanding (that is the interpreter is in a situation with specific concerns and point of view) (Warnke 1987). Gadamer explicitly stated that "when we understand a text we do not put ourselves in the place of the other, and it is not a matter of penetrating the spiritual activities of the author; it is simply a question of grasping the meaning, significance, and aim of what is transmitted to us" (Gadamer 1979, p.147). For Gadamer, understanding is always dependent on the historical circumstances of the interpreter and always dependent on the concerns or intentions of the interpreter (Warnke 1987). For Gadamer, understanding is always an understanding by a specific interpreter with specific concerns or intentions (Warnke 1987). Gadamer rejected the Schleiermacher's conception of hermeneutics as recovering the original meaning of the text as intended by the original author of the text (Gander 2015). For Gadamer, there is no meaning of the text that exist in itself and apart of interpretation by an interpreter, and the reader or interpreter always unavoidably begin with oneself and one self's language and historical, cultural context and with one's presuppositions and intentions and therefore the claim that the reader may approach the text in a state of neutrality or objectivity, distanced from oneself is unattainable, is pure fictional (Gander 2015).

The three steps of qualitative synthesis by meta-aggregation

I preserve the logical sequence of three steps of synthesis as originally proposed by Pearson (2004). The first step of synthesis is the extraction of findings and illustrations from primary studies. Meta-aggregation considers multiple studies regardless of their methodological orientations. In my proposed framework the justification for synthesis of findings from multiple studies even with different methodological orientations is based on James's focus on the collaborative nature of inquiry. James argues that truth is experienced in the long run by consensus of different inquirers, by way of repeated confirmation and revisions.

These findings from primary studies present the meaning intended by the researcher based on the meaning intended by the participants in the research. The extraction of findings and illustrations from primary studies is executed by reviewers who positioned themselves into a

special attitude towards the texts. This special attitude represents an adaptation of the Husserl's phenomenological bracketing for the purposes of synthesis research. The Husserlian transcendental-phenomenological epoche is the suspension or the bracketing of the thesis or belief of the natural attitude. The natural attitude is the implicit prejudice/belief that the world exists independent of any human person experiencing it. In natural attitude there is no doubt that the world is an objectively existing world. In transcendental phenomenology there is a return to the immediate original data of consciousness, ignoring the 'natural' implicit assumption of the existing world. In Husserlian epoche the natural attitude is in parentheses, it is not used. The epoche is not used to negate or refute the general thesis of the natural attitude but to put it in brackets, to suspend it. In my proposed framework for synthesis research, the reviewer's special attitude is not the Husserlian suspension or the bracketing of the thesis or belief of the natural attitude, but rather a suspension or bracketing by reviewer of all ideas that are not directly presented as findings in the primary studies. This adaptation of Husserlian bracketing is used also by Giorgi in his phenomenological approach used in primary qualitative research. Reviewer's bracketing assures that findings as given are extracted without any re-analysis or re-interpretation by the reviewer. Husserl argued that language is used in order to share the understanding of meaning. Essentially, by accessing the findings reported by authors, the reviewers have mediated access to the essence of phenomena experienced by participants in research. The justification for this claim is founded on Spiegelber's approach of vicarious experience and Husserl's ideas regarding meaning and intersubjective understanding. Giorgi justified the use in phenomenological research of data obtained from others by referring to Spiegelber's approach of vicarious experience. Reviewer's bracketing inspired by Husserl's bracketing represents the prerequisite condition for the reviewers' vicarious experience. Also, another strong justification for the claim that , by accessing the findings reported by authors, the reviewers have mediated access to the essence of phenomena experienced by participants in research is found in Husserl's ideas regarding empathy.

The second step of synthesis is the synthesis of findings into categories. The synthesis of findings into categories is founded on the examination of similarity of meaning of the findings. Peirce's approach to meaning is a solid operational basis for the examination of similarity of meaning: if there are no differences in practical consequences terms there are no differences in pragmatic meaning. Peirce's approach to pragmatism is best captured in his theory of meaning. Meaning of statements is indicated by the practical consequences that might conceivably result

from the statements. In Peirce's pragmatism there is a clear connection between meaning and potential actions.

A theoretical basis for meta aggregative synthesis

The synthesis of findings into categories is executed by reviewers who define themselves by a special purpose of synthesis; this special purpose represents an adaptation of the Husserl's phenomenological eidetic reduction for the purposes of synthesis research. It is possible to adapt Husserlian reflective and eidetic approach and concepts without the goals of transcendental phenomenological philosophy. This synthesis is eidetic, it is about essences, and it is not about particulars. This eidetic synthesis is based on Husserl's eidetic reduction. This is line with the position that meta-aggregation "*seeks to identify ... essences of meaning*" (Pearson et al 2011, p. 24). Eidetic reduction is the approach used in Husserl's transcendental phenomenology to make the transition from worldly facts to universal ideal essences. Husserlian phenomenology is an exploration of universal ideal essences as what is essential, what is universal and necessary, what is a priori. Phantasy is used to subject the experienced instance to different variations. The goal is to explore the essence, what is identical despite all imaginable variations. Variation in phantasy is not a method of the experimental or observational sciences of natural facts. Essences explored in pure transcendental phenomenology are not empirical facts about natural world or cultural world. In transcendental phenomenology the variation in imagination or phantasy is used in order to separate what is essential from what is accidental. The intuited essence is represented by what is universal and a priori necessary. These phenomenological essences are ideal, not about the empirical world, not about collections of facts. In synthesis research, it is not Husserl's phenomenological eidetic reduction *per se* that is used, but rather an adaptation. The idea of identifying what is essential is preserved; however, this essence is not a transcendental, universal, ideal, a priori essence, but rather an essence of findings from the empirical world. By imaginative variation of findings the reviewer explores what is accidental and what is essential. For Husserl the essence is not about empirical realities. Husserlian essences are not to be discovered in the world of particulars but in the pure transcendental consciousness. For Husserl the essence is about possibility independent of empirical experience. By contrast, in synthesis research, the essences are essences of findings from empirical experience. Reviewer's eidetic reduction inspired by Husserl's eidetic reduction represents the necessary procedure for identification of essences. This adaptation of Husserlian eidetic reduction by imaginative variation in imagination or phantasy is used also by Giorgi in his phenomenological approach used in primary qualitative research. Giorgi's approach to

phenomenology is briefly discussed in Chapter IV of the thesis. Giorgi used Husserlian ideas to inform his phenomenological approach applied in primary research. I consider that it is reasonable to use Husserlian ideas to inform an approach applied in synthesis research. Giorgi used the human scientific (psychological) phenomenological reduction and exploration of eidetic invariant meanings found in the structure of the concrete experiences in primary research. I consider that it is reasonable to use phenomenological reduction and exploration of essences in synthesis research. I consider that in meta-aggregation we explore essences in this sense of general structures as conceptualized by Giorgi. I consider that in meta-aggregation we explore not Husserlian philosophical universal essences rather we explore pragmatic essences in the sense that these essences are general structures that transcend the situation in which they were obtained and can be tested in other different real concrete circumstances. I consider that in meta-aggregation we use imaginative variation as it is used by Giorgi in the context of primary research and we explore invariance however the essence described is not universal, is not the philosophic type of essence, as also recognized by Giorgi, but rather due to the pragmatic focus of the enterprise, the essence is an essential description of invariants that are expressed as abductive pragmatic statements that are ready for empirical testing.

The third step of synthesis is the synthesis of categories into synthesized findings. The synthesis of categories into synthesized findings is founded on the examination of similarity of meaning of categories. Peirce's approach to meaning applies equally to this step. The special eidetic reduction for the purposes of synthesis research applies equally to the synthesis of categories into synthesized findings. The synthesis is not aggregative, is not "linear and mechanic - a mere process of 'adding' together the findings of two or more studies on a particular question" (Pearson et al 2011, p. 25). The term aggregation was used by proponents of meta-ethnography to describe a mechanical adding up of findings. Therefore, I suggest that the term meta-aggregation as descriptor for the JBI meta-synthesis should be replaced with a different term and I suggest the term eidetic interpretive synthesis.

Peirce's abduction and meta-aggregation

The logic of synthesis of findings into categories and of categories into synthesized findings is Peirce's logic of abduction that was recognized by Eco as the logic of any interpretation (Eco 1990). Eco unequivocally stated that "the logic of interpretation is the Peircean logic of abduction" (Eco 1990, p.59). Abduction is the third logical way; it is not induction, it is not deduction. In induction, as understood in logic, the inference is from particular instances to a general law. In deduction, as understood in logic, given a general law, the inference is to

particulars. In abduction, as understood in logic, a law should be discovered that may help explain the observed. Abduction is "the process of forming an explanatory hypothesis" (Peirce cited by Harrowitz 1983, p.181). The fundamental differences between abduction, induction, and deduction, are summarized by Peirce's as follows: "Deduction proves that something *must* be; Induction shows that something *actually is* operative; Abduction merely suggests that something *may be*" (Peirce cited by Harrowitz 1983, p.181). Through induction we establish a rule, a law, an expectation based on repetition of observations. Through abduction we discover a way of understanding observations. Meta-aggregation uses abduction in order to generate synthesized findings that are abductive hypotheses. Abduction offers this great opportunity to generate a rule that may explain the observations, however, it was noted that abduction involves an element of risk as sometimes the abduction statement proves to be incorrect (Bonfantini & Proni 1983). Thus, users of meta-aggregation should understand this element of risk involved in abduction.

Meaning for action and meta-aggregation
The synthesis is narratively constructed to express meaning for action. It is meaning for potential action. This specific goal of synthesis is founded on American pragmatism (Peirce, James, and Dewey). There should be no disconnection between understanding, meaning, and action.

Pragmatic statements and meta-aggregation
With regards to the categorizing of findings in meta-aggregation it was noted in a worked example that to prevent reviewers from ending up with categories that are too general to reveal useful information full sentences were used in order to present the categories generated in meta-aggregation (Hannes & Pearson 2012). In my opinion if meta-aggregation is to be really inspired by pragmatism then reviewers should use full sentences for the presentation of categories and synthesized findings, that is abductive pragmatic statements ready for practical testing.

Pragmatism, meta-aggregation, and implications for practice

In my opinion if meta-aggregation is to be really inspired by pragmatism then synthesized findings are abductive pragmatic statements ready for practical testing therefore there is no need to think about and present what is called implications for practice. In a real pragmatic meta-aggregation the product of synthesis, that is the synthesized findings are direct implications for practice. There is no need to make an artificial distinction between the final product of synthesis and implications for practice. In pragmatic terms the meta-aggregation

synthesis results must be presented as direct implications for practice. In a real pragmatic meta-aggregation the synthesized findings as abductive pragmatic statements ready for practical testing are already presented as direct implications for practice. In a real pragmatic meta-aggregation the synthesized findings as abductive pragmatic statements ready for practical testing are presented in such a form that these are direct recommendations for action for practitioners and policymakers.

Synthesis, power, and communication

To interpret another person's experience means to have power (Willig 2014). The communication of synthesis is considered as integral part of the synthesis process. The synthesis as interpretation is aligned with Habermas' practical interests, however, the emancipatory interest is considered the ultimate goal of communication of the synthesis. This is in line with the position that "*failing to be explicit about how qualitative data is interpreted raises ethical questions because a considerable amount of power resides within the right to interpret without explaining how it is done*" (Pearson et al 2011, p.23).

I should emphasize that in my proposed framework technical interest is not considered as a legitimate foundation for synthesis. Communication should be guided by the unique motivation of mutual understanding between the reviewers and the users of the review as ideally imagined in Habermas's communicative action framework. The intention is to communicate for mutual understanding and agreement not for instrumental manipulation. Communicative action presupposes the need to establish shared understanding. Communicative action is fundamentally different from strategic action. In strategic action there is no shared understanding, no consensus, rather the risk of manipulation. Communication of synthesis should be guided by Habermas's discourse ethics. Reviewers should be aware that despite all good intentions, the results of qualitative research when presented to diverse audiences or implemented in real life sometimes causes harms therefore all potential consequences of research should be actively discussed with all potentially affected (Mertens 2014). Essentially, all those interested in a synthesis should be able to discuss the synthesis, should be able to question it, understand not just the potential benefits but also the potential harms, and consensus should be a consensus of free individuals without apparent or hidden oppression. This is in line with my understanding that the essence of Dewey's pragmatism is his focus on ethical critical problem-solving actions for real life problems, with an the recognition of the necessary link between ethics and actions. Meta-aggregation should be conducted as a critical approach for research synthesis thus the abductive pragmatic hypotheses are offered for debate

by all in the spirit of Habermas's communicative action. If accepted through communicative action, these abductive pragmatic hypotheses for practice should be tested thus fulfilling the pragmatic ideal.

