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# REFLECTION OF PHILOSOPHICAL BASIS IN FINANCIAL ACCOUNTING RESEARCH

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**Abstract**; Current financial accounting research has paid little attention to the philosophical aspects that underlie the research, Hence, the existing results provide a little contribution towards the development of accounting theory and concepts. This article aims to describe the philosophical basis in financial accounting research, which consists of ontology, epistemology and axiology. The ontology and epistemology assumptions determine research paradiam, which are functionalist, interpretive and critical (radical humanist and radical structuralist). The ontology and epistemology assumptions also define the research methodology. This article outlines the taxonomy of financial accounting research formulated by Hopper and Powel (1985) and Laughlin (1995) which can be used as a guide in conducting financial accounting research. Understanding of philosophical aspects will result in high quality financial accounting research.

Abstrak; Penelitian akuntansi keuangan saat ini telah sedikit memperhatikan aspek filosofis yang mendasari penelitian. Oleh karena itu, hasilnya memberikan sedikit kontribusi terhadap pengembangan teori dan konsep akuntansi. Artikel ini bertujuan untuk menggambarkan dasar filosofis dalam penelitian akuntansi keuangan, yang terdiri dari ontologi, epistemologi dan aksiologi. ontologi dan epistemologi menentukan paradigma penelitian, yaitu fungsionalis, interpretif dan kritis (humanis radikal dan strukturalis radikal). Asumsi ontologi dan epistemologi juga menentukan metodologi penelitian. Artikel ini menguraikan taksonomi penelitian akuntansi keuangan yang dirumuskan oleh Hopper dan Powel (1985) dan Laughlin (1995) yang dapat digunakan sebagai panduan dalam penelitian akuntansi keuangan. Pemahaman aspek filosofis menghasilkan penelitian akuntansi keuangan berkualitas tinggi.

# INTRODUCTION

Financial accounting is known as the process of recording, summarizing, analyzing financial information, and presenting company financial statements to external parties (shareholders, creditors, government, and society), these reports are in the form of income statements, capital changes, balance sheets and cash flows (Weygandt et. al., 2015). Thus it can be understood that at first, financial accounting produces products in the form of financial statement numbers and is designed as a means of management accountability to capital owners. This definition also influences the development of financial accounting research, which was initially limited to large companies and capital markets and focused on the relationship between one accounting number variable and other accounting variables, as well as non-accounting variables. Ryan et.al., (2002) stated that until now, most of financial accounting research was conducted using the mainstream approach/positivist paradigm.

As Ryan et al., (2002), Lukka (2010) also stated that in recent years, accounting research, including financial accounting, has been narrowed in terms of philosophical assumptions, methodological approaches and underlying theories. This is most likely due to the hegemony of positive paradigms in accounting, which uses more statistics, emphasizing on less deepened generalizations and analyzes. Isgiyarta (2011) states that the results of accounting research with a positive paradigm are rarely able to become the basis for the development of accounting concepts and practices. Dye (2001) explains that research that is too focused on technical matters and not paying attention to conceptual aspects will endanger the science itself. Therefore it can be said that research that doesn't pay attention to philosophical aspects will not be able to produce good 'body of knowledge'.

Research paradigm determines the philosophical dimensions of social science. According to Jonker and Pennink (2010) in Wahyuni (2012), paradigm is a set of fundamental assumptions, beliefs, an individual's perspective on the world and reality, which then serves as a frame of thinking and guides the researcher's behavior. Creswell (2007) and Neuman (2003) emphasize the importance of establishing a research paradigm because it will substantially influence how one conducts social research and how the researcher frames and understands social phenomena. The two main philosophical foundations that distinguish paradigms are ontology and epistemology (Saunders et.al., 2009). Ontology and epistemology are fundamental assumptions of the nature of science or often also called the philosophy of science. Ontology is a person's belief in reality, while epistemology is a belief in how science is produced, understood and communicated, based on fundamental beliefs about reality (Surisumiantri, 2001). A good research design is determined by the philosophical perspective of the researcher in understanding the position of ontology and epistemology. Understanding of ontology and epistemology will ensure the interrelationship between research objectives and design, which will produce quality research (Easterby et. Al., 2002).

