GROUNDED THEORY REVIEW
An international journal

Aligning Critical Realism and Classic Grounded Theory

Sandra Carless-Kane, Faculty of Nursing, University of Calgary, Canada

Lorelli Nowell, Faculty of Nursing, University of Calgary, Canada

Abstract

Viewing research designs from a methodological standpoint and a philosophical lens or worldview can amplify how the *doing* of research may elicit meaning from people's experiences. Notably, doing research is more than a stepped approach or formal plan, as research questions are invariably tied to various philosophical perspectives and their underlying assumptions. For researchers looking to utilize classic grounded theory methodology, a critical realist lens offers a useful perspective to understand experiences in the social world and gain a more comprehensive understanding of the complexities and dynamics at play. This approach allows researchers to move beyond simply describing the observed social experiences and delve into the causal mechanisms that underpin them. As a result, the theories developed may be more robust and insightful in explaining the social experiences being investigated. To achieve robust theory development, it is important to consider the alignment between the philosophical perspective and the research methodology. Critical realism and classic grounded theory complement each other in the following ways: 1) seeking a clear understanding of reality, 2) appreciating the subjective experience of individuals and the objective reality of the world around them, 3) developing insight into underlying causal mechanisms and processes, and 4) using multiple perspectives to shape a

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

comprehensive understanding of reality. In this paper we highlight challenges and benefits that are inherent within this philosophical-methodological complement as a helpful guide for researchers conducting classic grounded theory research underpinned by a critical realism lens.

Keywords: Classic Grounded Theory, Critical Realism, Research Paradigms, Worldview

In this article, we explore the relationship between the principles that underline critical realism and those that underscore classic grounded theory methodology. The interdependence among philosophical worldviews and research designs helps create a framework researchers can utilize to shape their research approach. By examining the correlation between critical realist philosophical perspectives and classic grounded theory research methodology, researchers can envision the applicability of this philosophical-methodological complement. In the upcoming sections, we will describe ontology and epistemology and their relationship to research. We will then describe the classic grounded theory methodology and its openness to varying philosophical perspectives. Next, we will discuss critical realism from a philosophical perspective and its related ontological and epistemological foundations. With an understanding of the methodology and philosophical perspective, we describe four areas of alignment between critical realism and classic grounded theory. Throughout, we offer guiding points for researchers to demonstrate the connections mentioned above.

The Relationship Between Ontology and Epistemology

The fundamental principles of ontological and epistemological considerations are rooted in how we perceive and comprehend reality and decide on the most effective means to study

Published by: INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

it. Ontology refers to the branch of philosophy that deals with the nature of existence and the interpretation of reality (Davies & Fisher, 2018; Hathcoat et al., 2019). The idea of reality can exist in one of two ways: *independent of* human experience or *dependent on* human experience. Thus, how humans view reality shapes their understanding of it. If reality is viewed as independent of human experience, then it can be studied through objective observation and experimentation, where researchers can gain a more accurate understanding of reality by removing personal biases and subjective interpretations. However, if reality is viewed as dependent on human experience it may be examined by exploring different cultural perspectives, historical contexts, and individual experiences that shape our understanding of reality (Hathcoat et al., 2019). Researchers can also examine the ways in which our beliefs and biases may influence our perceptions of the world where subjective experiences and interpretations become an important part of the research (Davies & Fisher, 2018; Rawnsley, 1998).

Conversely, epistemology is concerned with studying reality and how we learn about the world around us (Davies & Fisher, 2018; Hathcoat et al., 2019). Epistemology refers to the methods and processes used to acquire knowledge, the nature of truth, and the limits of knowledge (Hathcoat et al., 2019). Thus, knowledge acquisition can be achieved through objective or subjective means or a combination of both (Davies & Fisher, 2018). Acquiring knowledge through objective means involves gathering information that is based on facts, evidence, and logic through scientific research, experimentation, observation, and analysis (Creswell & Creswell, 2018). Additionally, knowledge acquired through subjective means involves relying on personal experiences, emotions, and perspectives through intuition, personal reflection, and introspection (Creswell & Creswell, 2018). Subjective knowledge

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

varies from person to person based on social, cultural, and historical contexts, thus combining objective and subjective knowledge can help researchers gain a more complete understanding of the world around them.