Clarifications with regards to the meta-aggregation's characteristics based on insights from qualitative research

I found useful insights from qualitative research that I use in order to clarify the nature of meta-aggregation: metaphors used to describe qualitative research; the role of interpretation; the empathic interpretation; researcher's stances; similarity and contiguity relationships; emic substantive categories; external generalizability; induction, deduction, abduction; types of theories given their scope; empirical content of statements; qualitative research as a tool for social change; evaluative criteria for qualitative research.

Metaphors for qualitative research and meta-aggregation

I consider that it is useful to provide a metaphor as a description of the process of synthesis used in meta-aggregation. I consider that given the images and interpretations that the term aggregation evokes in the minds of readers, and considering that the term aggregation is not an accurate comprehensive one nor a useful term for the concise characterization of the process of meta-aggregation, I propose that crystallization is an appropriate term and metaphor for the process of synthesis used in meta-aggregation. Crystallization as a metaphor for qualitative research emphasizes the combination of diverse approaches for analysis, the multiplicity of perspectives and voices, the complexity of multiple different interpretations uncovered in different studies with diverse participants, the existence of multiple distinct ideas, but that however everything is brought together in a coherent whole (Ellingson 2011).

Interpretation and meta-aggregation

Qualitative research implies interpretation. I consider that synthesis of qualitative research is also interpretation, and meta-aggregation is interpretation.

Empathic interpretation and meta-aggregation

I consider that meta-aggregation is an interpretive enterprise founded on qualitative research empathic interpretation. The nature of empathic interpretation was briefly discussed in Chapter I of the thesis.

Researcher's stances and meta-aggregation

There are different researcher's stances in primary research: detached observer; empathetic observer; faithful reporter; mediator of languages; reflective partner; dialogic facilitator (Blaikie 2010). These researcher's stances were discussed in Chapter I, in the section regarding qualitative research. I consider that it is useful to apply these ideas to synthesis research. I think that in meta-aggregation the reviewer adopts different research stances at different stages of the process: detached observer when extracting findings from the studies; empathetic observer and faithful reporter when exploring findings in order to understanding meaning and synthesize findings into categories and synthesize categories into synthesized findings; reflective partner and dialogic facilitator when presenting the results of meta-aggregation.

Similarity and contiguity relationships and meta-aggregation

I propose that meta-aggregation is focused not only on similarity of meaning but also on contiguity. I consider that it is important to acknowledge in an explicit unambiguous way that both similarity relationships and contiguity relationships play essential roles in meta-aggregation. The differences between similarity relationships and contiguity relationships as defined in qualitative research data analysis are discussed in Chapter I, in the section regarding qualitative research.

Emic substantive categories and meta-aggregation

An important distinction among types of categories used in data analysis in qualitative research is that between organizational, substantive, and theoretical categories. I propose that meta-aggregation uses emic substantive categories. The differences between organizational, substantive, and theoretical categories are discussed in Chapter I, in the section regarding qualitative research.

Categorizing, connecting, and meta-aggregation

An important distinction used in data analysis in qualitative research is that between categorizing and connecting in data analysis. I propose that meta-aggregation uses both categorizing and connecting. I consider that it is important to acknowledge in an explicit unambiguous way that both categorizing and connecting play essential roles in meta-aggregation. The differences between categorizing and connecting as defined in qualitative research data analysis are discussed in Chapter I, in the section regarding qualitative research.

External generalizability and meta-aggregation

I propose that in meta-aggregation, the approach to external generalizability used considers that generalizability refers to the ability to propose a theory that will be tested in practice. Details about external generalizability are discussed in Chapter I, in the section regarding qualitative research.

Induction, deduction, abduction, and meta-aggregation

I propose that in meta-aggregation, the approach used is abductive, not inductive, and not deductive. Details about induction, deduction, and abduction as defined in qualitative research are discussed in Chapter I, in the section regarding qualitative research.

Types of theories given their scope and meta-aggregation

I propose that in meta-aggregation, the theory that is generated is a pragmatic theory for practice, it is a practice theory. I explicitly reject the idea that the theory that is generated in meta-aggregation is a middle range theory. The statements or propositions formulated in research may have diverse scope: grand theories, middle range theories, or working hypotheses. I consider that the theory that is generated in meta-aggregation (the practice theory; the abductive pragmatic hypothesis) is a working theory, it is a practice theory, and it is a hypothesis. I consider that the theory that is generated in meta-aggregation it is not middle range theory, it is not a grand theory. Different goals were proposed for research syntheses (including qualitative synthesis) such as integrative purposes, interpretative purposes, deconstructive purposes, participatory purposes, and emancipatory purposes (Suri 2014). Meta-aggregation cannot be forced into one of these categories of research synthesis. Meta-aggregation is a unique approach. Suri correctly identified meta-aggregation as a research synthesis oriented along pragmatism (Suri 2014). I propose a new category, that is the category of research syntheses with pragmatic purpose. Meta-aggregation is a pragmatic approach to qualitative research synthesis. Meta-aggregation has a pragmatic goal, that is, to offer abductive pragmatic hypotheses for practice. Meta-aggregation is a pragmatic approach to qualitative research synthesis having as its pragmatic aim the proposal of hypotheses that can be tested in practice, micro theories, or practice theories. I consider that meta-aggregation as a pragmatic approach is not interested in grand theories or middle range theories. Meta-aggregation if it is truly pragmatic is interested in hypotheses or practice theories. Manning (2012) rightly notes that a review approach should be used given the desired types of review outcomes and he gives the example of meta-aggregation as a review type useful if practical advice for clinicians or practitioners is what is considered as important. It is indicated that the end product of the meta-

aggregation are recommendations for practitioners or policy (Manning 2012). Meta-aggregation offers micro theories or practice theories. A practice theory is considered a directive for practice (McKenna & Slevin 2008). Micro theory is expressed in concrete and researchable terms and is very specific to a knowledge issue (McKenna & Slevin 2008). Micro theory is sometimes referred as practice theory (McKenna & Slevin 2008). Practice theories are very specific in their focus and compared to middle range theory they are narrower in scope and more concrete in their level of abstraction (McKenna & Slevin 2008). Practice theory should be stated in such a way that the assumed cause and effect relationship between means and goals can be empirically tested (McKenna & Slevin 2008). A practice theory is a theory that says *given this specific goal (such as producing this desired change or effect) these are the actions that we must take to meet the goal (to produce the change)* (McKenna & Slevin 2008). With practice theory we should be able to say *if we do this then the following will happen* (McKenna & Slevin 2008). It is clear that micro theories or practice theories are in fact abductive statements as suggested by Peirce.

Micro theories or practice theories are in reality applications of the pragmatic maxim. As the pragmatic maxim is the most important aspect of pragmatism, and as I consider that the essence of meta-aggregation consists in generating practice theories formulated based on Peirce's pragmatic maxim, I repeat here some fundamental aspects of pragmatism, aspects that were discussed in Chapter VI of the thesis, chapter about American pragmatism.

Three formulations for Peirce's pragmatic maxim were proposed by the Hookway (Hookway 2012, p.165-181). I consider that in meta-aggregation that takes a real pragmatic approach, these three formulations for Peirce's pragmatic maxim may guide the formulation of synthesized findings.

Formulation I of the pragmatic maxim is the following: *If the circumstances are [C] and you have desires [D], then you ought to perform an action of type [A]* (Hookway 2012, p.169).

Formulation II of the pragmatic maxim is the following: *If [E] were experienced to be the case, then the object [A] would behave in way [B]* (Hookway 2012, p.170).

Formulation III the pragmatic maxim is the following: *In circumstances [C], if I were to do [A], then I would experience [E]* (Hookway 2012, p.172).

For Peirce the meaning of a concept is analysable by considering practical considerations, and meanings are expressed using statements of the form: *If I act in manner X, then I will have experience Y* (Moore 1961).

Peirce emphasized the inseparable strong connection between the meaning of beliefs and the purposes of actions, that is meaning of beliefs is explained in the consequences of actions suggested by the beliefs, and the actions required for fulfilling specific purposes are indicated by the meaning of beliefs (Moore 1961). In other words: *If I conduct myself in manner X, then I will have experience Y* (meaning of beliefs explained in the consequences of actions suggested by the beliefs), and *If I want to have experience Y, then I will conduct myself in manner X* (actions required for fulfilling specific purposes are indicated by the meaning of beliefs) (Moore 1961).

Empirical Content of statements or propositions and meta-regression
The statements or propositions formulated in research may have high or low empirical content. I consider that the theory that is generated in meta-aggregation (the practice theory; the abductive pragmatic hypothesis) has high empirical content, it is formulated as a practical hypothesis ready for empirical testing.

Qualitative research as a tool for social change and meta-aggregation
In perfect alignment with critical theory and Habermas' philosophy used as overall theoretical framework for my thesis, I propose that qualitative research is a fundamental tool for social change and that meta-aggregation should be used as a tool for social change.

Evaluative criteria for qualitative research and meta-aggregation
In Chapter I, in the section on qualitative research, I mentioned that the most influential criteria for quality in primary qualitative research were identified by Guba and Lincoln in 1985 in terms of credibility, transferability, dependability, and confirmability. I consider that these same quality criteria may be applied to meta-aggregation.

In the context of meta-aggregation, I think that credibility essentially refers to the idea that the synthesis is performed in such a way that it makes sense and that synthesis of findings into categories and synthesis of categories into synthesized findings are conducted in such a way that there is true connection between the findings reporting participants' experiences in primary studies and the interpretations reported as synthesized findings in meta-aggregation. In the context of meta-aggregation, I consider that transferability refers to the applicability of

synthesized findings similar contexts. In the context of meta-aggregation, I propose that dependability refers to the existence of a research synthesis trail that presents in a transparent way the entire research synthesis process and decisions regarding for example to the extraction of findings and illustrations from included studies, the explicit rationalies (something like think aloud descriptions) for the synthesis of specific findings into categories, and the explicit rationalies for synthesizing specific categories into synthesized findings. In the context of meta-aggregation, I think that confirmability refers to the impact of the influence of the reviewer on research synthesis, specifically the bracketing performed by reviewer in order to suspend, or put aside all influences that can interfere with the empathic interpretation.

In Chapter I, in the section on qualitative research, I mentioned that Barone and Eisner (2012) proposed the following evaluative criteria for art-based research: incisiveness, concision, coherence, generativity, social significance, evocation and illumination (Barone & Eisner 2012 cited in Cho & Trent 2014). Also, in the same chapter, I mentioned that Richardson (2000) suggested five criteria for the examination of the quality of ethnographic texts: substantive contribution, aesthetic merit, reflexivity, impact, expression of a reality (Richardson 2000 cited in Cho & Trent 2014). I consider that it is useful to expand the evaluation criteria for meta-aggregation and I propose that meta-aggregation may be evaluated using these additional criteria such as: incisiveness (synthesized findings get to the essence of an issue); concision (use of the appropriate amount of textual material to express the categories and synthesized findings); coherence (all parts of the synthesis 'hang' together); generativity (the synthesized findings enable us to 'see' and 'act' on a phenomenon); social significance (synthesis refers to ideas that 'count'); evocation and illumination (the synthesis succeeded in defamiliarizing a phenomenon so that it can be seen in a way that is different from the taken for granted ways); substantive contribution (contribution of the synthesized findings to understanding); aesthetic merit (artistic characteristics of the text); reflexivity (self-awareness and self-exposure of the review authors including the motivations and the point of view of the authors); expression of a reality (the synthesized finding seems a true reflection of a reality, of the lived experience); impact (the synthesized findings affects me, for example influences me to action).