Although research is understood as a process of discovery, interpretation and communication of new knowledge, until now there are still debates about the source of knowledge itself. Financial accounting is one of the fields which, for more than forty years, was also involved in the debate (Ryan et al., 2002). Researchers claim that each of the paradigms they adhere to is the best paradigm for financial accounting research. Basically, paradigms cannot be debated to determine which one is the best, because each paradigm has philosophical assumptions and different nature of science fundamentals. This paper provides an overview of various philosophical perspectives that can be used as the foundation of accounting research, especially financial accounting.

#### DISCUSSION

#### Ontology

The two main dimensions of research philosophy that distinguish paradigms are ontology and epistemology (Saunders et al., 2009). Both are related to the nature of knowledge and the development of knowledge. Ontology or 'theory of being' is a branch of philosophy that studies the nature of reality and existence. Consequently, ontology

explains someone's most fundamental beliefs about reality, whether it is the reality of science, self reality, social reality, and so on (Kamayanti, 2016). In the context of the philosophy of science, Surisumiantri (2001) states that ontology is related to what object is being studied by the science? What is the essential form of the object? What is the connection between the object and human ability to process (such as thinking, feeling, and sensing) that produce knowledge?

Burrel and Morgan (1979) explain that ontology assumptions are assumptions about "the core of the phenomenon being studied", that is the nature of reality. The basic question faced by researchers related to ontology is whether the reality being studied is something outside the individual (objective) or is the result of individual cognitive products (subjective). On the objective dimension, ontology is known as realism, which assumes that the social world exists independently from individual appreciation. Realists believe that there is only one reality whose existence exists outside the researcher and can be described objectively (Collis and Hussey, 2009). On the subjective dimension, ontology is known as nominalism (which assumes that the social world outside the individual's cognitive comes from the name, concept and label used to construct reality).

The problem that often arises related to realism is that a person is often not aware of the actual reality, one's awareness is often limited to his perception of the reality presented in front of him. The empirical realist philosopher, David Hume (1711-1716) states that reality lies on the object of perception and we construct reality behavior when making relations between different events. Beliefs about causality and general law of behavior such as Newton's laws of motion are concluded from observations of the relationship of recurring events. For realists, the way to determine whether a statement is true or false is to compare it with empirical evidence (Ryan et al., 2002).

On the opposite side, idealism was first introduced by Bishop Berkeley who stated that perceived quality, such as color or texture, is a mental representation of the sense of data, and that mental representation forms the reality of what we experience. Therefore knowledge is built mentally and the truth or error of a statement can be tested not in terms of its compatibility with reality, but in terms of its coherence with other beliefs of individuals or with the beliefs of others. This leads to the idea that knowledge and reality can be formed socially (socially constructed), and it suits the position of idealist ontology.

Peixinho and Coelho (2005) state that the two ontologies above, realism and idealism both have weaknesses. The main problem in realist ontology is the existence of a gap between output/appearance of reality perceived by reality itself. The problem that arises from idealism is the difficulty of determining the truth, what is right is what we choose to believe to be the truth, or what is believed by society to be true. The proposition that truth does not have an objective basis is true if one considers that knowledge is a product of the mind. Of the two opposing sides of ontology, Morgan and Smircich (1980) formulated six ontology assumptions (Table 1).

Table 1. Morgan and Smircich's Assumptions of Ontology

- 1) Reality as a concrete structure (naïve realism)
- 2) Reality as a concrete process (transcendental realism)
- 3) Reality as a contextual field of information (conceptual relativism)
- 4) Reality as a symbolic discourse (balanced idealism)
- Reality as a construction (social constructionism)
- Reality as a projection of human imagination (idealism)

Source: Morgan and Smircich (1980)

From the six ontology assumptions above, Morgan and Smircich (1980) argue that the world can be seen from various points of view. The assumptions of ontology provide an instrument to see reality from the most objective point of view (concrete structure) to the most subjective point of view (projection of human imagination).