Classic Grounded Theory Methodology

In the 1960s, in direct response to the positivist perspective of reality and the deductive methods to explore it, sociologists Glaser and Strauss (2011) developed a grounded theory research methodology focused on theory generation rather than theory verification. Glaser and Strauss (2011) claimed that the positivist aspects of modern science were preoccupied with proving the existence of reality rather than allowing a theory to explain the nature of reality. Thus, their grounded theory research methodology aimed to discover a core concept within the research data that explains how individuals in certain social situations resolve what they perceive to be their main concern (Glaser & Strauss, 2011; Holton & Walsh, 2017). This core concept is the central idea around which other categories of data pivot. Grounded theory research aims to develop an explanatory theory *grounded in* people's perspectives within social situations. The systematic research approach of the methodology offers individuals a clear and well-grounded explanation of their main concern rather than merely describing it (Holton & Walsh, 2017). Thus, the nature of a grounded theory is that it emerges from the data rather than being validated by it (Glaser, 1998).

Classic grounded theorists use an inductive approach to understand people's behaviour in social situations where they derive an overarching theory from real-world data (Glaser & Strauss, 2011). The inductive approach is a reasoning process that starts with specific observations or evidence and uses them to develop general conclusions or theories (Glaser & Strauss, 2011). The specific observations or evidence are represented by the

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

participants' observations and interpretations, which are privileged above those of the researchers (Glaser, 1978; Glaser & Strauss, 2011). Thus, researchers need to adopt an "abstract wonderment" stance toward the social issue and how it is handled (Glaser, 1992, p. 22). Researchers collect and analyze data systematically and iteratively to identify patterns and relationships within the data that lead to eventual theory development (Glaser & Strauss, 2011). Ultimately, the resultant grounded theory offers an explanation rather than validating or verifying assumptions about what is happening for people within the substantive area.

Classic Grounded Theory Methodology and Philosophical Perspectives

Classic grounded theory methodology is a research approach that focuses on developing theories based on empirical data. As such, any philosophical perspective that provides a framework for understanding how social experiences are shaped by broader social, political, and economic factors can be used to underpin grounded theory methodology (Birks & Mills, 2015). Further, it is essential to note that philosophical perspectives that emphasize the importance of understanding the subjective and contextual nature of human experience while accounting for broader structures and mechanisms that shape social experiences are particularly useful in grounded theory methodology (Birks & Mills, 2015). Other philosophical perspectives, such as symbolic interactionism and pragmatism, are also commonly used in grounded theory methodology because they provide frameworks for understanding how individuals create meaning and interpret the world (Birks & Mills, 2015; Holton & Walsh, 2017). Ultimately, the choice of philosophical perspective in classic grounded theory methodology depends on the researcher's understanding of the phenomenon being studied, the research question, and the approach that best allows for the development of a theory that is grounded in the data and the experiences of the individuals being studied.

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

Key Methodological Features of Classic Grounded Theory

Classic grounded theory methodology is a research approach that emphasizes discovering new theories or concepts through a robust and systematic approach. The systematic and iterative approach to a classic grounded theory involves the following general methods: coding processes, constant comparative analysis of codes and categories to identify a core category and related categories, theoretical sampling, and memoing to capture insights and ideas about the nature of the relationships, connections, and patterns within the data (Holton & Walsh, 2017).

Coding involves systematically breaking down and analyzing the data to identify patterns and relationships, which helps develop categories and the eventual theory (Glaser & Strauss, 2011; Holton & Walsh, 2017). Open coding is conducted on initial data collection to identify commonalities and differences in the data. The patterns and relationships in these codes lead to category formation and an eventual identification of a core category. The core category represents the central idea that emerges from data analysis (Holton & Walsh, 2017). Selective coding requires a cessation of open coding and delimit coding – it focuses only on identifying patterns and relationships in the data that relate to the core category and related categories (Glaser, 1992).

Theoretical sampling is a critical method that permits robust theory development (Alvesson & Sköldberg, 2018). It guides researchers to collect data through intentionally selecting participants or data sources based on their potential to advance the theory developed by saturating the core category and related categories (Glaser, 1992; Holton & Walsh, 2017). Theoretical saturation occurs when new data no longer adds to or changes the emerging theory. Without conducting theoretical sampling, researchers may struggle to identify when

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

theoretical saturation has been reached or may overlook important data, thereby producing a thin and insignificant theory that does not adequately represent the data.