In Chapter I, in the section on qualitative research, I mentioned that Lincoln (2009) proposed a very powerful concept, that is authenticity of research, with multiple dimensions, such as ontological authenticity, catalytic authenticity, and tactical authenticity (Lincoln 2009 cited in Mertens 2014). I think that these three dimensions of authenticity reflects accurately a critical

orientation to research, and given the adopted theoretical framework for my thesis, that is critical theory and specifically Habermas' philosophy, I consider that it is useful to expand the evaluation criteria for meta-aggregation and I propose that meta-aggregation may be evaluated using these additional criteria such as: ontological authenticity (the synthesized findings produce 'awakening' on the part of the reviewers and readers); catalytic authenticity (the synthesized findings provides the stimulus to meaningful action); tactical authenticity (reviewers and readers are gaining a sense of power as synthesized findings can be used to 'speak truth to power').

Clarifications with regards to the meta-aggregation's position relative to other synthesis research approaches based on insights from qualitative synthesis literature

Booth et al (2012) make the distinction between three types of reviews with diverse scope: systematic reviews, scoping reviews, and mapping reviews. Systematic reviews aim to be comprehensive in their scope; scoping reviews aim to find the magnitude and characteristics of the literature; mapping reviews aims to find gaps in the literature (Booth et al 2012). Given this distinction between types of reviews with diverse scope, I note that meta-aggregation is the synthesis part of a systematic review type of review.

In research synthesis (including qualitative research synthesis) there were identified key methodological considerations: identifying an appropriate epistemological orientation, and identifying an appropriate purpose for the synthesis (Suri 2014). Four different paradigmatic orientations were proposed for research syntheses: post positivist syntheses; interpretive syntheses; participatory syntheses; and critical syntheses (Suri 2014). Meta-aggregation cannot be forced into one of these four paradigmatic orientations; meta-aggregation is a unique approach. Meta-aggregation is eidetic (focus on essences), is based on exegesis (hermeneutics), is pragmatic (offers abductive pragmatic hypotheses) and critical (is guided by the ideas from communicative action).

Differences between diverse approaches for qualitative synthesis can be explored in terms of the following aspects: predefined versus iterative questions; aggregative, integrative, or interpretive purpose; inclusion of comparable studies (comparable study designs) versus inclusion of different studies (inclusion of different study designs) (Saini & Shlonsky 2012). Meta-aggregation is a qualitative synthesis approach that accepts for inclusion in the same synthesis studies using diverse designs or research methodologies. With regards to the issue of

predefined versus iterative questions in qualitative synthesis, meta-aggregation is characterized by the use of a predefined question.

It was claimed that aggregative methods of qualitative synthesis employ a quantitatively oriented aggregation approach, with focus on frequency of findings, and the weight or importance of themes across findings (Saini & Shlonsky 2012). Given these meanings attached to aggregative methods or aggregative purposes it is critical for me to state that meta-aggregation is not an aggregative approach for qualitative synthesis.

Integrative methods focus on presenting taxonomies of the range of conceptual findings from studies and on synthesizing qualitative findings across studies in order to produce new integrated, descriptive and explanatory interpretations (Saini & Shlonsky 2012). Given these meanings attached to integrative methods or integrative purposes it is fundamental to state that meta-aggregation is not an integrative approach for qualitative synthesis.

Interpretive methods involve interpretation of findings across studies to generate new inductive understandings of the phenomena, events, or experiences (Saini & Shlonsky 2012). Given these meanings attached to interpretive methods or interpretive purposes it is fundamental to state that meta-aggregation is not an interpretive approach for qualitative synthesis.

Booth et al (2012) differentiate between interpretive reviews and aggregative reviews. According to their opinion, two characteristics of aggregative reviews are that aggregative reviews are reviews with a fixed and focused review question and a comprehensive search. Considering these two aspects, we note that meta-aggregation is an aggregative review. However, they proposed two other characteristics for aggregative reviews: the value of each new study is to confirm or not already identified findings, and a focus on mean or average results (Booth et al 2012). Considering these aspects, we note that if the label aggregative for a review is based on these aspects then meta-aggregation is not an aggregative type of review as meta-aggregation is interested in comprehensively synthesizing all different relevant insights provided in qualitative studies conducted with regards a specific review question and the focus is on what is essential, the essences of findings. Therefore, I consider that the use of labels such as aggregative or interpretive for classifications of reviews is misleading when applied to meta-aggregation.

With regards epistemological concerns, according to Manning (2012) who uses a distinction between an idealist synthesis position and a realist synthesis position mentioned by Kavanagh et al (2012), meta-aggregation is a review approach more realist rather than more idealist, with those adopting the more realist position considering that knowledge is partial and imperfect however useful in informing policy and practice, and those adopting a more idealistic position focusing on the hermeneutic process of interpretation that provides improved understanding. Kavanagh et al (2012) note that the idealist position is oriented more towards constructivist viewpoints and is more flexible, in contrast with the realist position characterized by a more traditional systematic review approach, use of prespecified search strategy and predefined review inclusion criteria and quality appraisal criteria. I consider that meta-aggregation is a pragmatic hermeneutic approach, that is meta-aggregation involves interpretation for better understanding and the final goal is to provide guidance for practice and policy, meta-aggregation dialectically combines realist and idealist perspectives, and positioning meta-aggregation exclusively as only more realist or more idealist is incomplete and misleading.

According to Paterson (2012) qualitative research approaches can be categorized with regards interpretive or aggregative nature, epistemology, and nature of outcome. It is noted that qualitative research approaches include elements of both aggregation and interpretation but one of these is more prominent than the other in a specific approach (Paterson 2012). It is noted that in aggregative synthesis findings are treated as if they were isolated from the context where these occurred and are combined in order to produce a general description of the phenomenon (Paterson 2012). Meta-aggregation is considered as an example of aggregative synthesis (Paterson 2012). It is noted that in interpretive synthesis the findings are used to produce a new abstract model or theory of the phenomenon considering the context of the research (Paterson 2012). Meta-ethnography is considered as an example of interpretive synthesis (Paterson 2012). It is claimed that interpretive synthesis is informed by idealist epistemology and that the outcome of synthesis is theoretical, and that results of synthesis require further interpretation before can be applied to practice and policy (Paterson 2012). It is claimed that aggregative synthesis is informed by realist epistemology and the outcome of the synthesis is utilitarian, and that results of synthesis are more concrete and definitive, and results may have immediate utility to practice and policy (Paterson 2012). In my opinion, in a real pragmatic meta-aggregation the synthesis of primary qualitative research studies is performed in order to produce abductive pragmatic statements ready for practical testing. Given the distinction between interpretive and aggregative synthesis proposed by Paterson (2012) and given the theoretical and philosophical

foundations I propose for meta-aggregation I consider that meta-aggregation is not interpretive and is not aggregative, I consider that meta-aggregation is an hermeneutic eidetic pragmatic approach to qualitative research synthesis. It is hermeneutic as recognizes the fundamental role of interpretation in the synthesis of findings into categories and in the synthesis of categories into synthesized findings. It is eidetic as focuses on essences of findings. It is pragmatic as aims at generating abductive pragmatic statements ready for practical testing.

Pope et al (2007) note that interpretive approaches to qualitative synthesis can be categorized into two broad types: the comparative interpretive approaches to synthesis informed by grounded theory, and translation-based interpretive approaches to synthesis informed by meta-ethnography (Pope et al 2007). I consider that meta-aggregation is a unique approach that cannot be forced to fit into these two rigid categories. Meta-aggregation is different from approaches to synthesis informed by grounded theory and approaches to synthesis informed by meta-ethnography. Meta-aggregation is a hermeneutical pragmatic approach to synthesis. Meta-aggregation uses hermeneutics understood as intuition of meaning not hermeneutics understood as translation therefore is different from approaches to synthesis informed by meta-ethnography. Meta-aggregation uses a pragmatic approach to generate abductive pragmatic statements ready for practical testing therefore is different from approaches to synthesis informed by grounded theory.

Pope et al (2007) note that interpretive syntheses re-analyse and combine the findings from several studies into a whole that moves beyond the findings of any individual study included in the synthesis (Pope et al 2007). Knowing and explicitly acknowledging that interpretation is used in meta-aggregation, specifically in synthesizing findings into categories, and in synthesizing categories into synthesizing categories into synthesized findings, and given that I consider that the aim of meta-aggregation approach to qualitative synthesis founded on American pragmatism is to generate abductive pragmatic statements ready for practical testing, in order to unequivocally distinguish meta-aggregation from interpretive approaches to qualitative synthesis, I propose that the term pragmatic hermeneutical synthesis should be used to describe meta-aggregation.

Pope et al (2007) note that interpretive methods for synthesis aim for new interpretation. Meta-aggregation does not aim for new interpretation but for practical recommendations for action. Therefore, knowing and explicitly acknowledging that interpretation is used in meta-aggregation, specifically in synthesizing findings into categories, and in synthesizing categories into synthesizing categories into synthesized findings, I consider that meta-aggregation should not be considered an interpretive approach to synthesis but a pragmatic approach to synthesis. In addition to the existing two terms used to categorize approaches to qualitative syntheses, that is aggregative synthesis, and interpretive synthesis, I propose a third term, the pragmatic synthesis, a term that describes with accuracy the meta-aggregation approach to qualitative synthesis founded on American pragmatism.

Qualitative research proponents caution against reliance on quantitative meta-analysis as the model for the development and implementation of qualitative research synthesis (Sandelowski & Barroso 2007). Sandelowski & Barroso (2007) used the question 'Can You Sum Up a Poem?' as a heading in their book. I consider that you cannot 'sum up' a poem however you can sum up numbers in meta-analysis. You cannot sum up a poem but you can understand the meaning of a poem, you can be moved by a poem. Therefore, I consider that the term meta-aggregation with its similarity with the term meta-analysis should be discontinued as a term used for qualitative research synthesis. I propose that meta-analysis should not be used as analogy or model for meta-aggregation. Given the unique characteristics of meta-aggregation explicitly founded on Husserlian phenomenology and American pragmatism I propose that the term meta-aggregation should be replaced by a term that highlights the hermeneutical eidetic pragmatic nature of the qualitative research synthesis represented by this specific type of meta-aggregation.

Sandelowski and Barroso (2007) distinguish between empirical/analytical readings of qualitative reports exemplified in qualitative research synthesis and critical/discursive readings of qualitative reports exemplified in meta-studies (Sandelowski & Barroso 2007). In empirical/analytical readings of qualitative reports research syntheses are conceived as empirically grounded and verifiable interpretations of the lived experiences of the research participants (Sandelowski & Barroso 2007). In critical/discursive readings of qualitative reports, in contrast to empirical/analytical readings, research syntheses are not viewed as authentic accounts of facts and feelings, rather are conceived as narratives, social constructions, and discipline specific discourses (Sandelowski & Barroso 2007).

In empirical/analytical readings of qualitative reports, language is viewed as a neutral vehicle of communication, the reviewer is viewed as communicator, and the logic of reading is one of reading lines for the aim of reducing the text (Sandelowski & Barroso 2007). In critical/discursive readings of qualitative reports, language is regarded as practice constituting communication, the reviewer is viewed as a representative of a discipline or group and as information or impression manager, and the logic of reading is reading into and between the lines and over-reading and rewriting for the aim of complicating the text (Sandelowski & Barroso 2007). Given these considerations regarding the differences between empirical/analytical readings of qualitative reports and critical/discursive readings of qualitative reports, and given the characteristics of meta-aggregation founded on Husserlian phenomenology and American pragmatism I consider that meta-aggregation cannot be forced to fit into one of these two categories. Meta-aggregation is unique, a hermeneutic eidetic pragmatic approach to qualitative synthesis.