### **Epistemology**

Rorty (1979) in Khin and Heng (2012) explains that the term 'epistemology' emerged in the 17th century Europe, which was driven by the development of knowledge in the era of enlightenment. The need to understand reality or the outside world requires the supervision/pre-understanding criteria of the world, that is epistemological assumptions. Burrel and Morgan (1979) introduced two types of epistemology from an objective and subjective perspective. The objective dimension of epistemology is called the positivist perspective, which considers knowledge as something that can be acquired. While the subjective dimension of epistemology is called a non-positivist perspective, which considers knowledge as something that must be experienced. Bryman and Bell (2007) in Abubakar et al., (2016) state that from a positivist perspective, the social world can be studied using procedures and principles that are the same as natural science. Therefore, researchers can maintain their independent position when discussing the objective world under study. On the other hand, anti-positivists assume that the principles and procedures used in natural science research cannot be applied in social sciences, because what is learned in social sciences is humans and institutions. The social world can only be understood from the point of view of people who involve directly in the activities under study (Burrel and Morgan, 1979). Table 2 illustrates six epistemologies following six ontology assumptions.

Table 2. Epistemology of Morgan and Smircich

Ontology Assumption	Epistemological Function
1) Naïve realism	To build positivist science
2) Transcendental realism	To study systems, processes and changes
<ol><li>Conceptual relativism</li></ol>	To map context
4) Transcendental idealism	To understand the pattern of symbolic discourse
5) Social constructionism	To understand how social reality is constructed
6) Idealism	To get phenomenological knowledge and enlightenment

Source: Morgan and Smircich (1980)

The ontology position of the researcher will influence his/her epistemological perspective. Researchers who believe in objective reality, will use a research design that is able to measure that reality. The two key underlying assumptions are reality can be reduced to its components and the causal mechanism that connects these components to be determined precisely and specifically. In contrast, researchers who believe in subjective reality tend to use a research design that describes and explains social phenomena. This perspective does not emphasize on the measurement or the use of universal law, reality is a creation of the human mind and researchers will gain wealth from one's understanding (Ryan et al., 2002)

## Axiology

Axiology is a fundamental belief regarding the purpose of the existence of science to reveal the benefit of science for humans (Abdullah, 2011). While the methodology is related to the model used for the research process in a particular paradigm. The methodology will be described in the discussion of other parts of this paper. Surisumiantri (2001) stated some basic questions related to axiology: what for is the knowledge of science used? What is the connection between how to use it with moral rules? How to determine the objects being studied based on moral choices? What is the connection between procedural techniques which are the operationalization of scientific methods and moral/professional norms?

Wahyuni (2012) states that axiology is related to ethics, including the role of value in research and the researchers' behavior in relation to the subject under study. Axiology is the value system that should be adhered to when developing and applying science. Anggoro (2010) explains that value is abstract and is a concept or principle, that once implemented by the subject, can bring equality in attitude or opinion, but can also cause differences. Contradictions or differences are caused by feelings/tastes, hence the problem of value cannot be debated. In the context of science, the problem that continues to rise is whether or not the value is meaningful. Every science is always based on certain values. Karl Popper who is accustomed to using natural science says

that in conducting experiments, a researcher must be value free. Whereas Habermas states that science must be of value and emancipatory to the oppressed and benefit others

As a result, there are two views related to science and value (Abdullah, 2011). The first view states that science is for science, which means that science is free from value. This view is in line with the positivist ideology which believes that science will develop rapidly if it does not contain any value other than scientific value. Research must be done in a value-free manner, researchers must be independent towards data and maintain objectivity. Science must provide trusted results, have a certain basis, objective and can be tested critically. While the second view is critical view, which states that science is not value free. Value-free science will be dangerous to the existence of science itself and to human life (Guba and Lincoln, 2005).