Another crucial feature of classic grounded theory methodology is memo writing in which ideas and insights that occur to researchers during the data analysis process are memoed (Glaser, 1992). These memo entries provide the collected body of evidence related to idea and insight developments. Further, they serve as a way for researchers to reflect on the data and make connections between different pieces of information, and identify patterns in the data (Alvesson & Sköldberg, 2018; Holton & Walsh, 2017). These key features of classic grounded theory help ensure researchers remain grounded in the data and that their ideas and insights are based on the evidence that has been collected. In this way, the emerging theory holds practical relevance and applicability to real-world problems and social experiences (Birks & Mills, 2015; Glaser & Strauss, 2011).

Critical Realism

Critical realism, as a philosophical worldview, seeks to understand the social structures and underlying forces or mechanisms that shape social experiences (Alvesson & Sköldberg, 2018). Critical realists recognize that reality is always subject to social and cultural contexts that are constantly in a state of change. Thus, it is essential to acknowledge that people experience subjective interpretations of the objective world (Ackroyd & Karlsson, 2014; Khanna, 2019). Critical realists also understand that social experiences are shaped by both physical and social realities, which are interdependent and interactional (Bhaskar, 1998a). For example, money and wealth shape how people see the world. The two are interdependent in that they are different in their representation. Money may represent power, freedom, and opportunity. Whereas wealth may be represented financially, socially, or as a *wealth of*

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

knowledge. However, when money and wealth interact, those representations can mean different things for different people. From this example, we can appreciate that our experiences and perceptions of reality are inevitably biased and shaped by the constant interchange between the physical and the social realities. Additionally, our subjective interpretations and cultural contexts limit our understanding of reality because of the narrow perspective through which we can view it (Bhaskar, 1998a).

Ontologically, critical realism posits a stratified reality consisting of three layers: the empirical, the actual, and the real. Together, these layers are referred to as domains (Bhaskar, 2008). Epistemologically, critical realism acknowledges that people's knowledge of reality is always partially mediated by social and cultural contexts (Alvesson & Sköldberg, 2018; Khanna, 2019). Our experiences and perspectives can influence our perception, potentially leading to a narrowed view. However, researchers can gain knowledge of the underlying mechanisms and structures that produce observable phenomena through a combination of empirical observation, theoretical analysis, and critical reflection (O'Mahoney & Vincent, 2014). Through these research approaches, a more comprehensive perspective of reality can help to broaden our understanding of the world around us.

Critical Realism and Its Place in Contemporary Research

To describe critical realism, it is essential to outline where it is situated as a philosophical paradigm. O'Mahoney and Vincent (2014) defined a philosophical paradigm as how people view the world and experience reality. The authors detailed the three main philosophical paradigms: positivism, constructivism, and critical realism. As they explained, positivism holds that the world exists independent of people and that reality is separate from our awareness. From a positivistic perspective, the way to understand reality is to study it

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

using an objective and neutral stance to observe how events are related. In positivist research, using an objective stance means that the *reality* of something is established by accepted measurement tools and observation methods, not by researchers' interpretations or involvement (Alvesson & Sköldberg, 2018).

In contrast, the constructivist paradigm suggests that the meaning of life is rooted in people's experiences and beliefs. Davies and Fisher (2018) stated that through lived experiences and the language and dialogue encompassing them, people can appreciate the varied meanings of reality. In this paradigm, knowledge production is based on an interpretation of the world as it is experienced. Thus, it is far from perfect but accepted as plausible. The meaning of the world is open to error as it is derived from social trends in thinking, such as attitudes towards health, lifestyles, and several other examples. Lastly, in the constructivist paradigm, the meaning of the world is susceptible to peoples' changing attitudes, views, values, beliefs, and perceptions (Alvesson & Sköldberg, 2018) and may undergo several transformations over time.