Comparison of meta-aggregation with Noblit & Hare's meta-ethnography
Meta-ethnography is considered an interpretive process that gives meaning to the studies examined and that creates new interpretations in the process (Noblit & Hare 1988). In meta-aggregation interpretation is used however no new interpretations are created, meta-aggregation clarifies the meaning already existing in included studies. In meta-ethnography interpretation is conceptualized as translation, that is the reviewer as interpreter translates the studies into his own worldview, and meta-ethnography as interpretation involves the reciprocal translation of studies by the means of reciprocal translation of interpretations from one study into the interpretations of another study (Noblit & Hare 1988). Meta-aggregation is founded on the idea of interpretation as understanding of meaning by empathy and the view that interpretation is translation is rejected.

Meta-ethnography may be used with any interpretive studies (Noblit & Hare 1988), also meta-aggregation may be used with any qualitative studies regardless of their philosophical perspectives, methodologies, or methods.

It was explicitly noted that meta-ethnography cannot be guided by Habermas' technical interests, and that meta-ethnography aims at developing interpretive explanations (Noblit & Hare 1988). I explicitly state that in the new theoretical framework, meta-aggregation is guided by the Habermas' practical interest and specifically by the ideal of communicative action informed by the Habermas' discourse ethics.

Meta-ethnography recognizes an important role for the interpretive skills of the reviewer as interpreter, and it was noted that a meta-ethnographic synthesis reveals the perspective of the reviewer as interpreter (Noblit & Hare 1988). I consider that meta-ethnography is reviewer-oriented or interpreter-oriented, and I clearly state that meta-aggregation is author-oriented or text-oriented.

It was contended that all forms of knowledge synthesis are inductive and that all forms of knowledge synthesis are interpretive, and it was stated that meta-ethnography is an inductive and interpretive form of knowledge synthesis (Noblit & Hare 1988). Meta-aggregation uses interpretation however the interpretation used in meta-aggregation is founded on Peirce's abduction.

It is claimed that the interpretation developed in meta-ethnography is transferable to other similar situations (Noblit & Hare 1988). I consider that the interpretation generated in meta-aggregation is a pragmatic practice theory that should be tested in diverse similar real life circumstances. It was noted that meta-ethnographic synthesis is expressed metaphorically (Noblit & Hare 1988). I consider that meta-aggregation generates pragmatic theories that are practice theories with high empirical content.

Three basic criteria for the adequacy of metaphors proposed by Brown are considered relevant for meta-ethnographic synthesis: economy, cogency, and range (Noblit & Hare 1988). A metaphor that is simpler, or briefer, is considered more economical (Brown 1977). A more economical metaphor is more easily understood and used (Brown 1977). Cogency refers to precision that avoids redundancy, ambiguity, and contradiction (Brown 1977). Range refers to the diversity of parts that are integrated together (Brown 1977). I consider that these three criteria are also relevant for the synthesized findings generated in meta-aggregation. One additional criterion, the apparency criterion proposed by Martin, is considered relevant for meta-ethnographic synthesis (Noblit & Hare 1988). Apparency refers essentially to the ability to use language in such a way words open to us, or "show" to us the experience described (Martin 1975, p.167). I consider that the apparency criterion is also relevant for the synthesized findings generated in meta-aggregation.

It is described that the meta-ethnographic synthesis involves metaphoric reductions, that is abstractions from the concepts found in studies (Noblit & Hare 1988). I note that meta-aggregation uses the process of eidetic reduction that it is a form of abstraction of what is essential from what is accidental. It was explicitly stated that a primary goal of meta-ethnography is to persuade an audience (Noblit & Hare 1988). I explicitly state that meta-aggregation is guided by Habermas' communicative action that emphasizes the need for understanding and agreement. It is considered that a meta-ethnography may enable the readers to understand an aspect of everyday reality, however, the readers have to understand the meaning of the meta-ethnographic synthesis in their lives (Noblit & Hare 1988). Meta-aggregation proposes a pragmatic practice theory that should be discussed by all affected, as proposed by Habermas, and if accepted, this pragmatic abductive hypothesis should be tested in real life circumstances, for confirmation or rejection. The value of a meta-ethnographic synthesis is dependent ultimately on its comprehensibility to readers (Noblit & Hare 1988). The value of meta-aggregation resides in the generation of an explicit pragmatic theory for practice, ready for testing.

Comparison of meta-aggregation with Paterson's meta-study

Meta-study is an interpretive qualitative research approach and aims to generate new knowledge by examining not just the findings of included studies but also the research process, including theory and methods (Paterson et al 2001). The explicitly stated primary goal of meta-study is to develop a midrange theory (Paterson et al 2001). Meta-aggregation also involves interpretation, however, the aim is not to generate new knowledge (if new knowledge is interpreted as new meaning created by re-interpretation and not already existing in the included studies), and rather meta-aggregation clarifies the knowledge already existing in included studies. Meta-aggregation generates a micro-theory, or practice theory, or a working hypothesis, not a middle range theory.

Comparison of meta-aggregation with Sandelowski & Barroso's qualitative research synthesis

Essentially qualitative research synthesis is viewed as re-interpretation by reviewers of interpretations by researchers of the interpretations of participants in research (Sandelowski & Barroso 2007). Qualitative research synthesis involves the re-framing of findings (Sandelowski & Barroso 2007). Qualitative research synthesis depends on the uniqueness of the reviewer as interpreter (Sandelowski & Barroso 2007). Also, qualitative research synthesis emphasizes the necessity to read "between the lines" and also the role of "over-reading" (Sandelowski & Barroso 2007,p.18). Thus, qualitative research synthesis is reviewer-oriented, or interpreter-oriented.

Meta-aggregation is author-oriented, or text-oriented. Qualitative research synthesis by using new interpretations, re-interpretations, generates a whole that is more than the sum of parts (Sandelowski & Barroso 2007). Meta-aggregation is not using re-interpretation, is not using new interpretations, and therefore generates a whole that is an accurate synthesis of the parts, and it is not more than the sum of parts.

Comparison of meta-aggregation with Major & Savin-Baden's qualitative research synthesis

Qualitative research synthesis involves interpretation and essentially refers to synthesizing the meaning from included studies into a new meaning by reinterpretation of data, and findings from included studies are combined into a new whole (Major & Savin-Baden 2010). Meta-aggregation also involves interpretation, however, there is no new different meaning created (if new meaning is interpreted as meaning created by re-interpretation and not already existing in the included studies), and there is no new whole, rather meta-aggregation clarifies the meaning already existing in included studies.

Conclusion: A new theoretical foundation for meta-aggregation

To conclude, I summarize the new theoretical framework for meta-aggregation founded on ideas from Husserlian phenomenology and American Pragmatism. Critical Theory in general and specifically Habermas's philosophy were considered as the theoretical context for this thesis therefore ideas from critical theory and Habermas's philosophy are an integral part of the new theoretical framework for qualitative research synthesis. The new proposed framework takes advantage of the profound connections between hermeneutics, phenomenology, pragmatism and critical theory. **Figure 4** presents a concept map for the new theoretical framework for meta-aggregation.

A narrative explanation of the concept map
The synthesis process is interpretive, phenomenological, abductive, pragmatic and critical. Synthesis in the new proposed framework is founded on Schleiermacher's classical hermeneutics with its focus on empathy, identification with the writer, and the idea that interpretation of the text should be guided by the writer's intended meaning (what Umberto Eco calls the intention of the author, the *intentio auctoris*). Each interpretation is just one possible interpretation and this idea is in line with the essential idea of unlimited semiosis proposed by Peirce, however, reviewers should make all efforts in order to empathically reconstruct the writer's original meaning. The only acceptable alternative, however, considered as second best or a degradation of the ideal, is what Umberto Eco calls *intention of the text (intentio operis)*. The third alternative, the intention of the interpreter, the *intentio lectoris*, the interpretation that is reader-oriented is not an acceptable alternative in the new proposed framework for meta-aggregation.

Meta-aggregation involves three steps: extraction of findings and illustrations from primary studies, synthesis of findings into categories and synthesis of categories into synthesized findings. The extraction of findings and illustrations from primary studies is executed by reviewers who position themselves into a special attitude towards the texts. This special attitude represents an adaptation of Husserl's phenomenological bracketing for the purposes of synthesis research. A reviewer's bracketing assures that findings as given are extracted without any re-analysis or re-interpretation by the reviewer. In meta-aggregation, by accessing the findings reported by authors, the reviewer has mediated access to the essence of phenomena experienced by participants in the research and this claim is based on Husserl's ideas that language is used in order to share the understanding of meaning, Husserl's ideas regarding

meaning and intersubjective understanding, and Spiegelber's approach of phenomenology of vicarious experience as proposed also by Giorgi as justification for the use of phenomenological data obtained from others. Reviewer bracketing inspired by Husserl's bracketing represents the prerequisite condition for the reviewers' vicarious experience. Also, as another strong justification for the claim that by accessing the findings reported by authors, the reviewer's mediated access to the essence of phenomena experienced by participants in research is found in Husserl's ideas regarding empathy.

The synthesis of findings into categories and the synthesis of categories into synthesized findings is executed by reviewers who define themselves by a special purpose of synthesis; this special purpose represents an adaptation of Husserl's phenomenological eidetic reduction for the purposes of synthesis research. It is possible to adapt Husserlian reflective and eidetic approach and concepts without the goals of transcendental phenomenological philosophy. This synthesis is eidetic, it is about essences and it is not about particulars. This eidetic synthesis is based on Husserl's eidetic reduction.

The synthesis of findings into categories is founded on the examination of similarity of meaning of the findings and the synthesis of categories into synthesized findings is founded on the examination of similarity of categories. In the new theoretical framework Peirce's approach to meaning is the operational basis for the examination of similarity of meaning: if there are no differences in practical consequences then there are no differences in pragmatic meaning.

The logic of synthesis of findings into categories and of categories into synthesized findings is Peirce's logic of abduction. In the new theoretical framework the synthesized findings are viewed as micro theories or practice theories that are abductive statements that are applications of the pragmatic maxim as proposed by Peirce.

In the new theoretical framework the communication of synthesis is considered as integral part of the synthesis process. The synthesis as interpretation is aligned with Habermas' practical interests, however, the emancipatory interest is considered the ultimate goal of the communication of the synthesis.

The communication of the synthesis - of the synthesized findings - should be guided by Habermas' communicative action and discourse ethics. The communication of the synthesized findings should be based on the ideal of meaningful interaction between persons with the goal of shared understanding and agreement. All those affected by the solutions proposed in the synthesized should be allowed to participate in a truly open and rational debate as proposed by Habermas' discourse ethics.