#### Research paradigm

The assumption of ontology and epistemology will determine research paradigm. Burrel and Morgan (1979) classify four kinds of paradigms based on ontological assumptions (realism-nominalism), epistemology (positivist-non-positivist), human environment (determinism/human activity determined by voluntarism/consider humans to have free will), and methodology (nomothetic/research conducted with systematic techniques and procedures such as natural science ideographic/research conducted by obtaining direct knowledge of the subject under study, allowing subjectivity to develop during the research process). The paradigms are functionalist paradigm, interpretive paradigm, radical humanist and structuralist radical paradigm.

Functionalist paradigm assumes that society has a concrete and regular existence. Scientific theory is obtained objectively by using empirical evidence. This paradigm seeks to maintain the status quo in research and examine the relationship of social variables that are expected to produce generalizations and universal principles. The research is conducted with the assumption that social issues are already out there (given) and only to be studied/confirmed so that there is no attempt to change the existing issues. This paradigm tries to develop a theory based on a deductive approach with a review of the literature and operationalize it in research. The hypothesis is then developed and tested using existing data based on statistical analysis. Therefore, this approach tends to confirm, revise, or expand (refinement) through cause and effect analysis (causal analysis).

Interpretive paradigm sees the social world as a process created by individuals. Social reality is the awareness of the individual, the network of assumptions and intersubjective meanings. Interpretive paradigm emphasizes on the role of language, interpretation and understanding in social science. This approach focuses on the subjective nature of the social world and seeks to understand it from the frame of thinking of the object being studied. The function of the theory in interpretive paradigm is to interpret. How good or bad the theory is, in interpretive paradigm, is seen from its capacity to interpret and reveal findings that are local (Triyuwono, 2013). To understand a particular social environment, researchers must explore the subjective experience of the doers. Interpretive research does not place objectivity as the most important thing, but recognizes that in order to gain deep understanding, the subjectivity of the doers must be explored as deeply as possible, this allows a trade-off between objectivity and the depth of research findings (Efferine et, al., 2004).

Chariri (2009) states that radical paradigm of humanism places reality as something socially constructed and criticizes the existence of the status quo. Adherents of this paradigm assume that human consciousness is dominated by the ideological superstructure of social system, which results in false alliances or consciousness. The main concern of this paradigm is to explain how ideological domination occurs and how to find ways for humans to be free from such domination and exploitation. In the context of this paradigm, the development of theory is based on a political agenda. This is due to the purpose of the theory, which is to test the legitimacy of social consensus about meaning and to reveal communication distortions and educate individuals to understand the ways that cause such distortions (Forester 1983 and Sartre 1943).

Essentially, this paradigm seeks to criticize and explain why social reality is formed regarding to what reasons or interests lie behind the formation of social reality (Chariri, 2009).

The structuralist radical paradigm assumes that reality is objective and concrete. This paradigm is based on ideology that seeks to make radical changes to structured reality. This paradigm is based on four ideas, they are (1) totality, which emphasizes the relationship between totality and its constituents; (2) structure, which is a configuration of social relations; (3) contradiction, which considers that the structure or social formation contains a relationship of contradictions and antagonistic relationships that can destroy themselves; (4) crisis, contradiction will produce political and economic crises that indicate transformation from one totality to the totality of the other, in which one structure will be replaced by another structure with different characteristics (Peixinho and Coelho, 2005). The formulation of the theory in this paradigm is based on the model of knowledge seeking (mode of inquiry) which is critical, dialectical and historical. The aim of the theory is to understand, explain, criticize and act on the basis of structural mechanisms contained in a social world or organization with the main goal of carrying out transformation through collective resistance and radical changes (Heydebrand, 1983 in Chariri, 2009). Thus the paradigm of radical humanist and radical structuralist are both aimed at criticizing the social reality that occurs.

# Taxonomy of Financial Accounting Research - Taxonomy of Hopper and Powell (1985)

Ryan et al. (2002) explained that some taxonomies for financial accounting research are currently available. The use of the right paradigm in accounting research will be very helpful in developing accounting theories. One taxonomy that is often used by financial accounting researchers is the taxonomy of Hopper and Powell (1985). Using the model of Burrell and Morgan (1979), Hopper and Powell (1985) divide accounting research into three paradigms: mainstream accounting research, interpretive accounting research, and critical accounting research. The functionalist research paradigm in the model of Burrell and Morgan is consistent with the mainstream accounting paradigm in Hopper and Powell's taxonomy (Chua, 1986; Ryan et al., 2002). For instance, the adoption of a certain theory to test hypotheses is in line with positivist epistemological assumptions based on methods often used in natural sciences.