So, where does critical realism fit? Critical realism emerged as a response to the limitations of both positivism and constructivism (Buch-Hansen & Nielsen, 2020). It acknowledges the importance of observation and interpretation in generating knowledge about the world. Further, critical realism acknowledges that reality exists independent of our perceptions but recognizes that our social and cultural contexts shape our understanding of reality. In this sense, critical realism can be seen as occupying a middle ground between positivism and constructivism, balancing the need for empirical observation with recognizing the role of interpretation in knowledge generation (Alvesson & Sköldberg, 2018; Porter, 2017). As such, critical realism builds off the positivist and constructivist views and strives to

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

dig under the surface to explore the reasons for events that are ongoing at the surface (Alvesson & Sköldberg, 2018; Porter, 2017; Ryan, 2019). Ackroyd and Karlsson (2014) and Khanna (2019) further described critical realism as a philosophical framework to guide researchers to seek out and investigate the causal mechanisms at work in any given social situation. Sayer (1999) stated that using a critical realist paradigm, researchers can provide contextual explanations of the social experience being investigated rather than merely describing it. To build on Sayer's point, Buch-Hansen and Nielsen (2020) affirmed that critical realists aim to produce research findings that reflect a deep and broad explanation of any social experience. Thus, incorporating a critical realist perspective may help researchers better illustrate causal mechanisms that might otherwise not be considered.

Understanding the origins of various philosophical perspectives is important for researchers as they reflect on the alignment between their worldview, research topic, research question, and methodological design. To add context to the philosophical perspective, critical realism emerged in the United Kingdom with the work of English philosopher Roy Bhaskar. Bhaskar's critical realism emerged from a time when researchers relied heavily on the natural sciences to represent reality (Alvesson & Sköldberg, 2018; Bhaskar, 1998a). Although social science research was not deemed wrong, the natural science community felt it added little meaning to the overall understanding of reality. Thus, in the mid-1960s and 1970s, Bhaskar challenged pervasive positivist thinking, arguing that scientific inquiry was insufficient to clearly understand people's everyday lived experiences (Alvesson & Sköldberg, 2018; Bhaskar, 1998a; Khanna, 2019). Bhaskar claimed that critical realism comprises two main components: 1) human agents and their choices and intentions (agency), and 2) social structures, which reflect various contexts, including the cultural, historical, and political

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

(Bhaskar, 2008). It is also argued that the effect of structures on human agency, and vice-versa, played a significant role in how people understood and responded to the world (Buch-Hansen & Nielsen, 2020; Porter, 2017). The natural sciences' focus on the effect of one event on another produces a limited understanding since it overlooks humans, their agency, and structures. Without understanding the building and transformation of social structures and how they influence human reasoning and planning, the ability for people to improve their world would be challenging (Bhaskar, 1998a).

Critical Realist Ontology

Critical realism is based on an ontological understanding that the social world exists independent of our perceptions and understandings (Alvesson & Sköldberg, 2018). This means that reality exists beyond our individual experiences and that underlying mechanisms or causal forces structure this reality. Critical realists believe that these causal forces are responsible for producing the observable events and phenomena that we encounter in the world (Bhaskar & Lawson, 1998). Along with this understanding of reality, our knowledge of the world is always partial and situated within particular social, cultural, and historical contexts (Ackroyd & Karlsson, 2014; Bhaskar & Lawson, 1998). This means that our values and beliefs always influence our understanding of reality.

The Domains

Appreciating the holistic view of reality through understanding the three domains (real, actual, and empirical) can help researchers better understand the complex interplay of factors that contribute to people's behaviour and experiences (Ackroyd & Karlsson, 2014). This holistic approach can lead to more nuanced and accurate research findings to demonstrate the interconnectedness of all things.

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

The Real Domain

The real domain contains human agents, social structures, and causal mechanisms (Alvesson & Sköldberg, 2018; Bhaskar, 2008). Social structures and causal mechanisms are not always visible to the naked eye, yet they play a crucial role in shaping events and phenomena (Bhaskar & Lawson, 1998). The interplay between social structures and causal mechanisms is powerful and significantly impacts our understanding of the world. By considering the relationship between underlying social structures and causal mechanisms, we can better understand the observable events generated in the actual domain (Bhaskar & Lawson, 1998; Buch-Hansen & Nielsen, 2020).

Social structures refer to things not necessarily apparent to humans, such as social systems and institutions (Bhaskar, 2008). More specifically, these systems and institutions can include the economy, government, and culture, among others. These social structures can shape our lives and understanding of reality (Alvesson & Sköldberg, 2018). Social structures can also refer to things visible to humans (Buch-Hansen & Nielsen, 2020), such as job roles, communities, families, and education programs, to list a few. These social structures have the same ability to change and shape our lives and views of reality (Buch-Hansen & Nielsen, 2020).