Figure 4. Concept map for the meta-aggregation theoretical framework
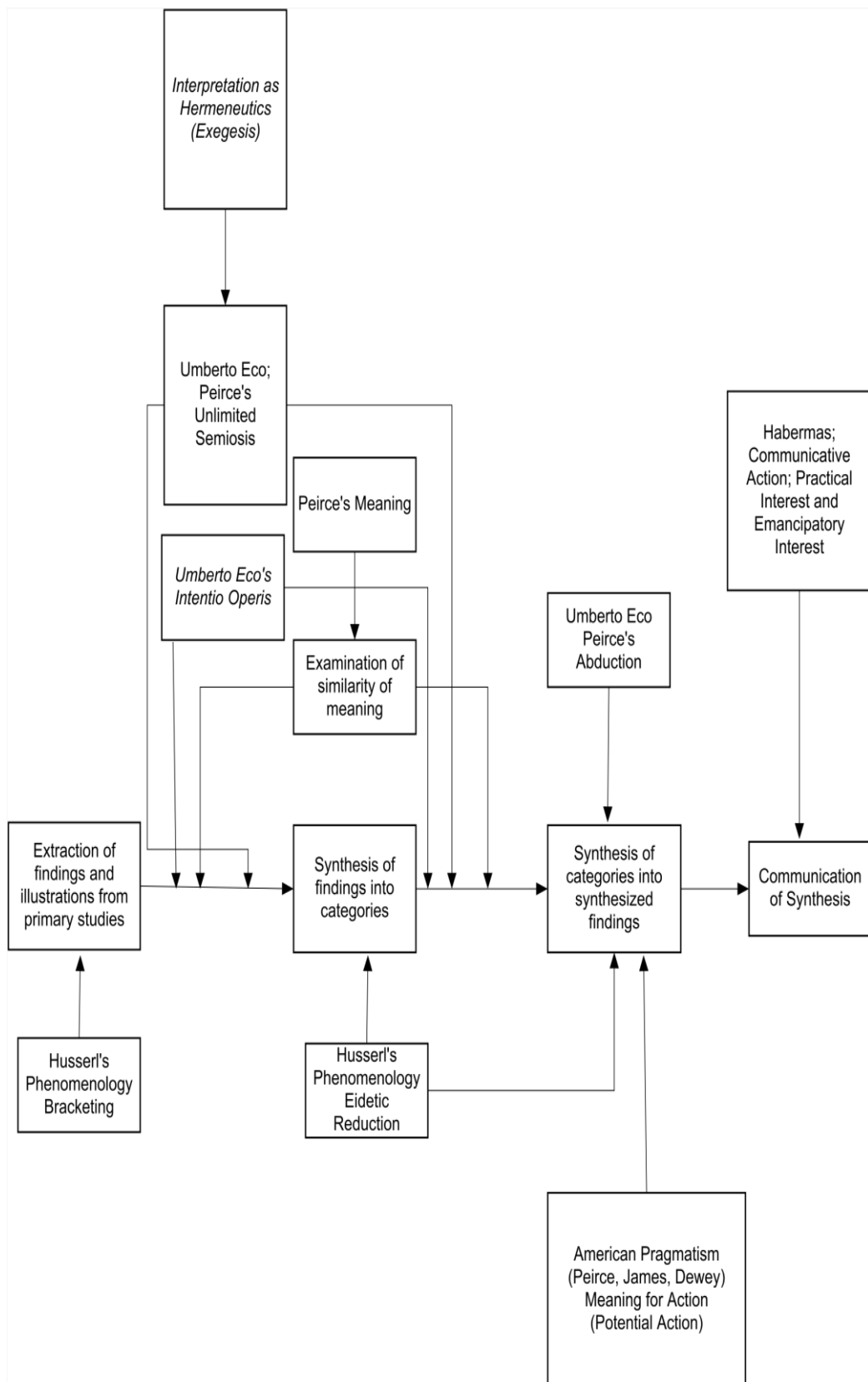
Mereology, meta-aggregation, and future research

The synthesis performed in meta-aggregation is mereological. The justification that synthesis is not aggregative but mereological is based on Husserl's theory of parts and wholes that represented one early inspiration for the mathematical field of mereology. Parthood relations (relations of part to whole and also relations of part to part within a whole) were explored by Brentano first and later by Husserl (Stjernfelt 2007; Colosi & Graziani 2014). The synthesized finding represents the whole; the synthesized finding is a description of the essence of the parts and of the relations between parts. The whole is not more than the parts. The whole is not the sum of the parts. There is close connection between mereology as a field of mathematics and another field of mathematics, *topology*, with *mereo-topology* as a new field of inquiry (Colosi & Graziani 2014). With regards to the graphical, visual representation of the synthesis, the current QARI view is a simple linear visual representation that reflects the transition from findings to categories to synthesized findings. Given the mereological nature of the synthesis I propose that ideas from Perice's visual semiotics and diagramatology (Stjernfelt 2007) should be used to inform a re-development of the QARI view in line with the mereological nature of synthesis. The QARI view should represent in a visually accurate and appealing way the relations of part to whole and also relations of part to part within the whole in the synthesis process. Given the connections between mereology and topology, and that topological 3D graphical representations help us understand the idea of continuity and as there is continuity from findings to categories to synthesized findings I suggest that 3D topological graphical representations (Kalajdezievski 2015) should be explored for the future potential re-design of the QARI view. Such an approach may be used to increase the functional visual power of meta-aggregation in line with the ideal proposed by Pearson et al. who intended QARI view to "*demonstrate to the reader how the meta aggregation does not change the findings of the individual studies but rather achieves a synthesis of their collective meaning through preserving the integrity of each individual study's findings*" (Pearson et al 2011, p. 71). This issue of the application of ideas from Perice's visual semiotics, diagramatology, mereology and topology (Stjernfelt 2007; Colosi & Graziani 2014; Kalajdezievski 2015) to meta-aggregation are complex, therefore I just suggest for now this potential avenue of research as a mere suggestion, without providing more explanations or details in this thesis, however, I consider that I should explore in a comprehensive systematic way these rich and innovative ideas in a different research, in my future research.

Limitations of the thesis

I acknowledge that some aspects of the meta-aggregation such as the issues related to the credibility/plausibility of findings and the examination of the confidence in the findings by using the new CONqual approach are not discussed in my thesis; however, I consider that no harm is produced to the thesis. I decided that I will examine in a different, future research, the issues related to the credibility/plausibility of findings and the new CONqual approach. I acknowledge that only the works of three American pragmatists considered to be the classical pragmatists were examined, specifically Charles Sanders Peirce, William James and John Dewey. I will examine in different, future research the potential contribution of the philosophical works of other pragmatists to meta-aggregation.

References

Aboulafia M, Bookman M, Kemp C (editors). Habermas and pragmatism. London: Routledge, 2002.

Aromataris E, Pearson A. The systematic review: an overview. Am J Nurs 2014; 114: 47–55.

Aromataris E, Riitano D. Systematic reviews: constructing a search strategy and searching for evidence. Am J Nurs 2014; 114: 49–56.

Ashworth P. Conceptual foundations of qualitative psychology. Pages 4-25. In Smith JA (editor). Qualitative psychology. A practical guide to research methods. Second edition. Los Angeles: Sage, 2008.

Bacon M. Pragmatism. An introduction. Cambridge: Polity Press, 2012.

Barbour RS. Quality of data analysis. In Flick U (editor). The SAGE Handbook of qualitative data analysis. Los Angeles: SAGE, 2014.

Bergman M. Peirce's philosophy of communication. The rhetorical underpinnings of the theory of signs. London: Continuum, 2009.

Bernet R, Kern I, Marbach E. An introduction to Husserlian phenomenology. Evanston, Illinois: Northwestern University Press, 1993.

Bhavnani K-K, Chua P, Collins D. Critical approaches to qualitative research. In Leavy P (editor). The Oxford Handbook of qualitative research. Oxford: Oxford University Press, 2014.

Blaikie N. Approaches to social enquiry. Advancing knowledge. Second edition. Cambridge: Polity Press, 2007.

Blaikie N. Designing social research. The logic of anticipation. Second edition. Second edition. Cambridge: Polity Press, 2010.

Bondas T, Hall EOC. Challenges in approaching meta-synthesis. Qual Health Res 2007; 17(1): 113-121.

Bonfantini MA, Proni G. To guess or not to guess? Pages 119-134. In Eco U, Sebeok TA (editors). The sign of three. Dupin, Holmes, Peirce. Bloomington: Indiana University Press, 1983.

Booth A, Papaioannou D, Sutton A. Systematic approaches to a successful literature review. Los Angeles: Sage, 2012.

Brand A. The Force of Reason. An Introduction to Habermas' Theory of Communicative Action. London: Allen & Unwin, 1990.

Brinkmann S, Jacobsen MH, Kristiansen S. Historical overview of qualitative research in the social sciences. In Leavy P (editor). The Oxford Handbook of qualitative research. Oxford: Oxford University Press, 2014.

Bronner SE. Critical theory. A very short introduction. Oxford: Oxford University Press, 2011.

Brown RH. A poetic for sociology. Toward a logic of discovery for the human sciences. Cambridge: Cambridge University Press, 1977.

Bryant A, Charmaz K. Introduction. Grounded Theory Research: Methods and Practices. Pages 1-28. In Bryant A, Charmaz K (editors). The SAGE Handbook of Grounded Theory. Los Angeles: Sage, 2007.

Bryant A, Charmaz K. Grounded Theory in Historical Perspective: An Epistemological Account. Pages 31-57. In Bryant A, Charmaz K (editors). The SAGE Handbook of Grounded Theory. Los Angeles: Sage, 2007.

Bryman A. Social research methods. Third edition. Oxford: Oxford University Press, 2008.

Buchler J. Philosophical Writings of Peirce. Selected and Edited with an Introduction by Justus Buchler. New York: Dover, 1955.

Burke FT. What pragmatism was. Bloomington: Indiana University Press, 2013.

Burkhardt FH, Bowers F, Skrupskelis IK. The Works of William James, 18 vols. Cambridge, MA: Harvard University Press, 1975–88.

Burns N, Grove SK. The practice of nursing research. Appraisal, synthesis, and generation of evidence. Sixth edition. St. Louis, Missouri: Saunders Elsevier, 2009.

Burns N, Grove SK. Frameworks. Pages 126-164. In Burns N, Grove SK. The practice of nursing research. Appraisal, synthesis, and generation of evidence. Sixth edition. St. Louis: Saunders Elsevier, 2009.

Cerbone DR. Understanding phenomenology. Durham: Acumen, 2006.

Cho J, Trent A. Evaluating Qualitative Research. In Leavy P (editor). The Oxford Handbook of qualitative research. Oxford: Oxford University Press, 2014.
Cohen L, Manion L, Morrison K. Research methods in education. Sixth edition. London: Routledge, 2007.

Collini S. Introduction: Interpretation terminable and interminable. In Collini S (editor). Interpretation and overinterpretation. Umberto Eco with Richard Rorty, Jonathan Culler, Christine Brooke-Rose. Cambridge: Cambridge University Press, 1992.

Collini S (editor). Interpretation and overinterpretation. Umberto Eco with Richard Rorty, Jonathan Culler, Christine Brooke-Rose. Cambridge: Cambridge University Press, 1992.

Colosi C, Graziani P (editors). Mereology and the sciences. Parts and wholes in the contemporary scientific context. Dordrecht: Springer, 2014.

Coplan A, Goldie P. Empathy. Philosophical and Psychological Perspectives. Oxford: Oxford University Press, 2011.

Cormier H. The truth is what works. William James, pragmatism, and the seed of death. Oxford: Rowman & Littlefield, 2001.

Coyle A. Introduction to qualitative psychological research. Pages 9-29. In Lyons E, Coyle A (editors). Analysing qualitative data in psychology. London: Sage, 2007.

Creswell JW. Qualitative inquiry and research design. Choosing among five approaches. Second edition. Thousand Oaks: Sage, 2007.

Creswell JW. Research design. Qualitative, quantitative, and mixed methods approaches. Third edition. Los Angeles: Sage, 2009.

Crotty M. The foundations of social research. Meaning and perspective in the research process. Los Angeles: Sage, 1998.

de Muralt A. The idea of phenomenology: Husserlian exemplarism. Translated by Garry L Breckon. Evanston, Illinois: Northwestern University Press, 1974.

Denzin NK, Lincoln YS (editors). The SAGE Handbook of Qualitative Research. Fourth edition. Los Angeles: Sage, 2011.

Denzin NK. The politics of evidence. Pages 645-657. In Denzin NK, Lincoln YS (editors). The SAGE Handbook of Qualitative Research. Fourth edition. Los Angeles: Sage, 2011.

Denzin NK, Lincoln YS. The discipline and practice of qualitative research. Pages 1-19. In Denzin NK, Lincoln YS (editors). The SAGE Handbook of Qualitative Research. Fourth edition. Los Angeles: Sage, 2011.

Detmer D. Phenomenology Explained. From Experience to Insight. Chicago: Open Court, 2013.

Dreyfus DL, Wrathall MA (editors). A Companion to phenomenology and existentialism. Chichester, UK: Wiley-Blackwell, 2009.

Dewey J. Logic. The theory of inquiry. London: Allen & Unwin, 1939.

Dewey J. Democracy and education. An introduction to the philosophy of education. New York: The Macmillan Company, 1963.

Dewey J. The quest for certainty. A study of the relation of knowledge and action. London: Allen & Unwin, 1930.

Downe S. Metasynthesis: a guide to knitting smoke. Evidence Based Midwifery 2008; 6(1): 4-8.