The interpretive accounting research paradigm adopts a different approach from functionalist accounting research. This approach was adopted from the Burrell and Morgan model, so that researchers have a good understanding of the problem of "social nature of accounting" that is being investigated based on human behavior (Ryan et al., 2002). The paradigm of critical accounting research includes the radical humanist and radical structuralist paradigm according to the paradigm model of Burrell and Morgan (1979). Therefore, Hopper and Powell (1985) argue that deficiencies associated with subjective-objective dimensions in the Burrell and Morgan (1979) model can be overcome. In the critical accounting research paradigm, researchers acquire knowledge with qualitative methods, similar to the interpretive paradigm (Hannah, 2003). Hopper and Powell's (1985) taxonomy is illustrated in figure 1 below.

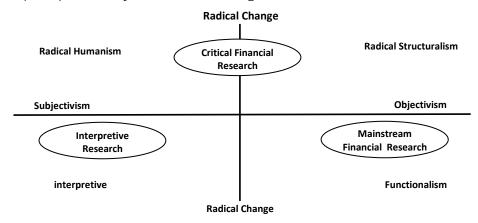


Figure 1 Taxonomy of Hopper and Powel Financial Accounting Research (1985)

# Laughlin Taxonomy (1995)

Laughlin (1995) identified the taxonomy of financial accounting and finance research based on Burrel and Morgan (1979) paradigm, which consists of accounting research and mainstream finance (positivist), interpretive and critical accounting research. Laughlin's taxonomy (1995) used criteria in terms of theory, methodology and characteristics of change to distinguish three taxonomic dimensions of financial accounting research. Laughlin's taxonomy (1995) is shown in Table 3.

Table 3 Taxonomy of Financial Accounting Research according to Laughlin (1995)

	Mainstream Financial	Critical Financial	Interpretive Financial
	Accounting Research	Accounting Research	Accounting Research
Characteristics of Theory	_		
Ontology belief	The world is general and objective, hence a general world can be discovered	Generalizations are allowed	Generalizations are not allowed
Role of theory	There is a clear theory to test hypotheses	Theory is marginal, with a broad understanding of relationships in society	No theory or hypothesis is needed
Characteristics of methodology	_	,	
Role of the	The researcher is	The researcher is part	The researcher is part of
observer	independent	of the discovery process	the discovery process
Characteristics	Structured, quantitative	Approaches can be	Unstructured,
of method	method	identified but can change in actual situations, qualitative	qualitative
Data sought	Cross-sectional data,	Longitudinal data, in	Longitudinal data, in
	selective, refers to the	terms of case studies,	terms of case studies,
	hypothesis	descriptive and analytical	descriptive
Conclusions	Conclusions based on	Conclusive based on	Less conclusive, but
	findings	the theory used,	empirically rich and
** 41.41.		empirically rich	detailed
Validity criteria	Use statistics	Meaning by the researcher	Meaning by the researcher
Characteristics	Does not emphasize on	Emphasize on the	Does not emphasize on
of Change	the change in status quo	change in status quo	the change in status quo

Source: Laughlin (2005) in Peixindo and Coelho (2005)

The above taxonomy explains that mainstream paradigm is a research that is closely related to accounting and financial functions. Researchers in this paradigm have an objective view of society, deterministic individual behavior, relying on empirical observation and adopting positivist research methodology. Researchers of classic mainstream financial accounting are not motivated to change the world, the theory built is neutral and focuses on testing general law that guides social life (Peixinho and Coelho, 2005).