The interaction between human agency and social structures results in social movements or trends often driven by the desire for change (Sayer, 1999). Thus, the intertwining of various social structures and human agency can have a profound impact on shaping our values and beliefs. Within social structures are contributing factors called *properties*. Properties help to define the unique features and characteristics of social structures (Kozhevnikov & Vincent, 2019). These properties remain consistent regardless of

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

the interaction between human agency and causal mechanisms. For example, the property of *freedom of speech* allows individuals to express their opinions freely without fear of persecution, such as during student elections on university campuses that provide students the freedom to express their views and act as a collective body to influence change in their academic lives. The election process represents the social structure, while the freedom to express viewpoints represents one of the properties inherent within the social structure. By considering how properties define social structures, we can more fully appreciate the function and purpose of social structures (Buch-Hansen & Nielsen, 2020; Kozhevnikov & Vincent, 2019).

Causal mechanisms are those forces that interact with human agents and social structures to give rise to observable events in the actual domain (Bhaskar, 2008; Bhaskar & Lawson, 1998). For example, the overt force of social influence and its effect on people and social structures is known as a causal mechanism (Alvesson & Sköldberg, 2018). Social influence can include everything from peer pressure to conformity to social norms. Therefore, human agency, social structures and causal mechanisms are necessary preconditions for the events that occur (Alvesson & Sköldberg, 2018; Bhaskar, 1998b). Understanding the underlying causal forces can enhance our understanding of the world as we gain a broader perspective and identify patterns and relationships among causal mechanisms or forces that may have otherwise gone unnoticed.

The Actual Domain

The actual domain contains events generated by the interaction between human agents/agency, social structures, and causal mechanisms (Alvesson & Sköldberg, 2018; Bhaskar, 2008). Under the right circumstances, countless events and phenomena occur at any

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

given moment, some of which we may be aware of and others that may go unnoticed (Buch-Hansen & Nielsen, 2020). Examples of events include a sports game, a theatre production, an instructor teaching students, nurses providing patient care, a baby being born, a wedding, and birthday celebrations, to name a few. Thinking of events, one cannot help but think about the interaction between human agency, social structures, and possible causal mechanisms that are all in place to permit the event to occur. Thus, considering the interaction between these three factors, researchers can gain a much more nuanced and complex understanding of the social phenomena as opposed to viewing individuals and social structures in isolation (Alvesson & Sköldberg, 2018; Buch-Hansen & Nielsen, 2020). Therefore, conducting interviews and observing people in social situations are valuable methods for gaining a deeper understanding of real-world experiences (Creswell & Creswell, 2018). Through these techniques, researchers can learn about people's behaviours, motivations, and challenges in specific contexts, circumstances, and environments. In response, research findings can be instrumental in developing more effective solutions and strategies to address people's needs better (Ryan, 2019).

The Empirical Domain

The empirical domain is epistemological in nature, meaning that the concept of reality can be observed, measured, and tested (Alvesson & Sköldberg, 2018; Bhaskar & Lawson, 1998). Empirical evidence includes but is not limited to, data collected from surveys, polls or interviews, observations made by researchers in the field, demographic statistics, and medical test results. Researchers view empirical data as a critical component of research, forming the basis for investigation (Ackroyd & Karlsson, 2014; Danermark, 2019). As researchers interact with empirical data, they bring along certain human qualities that are inherent to their

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

nature—in particular, preconceptions, biases, and expectations. These attributes significantly shape how research evidence is interpreted and ultimately understood (Buch-Hansen & Nielsen, 2020). However, the argument among critical realists is that empirical data is often limited because it only provides a snapshot of events and outcomes without a deeper understanding of the underlying causal mechanisms that drive them (Bhaskar & Lawson, 1998). Because several causal mechanisms can occur in any given situation, in any random order or configuration, what is observed in the empirical domain cannot provide the complete story (Danermark, 2019).