Eco U. Interpretation and history. Pages 23-43. In Collini S (editor). Interpretation and overinterpretation. Umberto Eco with Richard Rorty, Jonathan Culler, Christine Brooke-Rose. Cambridge: Cambridge University Press, 1992.

Eco U. Overinterpreting texts. Pages 45-66. In Collini S (editor). Interpretation and overinterpretation. Umberto Eco with Richard Rorty, Jonathan Culler, Christine Brooke-Rose. Cambridge: Cambridge University Press, 1992.

Eco U. Between author and text. Pages 67-88. In Collini S (editor). Interpretation and overinterpretation. Umberto Eco with Richard Rorty, Jonathan Culler, Christine Brooke-Rose. Cambridge: Cambridge University Press, 1992.

Eco U. Reply. Pages 139-151. In Collini S (editor). Interpretation and overinterpretation. Umberto Eco with Richard Rorty, Jonathan Culler, Christine Brooke-Rose. Cambridge: Cambridge University Press, 1992.

Eco U. The limits of interpretation. Bloomington: Indiana University Press, 1990.

Eco U. Horns, Hooves, Insteps: Some Hypotheses on Three Types of Abduction. Pages 198-220. In Eco U, Sebeok TA (editors). The sign of three. Dupin, Holmes, Peirce. Bloomington: Indiana University Press, 1983.

Edgar A. The philosophy of Habermas. Chestam: Acumen, 2005.

Edgar A. Habermas: The key concepts. London: Routledge, 2006.

Edie JM. Speaking and meaning. The phenomenology of language. Bloomington: Indiana University Press, 1976.

Ellingson LL. Analysis and representation across the continuum. Pages 595-610. In Denzin NK, Lincoln YS (editors). The SAGE Handbook of Qualitative Research. Fourth edition. Los Angeles: Sage, 2011.

Elliott J. Educational Research and Outsider-Insider Relations. Qualitative Studies in Education, 1988, 1(2), 155—166.

Embree L. Reflective analysis. A first introduction into phenomenological investigation. Second edition. Bucharest: Zeta Books, 2011.

Embree L, Behnke EA, Carr D, Evans JC, Huertas-Jourda J, Kockelmans JJ, et al., editors. Encyclopedia of Phenomenology. Dordrecht, Kluwer Academic Publishers, 1997.

Embree L, Mohanty JN. Introduction. In Embree L, Behnke EA, Carr D, Evans JC, Huertas-Jourda J, Kockelmans JJ, et al., editors. Encyclopedia of Phenomenology. Dordrecht, Kluwer Academic Publishers, 1997.

Evans D, Pearson A. Systematic reviews of qualitative research. Clinical Effectiveness in Nursing 2001; 5: 111-119.

Evans D. Systematic reviews of interpretive research: interpretive data synthesis of processed data. Australian Journal of Advanced Nursing 2003; 20(2): 22-26.

Fann KT. Peirce's theory of abduction. The Hague: Martinus Nijhoff, 1970.

Farber M. Husserl and philosophical radicalism. The ideal of presuppositionless philosophy. In Kockelmans JJ (editor). Phenomenology: The philosophy of Edmund Husserl and its interpretation. New York: Doubleday & Company, 1967.

Fine K. Part-whole. In Smith B, Woodruff Smith D. Introduction. In Smith B, Woodruff Smith D (editors). The Cambridge Companion to Husserl. Cambridge: Cambridge University Press, 1995.

Finfgeld DL. Metasynthesis: the state of the art - so far. Qualitative Health Research 2003; 13(7): 893-904.

Finlay L. Phenomenology for therapists. Researching the lived world. Chichester, UK: Wiley-Blackwell, 2011.

Finlayson KW, Dixon A. Qualitative meta-synthesis: a guide for the novice. Nurse Researcher 2008; 15(2): 59-71.

Firmin MW. Interpretation. In Given LM (editor). The SAGE Encyclopedia of Qualitative Research Methods. Thousand Oaks, CA: Sage, 2008.

Fisher A. The logic of real arguments. Second edition. Cambridge: Cambridge University Press, 2004.

Fitzgerald M, Field J. Qualitative research designs. In Courtney M. Evidence for nursing. Sydney: Elsevier Churchill Livingstone, 2005.

Flemming K. Synthesis of quantitative and qualitative research: an example using Critical Interpretive Synthesis. Journal of Advanced Nursing 2010; 66(1): 201-217.

Flick U (editor). The SAGE Handbook of qualitative data analysis. Los Angeles: SAGE, 2014.

Follesdal D. Husserl's reductions and the role they play in his phenomenology. In Dreyfus DL, Wrathall MA (editors). A Companion to phenomenology and existentialism. Chichester, UK: Wiley-Blackwell, 2009.

Freeman M. Hermeneutics. In Given LM (editor). The SAGE Encyclopedia of Qualitative Research Methods. Thousand Oaks, CA: Sage, 2008.

Freire P. Pedagogy of the oppressed. Translated by Myra Bergman Ramos. New York: Penguin Books, 1972.

Gadamer H-G. The enigma of health. The art of healing in a scientific age. Stanford, California: Stanford University Press, 1996.

Gadamer H-G. Truth and method. Second, Revised edition. Translation revised by Joel Weinsheimer and Donald G Marshall. New York: Continuum, 2004.

Gadamer H-G. The hermeneutics of suspicion. In Mohanty JN (editor). Phenomenology and the human sciences. Dordrecht: Martinus Nijhoff Publishers, 1985.

Gadamer H-G. The problem of historical consciousness. Pages 103-160. In Rabinow P, Sullivan WM (editors). Interpretive social science. A reader. Berkley: University of California Press, 1979.

Gallagher S. Phenomenology. London: Palgrave Macmillan, 2012.

Gander H-H. Gadamer: the universality of hermeneutics. In Malpas J, Gander H-H (editors). The Routledge Companion to Hermeneutics. London: Routledge, 2015.

Geuss R. The idea of a critical theory. Habermas and the Frankfurt School. Cambridge: Cambridge University Press, 1981.

Giacomini M, Cook DJ. Qualitative research. Pages 285-297. In Guyatt G, Rennie D, Meade MO, Cook DJ. Users' guides to the medical literature. A manual for evidence-based clinical practice. Third edition. Chicago, McGrawHill, 2015.

Giorgi A. The descriptive phenomenological method in psychology. A modified Husserlian approach. Pittsburgh, Pennsylvania: Duquesne University Press, 2009.

Given LM (editor). The SAGE Encyclopedia of Qualitative Research Methods. Thousand Oaks, CA: Sage, 2008.

Grace PJ, Perry DJ. Philosophical inquiry and the goals of nursing. A critical approach for disciplinary knowledge development and action. Advances in Nursing Science 2013; 36(2): 64-79.

Gray M. Evidence-based healthcare and public health. How to make decisions about health services and public health. Third edition. London: Churchill Livingstone Elsevier, 2009.

Green J, Thorogood N. Qualitative methods for health research. Second edition. Los Angeles: Sage, 2009.

Greenhalgh T. How to read a paper. The basics of evidence-based medicine. Fifth edition. Chichester, UK: Wiley Blackwell, 2014.

Grondin J. Sources of Hermeneutics. Albany: State University of New York Press, 1995.

Grondin J. Introduction to philosophical hermeneutics. New Haven: Yale University Press, 1994.

Grondin J. Ricoeur: the long way of hermeneutics. In Malpas J, Gander H-H. The Routledge companion to hermeneutics. Newy York: Routladge, 2015.

Gurwitsch A. Phenomenology and the theory of science. Edited by Lester Embree. Evanston: Northwestern University Press, 1974.

Guyatt G, Jaeschke R, Wilson MC, Montori VM, Richardson WS. What is evidence-based medicine? Pages 7-14. In Guyatt G, Rennie D, Meade MO, Cook DJ. Users' guides to the medical literature. A manual for evidence-based clinical practice. Third edition. Chicago, McGrawHill, 2015.

Guyatt G, Rennie D, Meade MO, Cook DJ. Users' guides to the medical literature. A manual for evidence-based clinical practice. Third edition. Chicago, McGrawHill, 2015.

Haack S (editor). Pragmatism, old and new. Selected writings. New York: Prometheus Books, 2006.

Habermas J. Knowledge and human interests. Translated by Jeremy J. Shapiro. Second edition. London: Heinmann, 1978.

Habermas J. A postscript to Knowledge and Human Interests. Translated by Christian Lenhardt. Pages 351-380. In Habermas J. Knowledge and Human Interests. Second edition. Translated by Jeremy J Shapiro. London: Heinmann, 1978.

Habermas J. Appendix. Knowledge and Human Interests: A General Perspective. Pages 301-349. In Habermas J. Knowledge and Human Interests. Second edition. Translated by Jeremy J Shapiro. London: Heinmann, 1978.

Habermas J. The theory of communicative action. Volume 1. Reason and the rationalization of society. Translated by Thomas McCarthy. Boston: Beacon Press, 1984.

Habermas J. Postscript: some concluding remarks. In Aboulafia M, Bookman M, Kemp C (editors). Habermas and pragmatism. London: Routledge, 2002.

Habermas J. Justification and Application. Remarks on Discourse Ethics. Translated by Ciaran Cronin. Cambridge: Polity Press, 1993.

Habermas J. A Reply to my Critics. Pages 219-284. In Thompson JB, Held D (editors). Habermas. Critical Debates. London: The Macmillan Press, 1982.

Habermas J. A Reply. Pages 214-265. In Honneth A, Joas H (editors). Communicative Action. Essays on Jurgen Habermas's The Theory of Communicative Action. Cambridge: Polity Press, 1991.

Habermas J. Legitimation Crisis. Translated by Thomas McCarthy. London: Heinmann, 1973.

Hannes K, Lockwood C. Pragmatism as the philosophical foundation for the Joanna Briggs meta-aggregative approach to qualitative evidence synthesis. Journal of Advanced Nursing 2011; 67(7): 1632-1642.

Hannes K, Lockwood C (editors). Synthesizing qualitative research. Choosing the right approach. Chichester, UK: Wiley Blackwell, 2012.

Hannes K, Pearson A. Obstacles to the implementation of evidence-based practice in Belgium: a worked example of meta-aggregation. In Hannes K, Lockwood C (editors). Synthesizing qualitative research. Choosing the right approach. Chichester: Wiley, 2012.

Harrowitz N. The body of the detective model. Charles S Peirce and Edgar Allan Poe. Pages 179-197. In Eco U, Sebeok TA (editors). The sign of three. Dupin, Holmes, Peirce. Bloomington: Indiana University Press, 1983.

Hildebrand D. Dewey's pragmatism: instrumentalism and meliorism. In Malachowski A (editor). The Cambridge Companion to Pragmatism. Cambridge: Cambridge University Press, 2013.

Hintikka J. The phenomenological dimension. In Smith B, Woodruff Smith D. (editors). The Cambridge Companion to Husserl. Cambridge: Cambridge University Press, 1995.

Honneth A, Joas H (editors). Communicative Action. Essays on Jurgen Habermas's The Theory of Communicative Action. Cambridge: Polity Press, 1991.

Hookway C. The pragmatic maxim. Essays on Peirce and Pragmatism. Oxford: Oxford University Press, 2012.

Hookway C. The principle of Peirce and the origins of pragmatism. In Malachowski A (editor). The Cambridge Companion to Pragmatism. Cambridge: Cambridge University Press, 2013.

Hopp L, Rittenmeyer L. Review and Synthesize Completed Research Through Systematic Review. Western Journal of Nursing Research. 2015; Vol. 37(10) 1359–1372.

How A. The Habermas-Gadamer debate and the nature of the social. Back to bedrock. Aldershot: Avebury, 1995.

Husserl E. The thesis of the natural standpoint and its suspension. In: Kockelmans JJ, editor. Phenomenology: The Philosophy of Edmund Hisserl and Its Interpretation. New York: Doubleday & Company Inc; 1967.

Husserl E. On Eidetic Reduction. In: Kockelmans JJ, editor. Phenomenology The Philosophy of Edmund Husserl and Its Interpretation. New York: Doubleday & Company Inc; 1967.