Ryan et al. (2002) also explains the dominant research methodology in financial accounting. Researchers must understand the differences between the theoretical and empirical domains of research. More effort is needed for financial accounting researchers to associate theoretical concepts embedded in financial models and empirical observations. The growth and consolidation in the financial accounting field is largely due to the development of rigorous theoretical concepts and empirical testing that seeks to link the theory and reality of financial accounting, this forms a dominant methodology in financial accounting research.

### Two Dimensions of Financial Accounting Research

Peixindo and Coelho (2005) state that the philosophical discussion and taxonomy of accounting research above are too complicated to understand by researchers who enter this field of research. Therefore Peixindo and Coelho (2005) made a more comprehensive mapping for accounting and financial research, which was divided into two perspectives: objective perspective (perspective A) and subjective perspective (perspective Z). The mapping is based on philosophical thinking and methodology from Mathew and Parera (1991), Blaikie (1993), Johnson and Duberley (2000), Sekaran (2000), Easterby et al. (2002) and Ryan et al. (2002). Figure 2 below describes two dimensions of accounting mapping and financial research, which are relevant to be applied in financial accounting research.

The two main assumptions underlying Perspective A (Figure 2) are (a) reality is objective and is outside the researcher and (b) knowledge is significant if it is based on observations of the external reality. (Peixindo and Coelho, 2005). All subjective biases in this perspective research must be eliminated. Theory is used to form hypotheses, to explain causal relationships between independent and dependent variables. Testing hypotheses related to the nature of reality will help researchers to validate theories related to the phenomenon under study. The data used in the study is objective data and can be replicated. The methodology used in general is based on quantitative methods which include measurement and verification. Perspective Z (subjective) is based on the idea that reality is formed socially. The task of researchers in this perspective is to appreciate the difference in construction and the meaning of experience given by people. Researchers must understand and explain why people have meanings of different experiences (Easterby et al., 2002). Qualitative research method is used in this perspective to understand complex situations that cannot be explored using quantitative method.

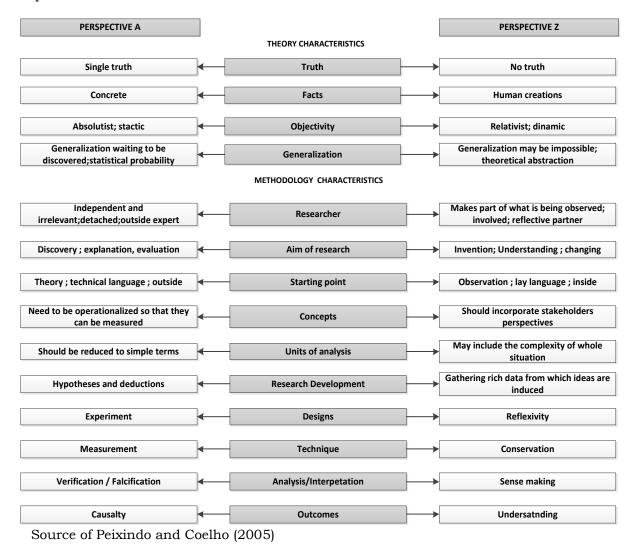


Figure 2. Two Dimensions of Accounting and Financial Research

The general idea contained in perspective A is often used in financial accounting research in positivist paradigm. Johnson and Duberley (2000) state that positivist terms are rarely alluded to in accounting and financial journals. This does not mean that financial accounting researchers are not familiar with the terms. Most financial accounting research is conducted using the positivist paradigm, but the researcher does not explicitly mention the reflection of philosophical perspectives adopted in the study (Johnson and Duberley, 2000).

Peixindo and Coelho (2005) explain that the lack of discussion of philosophical aspects in financial accounting research needs to be considered and corrected. The fact that most accounting articles and positivist financial management do not discuss the philosophical side can support the notion that positivistic perspectives are insufficient to prove social phenomena. Abdel-khalik and Ajinkya (1979) explore several methodological frameworks and conclude that positivistic scientific methods must be the "ideal" method in accounting research. However, Tomkins and Groves (1983) oppose this conclusion by saying that positivist scientific methods should not have a special place in accounting research. The suitability of research method depends on the nature of the phenomenon under study. Unlike the scientific method, naturalistic method is based on realism, holism and analytical methods (Ryan et al., 2002). Naturalistic method must be used if the nature of the phenomenon under study shows characteristics that are closer to perspective Z. If the researcher considers that reality is a projection of human imagination, then it makes no sense to use a positivist method because, according to perspective Z, reality is not objective and generalization is impossible to obtain (Peixindo and Coelho, 2005).

# Methodology and Financial Accounting Research Methods

Gaffikin (1989) in Abdullah (2011) describes the importance of a methodology in accounting research and development. Along with the increase of research in accounting, Gaffikin assumes that many researchers only apply dogmatic methodology. A good research methodology is designed based on a philosophical foundation and not on the technical argument. Methodology determines the procedure used to compile and test prepositions in order to obtain valid knowledge. Procedures that are justified by philosophical arguments are based on knowledge obtained from philosophy, whereas philosophical knowledge is derived from epistemology and ontology (Abdullah, 2011). Epistemology sets the criteria for acquiring true knowledge about a reality. Ontology is the science of existence/reality, whether existence is objective outside the researcher or is subjective and is the result of human mind. The methodology derived from ontology is related to the nature of "existence" which is the object of investigation, thus it answers the question of "what". Assumptions about epistemology and ontology will determine the methodology.

Method and methodology are two different things. Sarantakos (2005) explains that methodology refers to a model for conducting research in the context of a particular paradigm. Methodology consists of a series of basic beliefs that guide researchers to select a particular set of research methods among the other methods. Since methodology is closer to research practice than philosophical concepts in paradigm, many researchers often say that they conduct "qualitative" research rather than mentioning that they have conducted "interpretive research".

Research method consists of a series of specific procedures, tools and techniques for acquiring and analyzing data. Research method is something a-theoretical, which is independent of methodology and paradigm (Sarantakos, 2005). Thus a research method, for example an interview, can be used in a different methodology. In other words, the method is a practical application in conducting research while the methodology is the theoretical and ideological basis of the research method. A research design is important to link the methodology and a series of feasible research methods to answer research problems related to the social phenomena under study (Wahyuni, 2012). Financial accounting research that uses mainstream/positivist paradigm will apply quantitative research methodology in formulating the research method to be used. While financial accounting research that uses a non-positivist paradigm (interpretive and critical) will apply qualitative research methodology.

# Quantitative Research Methodology

Maree (2010) in Abubakar et al., (2016) states that quantitative research is a research method which uses numerical data from samples in a particular population, to generalize the results to the field/population being studied. Commonly, quantitative research will use statistical analysis for data testing and analysis (Adams et al., 2009). Therefore, quantitative research can be defined as making conclusions based on evidence obtained from data (usually in numerical form) and statistical analysis using deductive reasoning. This whole process is empirical. The research design of quantitative research methodology can use various methods in collecting data (e.g. experiments, surveys/questionnaires, archival), statistical analysis and mathematical modeling (Hammersley, 2012 in Villiers and Fouche, 2015).

The researcher needs to identify the dependent and independent variables in the study to determine the appropriate data collection method. The independent and dependent variables have a causal relationship, where the independent variable is the affecting variable while the dependent variable is the affected variable (Repko, 2012). The formulation of the dependent and independent variables is based on the theory underlying the research.

#### Qualitative Research Methodology

Bog and and Taylor (1984) in Wahyuni (2012) state that qualitative research is one of the research procedures that produces descriptive data in the form of speech or writing and the behavior of the people being observed. Through qualitative research, researchers can recognize subjects and feel what they experience in everyday life. Maree (2012) describes qualitative research as a research that seeks to collect descriptive data regarding specific phenomena in order to obtain an understanding of what is being observed, and not to prove a hypothesis (Abubakar et al., 2016). Thus, qualitative research methodology can be defined as a research that produces evocative data, which is obtained from the experiences and perceptions of researchers which are then written. Qualitative research experiences rapid growth and becomes a recognized research approach in various disciplines, such as anthropology, sociology, accounting and education (McKerchar, 2008).