Husserl E. The Idea of Phenomenology. A Translation of Die Idee der PhanomenologieHusserliana II. Translation and Introduction by Lee Hardy. Dordrecht: Kluwer Academic Publishers; 1999.

Husserl E. Ideas: General Introduction to Pure Phenomenology. Translated by W. R. Boyce Gibson. London: George Allen & Unwin Ltd; 1931.

Husserl E. Cartesian Meditations. An Introduction to Phenomenology. Translated by Dorion Cairns. The Hague: Martinus Nijhoff Publishers; 1960.

Husserl E. Phenomenology and the Crisis of Philosophy. (Philosophy as Rigorous Science and Philosophy and the Crisis of European Man) Translated with Notes and Introduction by Quentin Lauer. New York: Harper & Row; 1965.

Husserl E. The Crisis of European Sciences and Transcendental Phenomenology. An Introduction to Phenomenological Philosophy. Translated by David Carr. Evanston: Northwestern University Press; 1970.

Husserl E. Phenomenology and The Foundations of the Sciences. Third Book. Ideas Pertaining To a Pure Phenomenology and To A Phenomenological Philosophy. Translated by Ted E. Klein and William E. Pohl. The Hague: Martinus Nijhoff Publishers; 1980.

Husserl E. Ideas Pertaining To A Pure Phenomenology and To A Phenomenological Philosophy. First Book. General Introduction To A Pure Phenomenology. Translated by F. Kersten. The Hague: Martinus Nijhoff Publishers; 1983.

Husserl E. Ideas Pertaining to A Pure Phenomenology and To A Phenomenological Philosophy. Second Book. Studies in the Phenomenology of Constitution. Translated by Richard Rojcewicz and Andre Schuwer. Dordrecht: Kluwer Academic Publishers; 1989.

Husserl E. The Basic Problems of Phenomenology. From The Lectures, Winter Semester, 1910-1911. Translated by Ingo Farin and James G. Hart. Dordrecht: Springer; 2006.

Ingram D. Habermas. Introduction and Analysis. Ithaca: Cornell University Press, 2010.

Jackson D, Borbasi S. Qualitative research: the whole picture. Pages 153-177. In Borbasi S, Jackson D, Langford RW. Navigating the maze of nursing research. An interactive learning adventure. Second edition. Sydney: Mosby Elsevier, 2008.

James W. Pragmatism. A new name for some old ways of thinking. London: Longmans, Green, and Co., 1907.

Jensen LA, Allen MN. Meta-synthesis of qualitative findings. Qualitative Health Research 1996; 6(4): 553-560.

Kalajdzievski S. An illustrated introduction to topology and homotopy. Boca Raton: CRC Press, 2015.

Kavanagh J, Campbell F, Harden A, Thomas J. Mixed methods synthesis: a worked example. In Hannes K, Lockwood C (editors). Synthesizing qualitative research. Choosing the right approach. Chichester: Wiley, 2012.

Keane N, Lawn C (editors). The Blackwell Companion to Hermeneutics. Chichester: Wiley, 2016.

Kelkel AL. Language in Husserl. In Embree L, Behnke EA, Carr D, Evans JC, Huertas-Jourda J, Kockelmans JJ, et al., editors. Encyclopedia of Phenomenology. Dordrecht, Kluwer Academic Publishers, 1997.

Kelle U. Theorization from data. In Flick U (editor). The SAGE Handbook of qualitative data analysis. Los Angeles: SAGE, 2014.

Kersten F. Phenomenological method: theory and practice. Boston: Kluwer Academic Publisher, 1989.

Kockelmans JJ (editor). Phenomenology: The philosophy of Edmund Husserl and its interpretation. New York: Doubleday & Company, 1967.

Kockelmans JJ. What is phenomenology? Some fundamental themes of Husserl's phenomenology. In Kockelmans JJ (editor). Phenomenology: The philosophy of Edmund Husserl and its interpretation. New York: Doubleday & Company, 1967.

Korhonen A, Hakulinen-Viitanen T, Jylha V, Holopainen A. Meta-synthesis and evidence-based health care - a method for systematic review. Scad J Caring Sci 2013; 27: 1027-1034.

Koukal DR. The rhetorical impulse in Husserl's phenomenology. Continental Philosophy Review. 2001; 34: 21-43.

Lawn C, Keane N. The Gadamer Dictionary. New York: Continuum, 2011.

Leavy P. Introduction. In Leavy P (editor). The Oxford Handbook of qualitative research. Oxford: Oxford University Press, 2014.

Leavy P (editor). The Oxford Handbook of qualitative research. Oxford: Oxford University Press, 2014.

Leckie G. Researcher Roles. In Given LM (editor). The SAGE Encyclopedia of Qualitative Research Methods. Thousand Oaks, CA: Sage, 2008.

Levinas E. Intuition of essences. In Kockelmans JJ (editor). Phenomenology: The philosophy of Edmund Husserl and its interpretation. New York: Doubleday & Company, 1967.

Liamputtong P. Qualitative research methods. Third edition. Melbourne: Oxford University Press, 2009.

Liamputtong P. The science of words and the science of numbers: research methods as foundations for evidence-based practice in health. Pages 3-26. In Liamputtong P (editor). Research methods in health. Foundations for evidence-based practice. Melbourne: Oxford University Press, 2010.

Liehr P, Smith MJ. Theoretical framework. Pages 111-125. In LoBiondo-Wood G, Haber J. Nursing research. Methods and critical appraisal for evidence-based practice. St. Louis: Mosby Elsevier, 2006.

Liehr PR, LoBiondo-Wood G. Qualitative approaches to research. Pages 148-175. In LoBiondo-Wood G, Haber J. Nursing Research. Methods and Critical appraisal for evidence-based practice. Sixth edition. St. Louis, Missouri: Mosby Elsevier, 2006.
Lincoln YS, Lynham SA, Guba EG. Paradigmatic controversies, contradictions, and emerging confluences, revisited. Pages 97-128. In Denzin NK, Lincoln YS (editors). The SAGE Handbook of Qualitative Research. Fourth edition. Los Angeles: Sage, 2011.

Lincoln YS, Denzin NK. Epilogue. Toward a "Refunctioned Ethnography". Pages 715-718. In Denzin NK, Lincoln YS (editors). The SAGE Handbook of Qualitative Research. Fourth edition. Los Angeles: Sage, 2011.

Lloyd Jones M. Application of systematic review methods to qualitative research: practical issues. Journal of Advanced Nursing 2004; 48(3):271-278.

Locke K. Rational control and irrational free-play: dual-thinking modes as necessary tension in grounded theory. Pages 565-579. In Bryant A, Charmaz K (editors). The SAGE Handbook of Grounded Theory. Los Angeles: Sage, 2007.

Lockwood C, Munn Z, Porritt K. Qualitative research synthesis: methodological guidance for systematic reviewers utilizing meta-aggregation. Int J Evid Based Healthc 2015; 13: 179–187.

Lockwood C, Pearson A. A Comparison of Meta-Aggregation and Meta-Ethnography as Qualitative Review Methods. Philadelphia: Lippincott Williams & Wilkins, 2013.

Lockwood C. Critiquing the contested nature of aggregation in qualitative evidence synthesis: an examination of dominant views on Interpretivism. PhD Thesis. Adelaide: University of Adelaide, 2011.

Lyons E, Coyle A (editors). Analysing qualitative data in psychology. London: Sage, 2007.

Major HC, Savin-Baden M. An introduction to qualitative research synthesis. Managing the information explosion in social science research. New York: Routledge, 2010.

Malachowski A (editor). The Cambridge Companion to Pragmatism. Cambridge: Cambridge University Press, 2013.

Malachowski A. James's holism: the human continuum. In Malachowski A (editor). The Cambridge Companion to Pragmatism. Cambridge: Cambridge University Press, 2013.

Malachowski A. Introduction: the pragmatist orientation. In Malachowski A (editor). The Cambridge Companion to Pragmatism. Cambridge: Cambridge University Press, 2013.

Malpas J, Gander H-H (editors). The Routledge Companion to Hermeneutics. London: Routledge, 2015.

Manning N. Conclusion. Pages 161-171. In Hannes K, Lockwood C (editors). Synthesizing qualitative research. Choosing the right approach. Chichester, UK: Wiley Blackwell, 2012.

Martin GD. Language Truth and Poetry. Notes towards a philosophy of literature. Edinburgh: Edinburgh University Press, 1975.

Maxwell JA, Chimel M. Generalization in and from qualitative analysis. In Flick U (editor). The SAGE Handbook of qualitative data analysis. Los Angeles: SAGE, 2014.

Maxwell JA, Chmiel M. Notes toward a theory of qualitative data analysis. In Flick U (editor). The SAGE Handbook of qualitative data analysis. Los Angeles: SAGE, 2014.

McCarthy T. The critical theory of Jurgen Habermas. Cambridge: Polity Press, 1978.

McCormick J, Rodney P, Varcoe C. Reinterpretations across studies: an approach to meta-analysis. Qual Health Res 2003; 13(7): 933-944.

McKenna WR. Epoche and Reduction. In Embree L, Behnke EA, Carr D, Evans JC, Huertas-Jourda J, Kockelmans JJ, et al., editors. Encyclopedia of Phenomenology. Dordrecht, Kluwer Academic Publishers, 1997.

McKenna HP, Slevin OD. Nursing models, theories and practice. Oxford: Blackwell, 2008.

Mertens DM. Ethical use of qualitative data and findings. In Flick U (editor). The SAGE Handbook of qualitative data analysis. Los Angeles: SAGE, 2014.

Mertens DM. Research and evaluation in education and psychology. Integrating diversity with quantitative, qualitative, and mixed methods. Third edition. Los Angeles: Sage, 2010.

Misak C. The American pragmatists. Oxford: Oxford University Press, 2013.

Misak CJ. Truth and the end of inquiry. A Peircean account of truth. Expanded paperback edition. Oxford: Oxford University Press, 2004.

Mohanty JN. The development of Husserl's thought. In Smith B, Woodruff Smith D (editors). The Cambridge Companion to Husserl. Cambridge: Cambridge University Press, 1995.

Mohanty JN. Meaning. In Embree L, Behnke EA, Carr D, Evans JC, Huertas-Jourda J, Kockelmans JJ, et al., editors. Encyclopedia of Phenomenology. Dordrecht, Kluwer Academic Publishers, 1997.

Moore EC. American Pragmatism: Peirce, James, and Dewey. New York: Columbia University Press, 1961.

Moran D. Introduction to Phenomenology. New York: Routledge; 2000.

Moran D. Edmund Husserl Founder of Phenomenology. Cambridge UK: Polity Press; 2005.

Moran D, Cohen J. The Husserl Dictionary. London: Continuum, 2012.

Morse JM. What is qualitative health research? Pages 401-414. In Denzin NK, Lincoln YS (editors). The SAGE Handbook of Qualitative Research. Fourth edition. Los Angeles: Sage, 2011.

Munn Z, Porritt K, Lockwood C, Aromataris E, Pearson A. Establishing confidence in the output of qualitative research synthesis: the ConQual approach. BMC Medical Research Methodology. 2014; 14:108.
Munn Z, Tufanaru C, Aromataris E. JBI's systematic reviews: data extraction and synthesis. Am J Nurs 2014; 114: 49–54.

Neuman WL. Social research methods. Qualitative and quantitative approaches. Sixth edition. Boston: Pearson, 2006.

Noblit GW, Hare RD. Meta-ethnography: synthesizing qualitative studies. Newbury Park: Sage, 1988.

Ormiston GL, Schrift AD (editors). The Hermeneutic tradition. From Ast to Ricoeur. Albany: State University of New York Press, 1990.

Ormiston GL, Schrift AD. Editors' Introduction. In Ormiston GL, Schrift AD (editors). The Hermeneutic tradition. From Ast to Ricoeur. Albany: State University of New York Press, 1990.

Outhwaite W. (editor). The Habermas Reader. Cambridge, UK: Polity Press, 1996.

Outhwaite W. Habermas. A Critical Introduction. Second Edition. Cambridge: Polity Press, 2009.