Because of its development over time, qualitative research methodology is used to summarize a number of theoretical frameworks (Flick, 2008). Ravitch and Riggan (2012) describe theoretical framework as a way to connect all elements of the research process, which is the specific research design in qualitative research methodology. The theoretical framework is the backbone of the research design and the starting point of qualitative research regarding a particular phenomenon (Villiers and Fouche, 2015). The theoretical framework of qualitative research consists of grounded theory, phenomenology, ethnography, case study, and narrative biography (Creswell, 2015).

#### MIXED RESEARCH METHODOLOGY (MIXED METHOD)

The use of mixed methodology consisting of quantitative and qualitative method used for data collection is increasing in accounting research (McKerchar, 2008). The incorporation of qualitative and quantitative method is an interesting issue because of the various epistemological and ontological assumptions (components) and paradigms associated with these two methods (Kidd et al., 2011). Researchers who use mixed methodology can overcome paradigmatic problems by drawing strengths from both methods of data collection to reduce the weaknesses of each method. The use of mixed methods is very identical to the pragmatic paradigm that does not indicate the type of research methodology that must be applied by researchers, all methods in this paradigm can be accepted. Research in the pragmatic paradigm moves beyond quantitative and qualitative arguments and recognizes the value of both to exploit strengths and reduce each other's weaknesses (McKerchar, 2008).

The main challenge of mixed methodology is selecting techniques of data collection to achieve triangulation of results and improve the validity of research findings. Triangulation is the use of mixed methods to validate research results, thus the research can apply strengths and reduce the weaknesses of each approach, each method in the mixed method is used to assess the same phenomenon (Aagaard et al,

2014 in Villiers and Fouche, 2015) This mixed data collection technique can be applied sequentially or simultaneously, and may fulfill multiple objectives that allow the results of one data collection method to provide information on other data collection methods (McKerchar, 2008). For example, the results of data collection method with Focus Group Discussion inspire questions used for questionnaires as a final method to test hypotheses related to a certain financial accounting phenomenon.

#### CONCLUSION

The discussion in this paper begins by discussing two philosophical foundations in financial accounting research: ontology (theory of being/one's perspective in seeing reality) and epistemology (theory of knowledge/beliefs regarding how knowledge is produced, understood, used and communicated). By using these two philosophical foundations and assumptions about human nature and methodology, Burrel and Morgan (1979) formulate four kinds of paradigms used in social research, they are functionalist paradigm, interpretive paradigm, radical humanist paradigm and radical structuralist paradigm.

Hopper and Powell (1985) and Laughlin (1995) compile a taxonomy of accounting research using the paradigm of Burrel and Morgan. The taxonomy is relevant to be applied in financial accounting research. Referring to Hopper and Powel, financial accounting research can be grouped into three types: mainstream financial accounting research, interpretive financial accounting research and critical financial accounting research. Laughlin also classifies financial accounting research into mainstream, interpretive and critical research, adding three more specific criteria related to the characteristics of theory, characteristics of methodology and characteristics of change.

This paper also discusses financial accounting research mapping compiled by Peixindo and Coelho (2005), which is useful as an initial guide to the philosophical aspects of financial accounting research, especially for those who have just got into financial accounting research. Peixindo and Coelho's (2005) mapping is divided into two perspectives: objective perspective (perspective A) and subjective perspective (perspective Z). The division of the two perspectives is based on criteria (a) characteristics of theory (consisting of the nature of truth, facts, objectivity, generalisability) and (b) characteristics of methodology (consisting of the role of the researcher, research objectives, research starting point, nature of the concept, unit of design, research development, research research analysis, techniques, analysis/interpretation and results).

An understanding of philosophical basis of financial accounting research is needed to keep accounting science and theory growing. The development of thought and accounting theory (accounting thought) is strongly influenced by the basic assumptions used and the way of classifying by the thinkers. Financial accounting research can be conducted in a different research paradigm, which is based on totally different ontological and epistemological assumptions. Hence there is no right or wrong perspective in the process of financial accounting research. Researchers who have a deep understanding of philosophical aspects will produce high-quality financial accounting research.

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