Palmer RE. Hermeneutics: Interpretation theory in Schleiermacher, Dielthey, Heideggerm and Gadamer. Evanston: Northwestern University Press, 1969.

Parse RR, Coyne AB, Smith MJ. Nursing research. Qualitative methods. Bowie, Maryland: Brady Communications Company, 1985.

Paterson BL. "It looks great but how do I know if it fits?": an introduction to meta-synthesis research. Pages 1-20. In Hannes K, Lockwood C (editors). Synthesizing qualitative research. Choosing the right approach. Chichester, UK: Wiley Blackwell, 2012.

Paterson BL, Thorne SE, Canam C, Jillings C. Meta-study of qualitative health research. A practical guide to meta-analysis and meta-synthesis. Thousand Oaks: Sage, 2001.

Paul R, Elder L. Critical thinking. Tools for taking charge of your learning and your life. Third edition. Boston: Pearson, 2012.

Pearson A. Evidence synthesis and its role in evidence-based health care. Nursing Clinics of North America. 2014; 49(4): 453-460.

Pearson A, Field J, Jordan Z. Evidence-based clinical practice in nursing and health care. Assimilating research, experience and expertise. Oxford: Blackwell, 2007.

Pearson A, Hannes K. Evidence about patients' experiences and concerns. Pages 221-239. In Hoffmann T, Bennett S, Del Mar C. Evidence-based practice across the health professions. Second edition. Sydney: Churchill Livingstone Elsevier, 2013.

Pearson A. Balancing the Evidence: Incorporating the Synthesis of Qualitative Data into Systematic Reviews. JBI Reports. 2004; 2: 45-64.

Pearson A, Robertson Malt S, Rittenmeyer L. Synthesising Qualitative Evidence. Philadelphia: Lippincott Williams & Wilkins, 2011.

Pesut B, Johnson J. Reinstating the 'Queen': understanding philosophical inquiry in nursing. Journal of Advanced Nursing 2008; 61(1): 115-121.

Piercey R. Paul Ricoeur. In Keane N, Lawn C (editors). The Blackwell Companion to Hermeneutics. Chichester: Wiley, 2016.

Polit DF, Tatano Beck C. Essentials of nursing research. Appraising evidence for nursing practice. Seventh edition. Philadelphia: Lippincott Williams & Wilkins, 2010.

Popay J, Rogers A, Williams G. Rationale and standards for the systematic review of qualitative literature in health services research. Qualitative Health Research 1998; 8(3): 341-351.

Pope C, Mays N, Popay J. Synthesizing qualitative and quantitative health evidence. A guide to methods. New York: Open University Press, 2007.

Pope C, Mays N (editors). Qualitative research in health care. Third edition. London: Blackwell, 2006.

Pope C, Mays N. Qualitative methods in health research. Pages 1-11. In Pope C, Mays N (editors). Qualitative research in health care. Third edition. London: Blackwell, 2006.

Pope C, Mays N. Synthesising qualitative research. Pages 142-152. In Pope C, Mays N (editors). Qualitative research in health care. Third edition. London: Blackwell, 2006.

Porritt K, Gomersall J, Lockwood C. JBI's systematic reviews: study selection and critical appraisal. Am J Nurs 2014; 114: 47–52.

Porritt K, Pearson A. The historical emergence of qualitative synthesis. Philadelphia: Lippincott Williams & Wilkins, 2013.

Porritt K. A Discursive Analysis Of Contemporary Literature Examining Qualitative Research Findings In Evidence-Based Health Care. PhD Thesis. Adelaide: The University of Adelaide, 2011.

Pusey M. Jurgen Habermas. Chichester: Ellis Horwood, 1987.

Reeder HP. The Theory and Practice of Husserl's Phenomenology. Second Edition. Bucharest: Zeta Books, 2010.

Reichertz J. Induction, deduction, abduction. In Flick U (editor). The SAGE Handbook of qualitative data analysis. Los Angeles: SAGE, 2014.

Reichertz J. Abduction: The logic of discovery of grounded theory. Pages 214-228. In Bryant A, Charmaz K (editors). The SAGE Handbook of Grounded Theory. Los Angeles: Sage, 2007. Ricoeur P. Freud and Philosophy. An Essay on Interpretation, trans. Denise Savage. New Haven, CT: Yale University Press, 1970.

Saini M, Shlonsky A. Systematic synthesis of qualitative research. New York: Oxford University Press, 2012.

Sandelowski M, Barroso J. Handbook for synthesizing qualitative research. New York: Springer, 2007.

Sandelowski M, Dochery S, Emden C. Qualitative metasynthesis: issues and techniques. Research in Nursing & Health 1997; 20: 365-371.

Scanlon J. Eidetic method. In Embree L, Behnke EA, Carr D, Evans JC, Huertas-Jourda J, Kockelmans JJ, et al., editors. Encyclopedia of Phenomenology. Dordrecht, Kluwer Academic Publishers, 1997.

Scheffler I. Four Pragmatists. A Critical Introduction to Peirce, James, Mead, And Dewey. New York: Humanities Press, 1974.

Schleiermacher FDE. The aphorisms on Hermeneutics from 1805 and 1809/10. In Ormiston GL, Schrift AD (editors). The Hermeneutic tradition. From Ast to Ricoeur. Albany: State University of New York Press, 1990.

Schleiermacher FDE. The Hermeneutics: Outline of the 1819 Lectures. In Ormiston GL, Schrift AD (editors). The Hermeneutic tradition. From Ast to Ricoeur. Albany: State University of New York Press, 1990.

Schmitt R. Husserl's transcendental-phenomenological reduction. In Kockelmans JJ (editor). Phenomenology: The philosophy of Edmund Husserl and its interpretation. New York: Doubleday & Company, 1967.

Scholtz G. Ast and Schleiermacher: hermeneutics and critical philosophy. In Malpas J, Gander H-H (editors). The Routledge Companion to Hermeneutics. London: Routledge, 2015.

Schwandt TA. The SAGE Dictionary of Qualitative Inquiry. Thousand Oaks, CA: Sage, 2007.

Shook JR, Margolis J. A Companion to Pragmatism. Oxford: Blackwell, 2006.

Simons P. Meaning and language. In Smith B, Woodruff Smith D (editors). The Cambridge Companion to Husserl. Cambridge: Cambridge University Press, 1995.

Smith B, Woodruff Smith D. Introduction. In Smith B, Woodruff Smith D (editors). The Cambridge Companion to Husserl. Cambridge: Cambridge University Press, 1995.

Smith B, Woodruff Smith D (editors). The Cambridge Companion to Husserl. Cambridge: Cambridge University Press, 1995.

Sokolowski R. Husserlian meditations. How words present things. Evanston: Northwestern University Press, 1974.

Spencer R, Pryce JM, Walsh J. Philosophical approaches to qualitative research. In Leavy P (editor). The Oxford Handbook of qualitative research. Oxford: Oxford University Press, 2014.

Spiegelberg H. The Context of Phenomenological Movement. The Hague: Martinus Nijhoff, 1981.

Spiegelberg H. Doing Phenomenology: Essays On and In Phenomenology. The Hague: Martinus Nijhoff, 1975.

Spiegelberg H. The Phenomenological Movement: A Historical Introduction. Third revised and enlarged ed. The Hague: Martinus Nijhoff Publishers, 1982.

Spiegelber H. Phenomenology through vicarious experience. In Spiegelberg H. Doing phenomenology. Essays on and in phenomenology. The Hague: Martinus Nijhoff Publishers, 1975.
Spiegelberg H. The essentials of the phenomenological method. In Spiegelberg H. The phenomenological movement. A historical introduction. Third revised and enlarged edition. Dordrecht: Martinus Nijhoff Publishers, 1982.

Stern C, Jordan Z, McArthur A. Developing the review question and inclusion criteria. Am J Nurs 2014; 114: 53–6.

Stjernfelt F. Diagrammatology: An investigation on the borderlines of phenomenology, ontology, and semiotics. Dordrecht: Springer, 2007.

Streubert Speziale HJ. Philosophy and Theory: Foundations of qualitative research. Pages 1-17. In Streubert Speziale HJ, Carpenter DR. Qualitative research in nursing. Advancing the humanistic imperative. Fourth edition. Philadelphia: Lippincott Williams & Wilkins, 2007.

Streubert Speziale HJ. The conduct of qualitative research: Common essential elements. Pages 19-33. In Streubert Speziale HJ, Carpenter DR. Qualitative research in nursing. Advancing the humanistic imperative. Fourth edition. Philadelphia: Lippincott Williams & Wilkins, 2007.

Streubert Speziale HJ. Designing data generation and management strategies. Pages 35-55. In Streubert Speziale HJ, Carpenter DR. Qualitative research in nursing. Advancing the humanistic imperative. Fourth edition. Philadelphia: Lippincott Williams & Wilkins, 2007.

Streubert Speziale HJ. Evaluating qualitative research. Pages 176-196. In LoBiondo-Wood G, Haber J. Nursing Research. Methods and Critical appraisal for evidence-based practice. Sixth edition. St. Louis, Missouri: Mosby Elsevier, 2006.

Strubing J. Research as pragmatic problem-solving: the pragmatic roots of empirically-grounded theorizing. Pages 580-601. In Bryant A, Charmaz K (editors). The SAGE Handbook of Grounded Theory. Los Angeles: Sage, 2007.

Suri H. Towards methodologically inclusive research syntheses. Expanding possibilities. New York: Routledge, 2014.

Thayer HS. Meaning and Action. A Critical History of Pragmatism. Indianapolis: The Bobbs-Merrill Company, 1968.

Thayer HS. Meaning and Action. A Study of American Pragmatism. New York: The Bobbs-Merrill Company, 1973.

The Joanna Briggs Institute. Reviewer's Manual 2014 Edition. Adelaide: The Joanna Briggs Institute, 2014.

The Joanna Briggs Institute. Reviewer's Manual 2011 Edition. Adelaide: The Joanna Briggs Institute, 2011.

The Joanna Briggs Institute. Reviewer's Manual 2008 Edition. Adelaide: The Joanna Briggs Institute, 2008.

Thorne S, Jensen L, Kearney MH, Noblit G, Sandelowski M. Qualitative metasynthesis: reflections on methodological orientation and ideological agenda. Qualitative Health Research 2004; 14(10): 1342-1365.

Timulak L. Qualitative Meta-analysis. In Flick U (editor). The SAGE Handbook of qualitative data analysis. Los Angeles: SAGE, 2014.

Toulmin SE. The uses of argument. Updated edition. Cambridge: Cambridge University Press, 2003.

Van Manen M. Phenomenology of practice. Meaning-giving methods in phenomenological research and writing. Walnut Creek, California: Left Coast Press, 2014.

Van Manen M. Researching lived experience. Human science for an action sensitive pedagogy. London, Ontario: State University of New York Press, 1990.

Walsh D. Meta-synthesis method for qualitative research: a literature review. Journal of Advanced Nursing 2005; 50(2): 204-211.

Walton DN. Informal logic. A handbook for critical argumentation. Cambridge: Cambridge University Press, 1989.

Warnke G. Gadamer: Hermeneutics, tradition and reason. Cambridge: Polity Press, 1987.

Weed M. A potential method for the interpretive synthesis of qualitative research: issues in the development of 'meta-interpretation'. Int J Social Research Methodology 2008; 11(1): 13-28.

Weinsheimer JC. Gadamer's Hermeneutics: A reading of Truth and Method. New Haven: Yale University Press, 1985.

Willig C. Interpretation and Analysis. In Flick U (editor). The SAGE Handbook of qualitative data analysis. Los Angeles: SAGE, 2014.

Woodruff Smith D. Husserl. Milton Park, Abingdon, Oxon UK: Routledge; 2007.

Zichi Cohen M. Introduction to qualitative research. Pages 131-147. In LoBiondo-Wood G, Haber J. Nursing Research. Methods and Critical appraisal for evidence-based practice. Sixth edition. St. Louis, Missouri: Mosby Elsevier, 2006.

Zimmer L. Qualitative meta-synthesis: a question of dialoguing with texts. Journal of Advanced Nursing 2006; 53(3): 311-318.