Ontological Emergence

Ontological emergence is a concept that suggests that phenomena exhibit properties that cannot be explained or predicted by examining their individual components alone (Buch-Hansen & Nielsen, 2020; Clark et al., 2008), where the whole is greater than the sum of its parts. Reductionism is the assumption that complex systems can be understood by breaking them down into their constituent parts (Buch-Hansen & Nielsen, 2020), and critical realists caution that this reductionist thinking limits the potential for a comprehensive understanding of phenomena (Archer, 1998). Just as each of the three domains of reality helps researchers achieve a deeper, more contextualized understanding of what is happening within a substantive area, ontological emergence suggests that social experiences are not reducible to their components (Buch-Hansen & Nielsen, 2020; Clark et al., 2008). Instead, social interactions are complex and emerge from the interplay between various factors, such as social structures, groups, and individuals. Therefore, it is difficult to explain social phenomena by focusing on only one aspect of an individual, group, or community (Archer, 1998). Ontological emergence is an important concept in critical realist philosophy because it

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

challenges reductionist thinking and encourages a more holistic approach to understanding the complexities of social phenomena (Buch-Hansen & Nielsen, 2020; Clark et al., 2008).

Critical Realist Epistemology

Critical realists acknowledge that exploring reality through different perspectives is the key to explaining how knowledge is produced and validated (Buch-Hansen & Nielsen, 2020). This epistemological perspective is based on the idea that an objective reality exists independent of human perception but that our knowledge of reality is always limited and incomplete (Alvesson & Sköldberg, 2018; Buch-Hansen & Nielsen, 2020; Kozhevnikov & Vincent, 2019). This means that people's interpretation of reality is continually evolving and shaped by social, historical, and cultural contexts (DeForge & Shaw, 2012). In contrast to positivism, which holds that knowledge can be attained through direct observation and measurement (Alvesson & Sköldberg, 2018), critical realism acknowledges the role of theory as a framework for interpreting and making sense of empirical data (Ackroyd & Karlsson, 2014; Alvesson & Sköldberg, 2018). Critical realists believe that theory can help to reveal the underlying structures and mechanisms that give rise to observable phenomena (Bhaskar, 1998a; Kozhevnikov & Vincent, 2019). By developing and refining theories, researchers can gain a deeper understanding of the causal mechanisms that drive the phenomena being investigated. Furthermore, as theory is always provisional and subject to modification and revision as new evidence and insights are gained, knowledge is accepted as a perpetual state of change (Ackroyd & Karlsson, 2014). This is of particular importance for researchers because it challenges them to remain open-minded and adaptable. Researchers who are committed to the idea that knowledge is always evolving are better equipped to handle the uncertainties and complexities of their work.

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

Alignment Between the Philosophical and Methodological Principles

Critical realism is built upon principles that differentiate it from other philosophical perspectives. Similarly, the guiding principles of classic grounded theory demarcate it from other research designs. The following sections will discuss the alignment between the principles of critical realism and classic grounded theory methodology.

A Quest for Clarity: Understanding Reality

Critical realists recognize that an understanding of the world is shaped by people's experiences and perceptions of it and that it is impossible to attain a completely objective and unbiased perspective (Kempster & Parry, 2014). Therefore, how people perceive the world plays a significant role in shaping their understanding of reality. People's perceptions and interpretations help them make sense of their world; thus, reality is constructed through social structures, human agency, and causal mechanisms (Buch-Hansen & Nielsen, 2020; Clark et al., 2008). This social construction of reality purports that we can only know what we have experienced or what has been presented to us. However, we must recognize that our current understanding of the world is always subject to revision and refinement. Thus, we cannot assume that the knowledge we gain through research is all there is to know. Many aspects remain beyond our current understanding or ability to observe (Buch-Hansen & Nielsen, 2020). Critical realists understand that our knowledge and understanding of the world constantly evolve. As such, we must remain open-minded and receptive to new ideas that provide new insights and concepts. The real world and all the causal mechanisms that interact to create the events we may or may not experience will always be much larger than we can grasp (Clark et al., 2008; Schiller, 2016).

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

In the classic grounded theory methodology, preconceptions are those beliefs and attitudes that researchers hold, which can act like blinders and influence researchers' abilities to see the data for what it is (Glaser, 2013; Reay et al., 2016). Such preconceptions can be detrimental as researchers may inadvertently analyze the data through these lenses. Consequently, researchers are challenged to build a theory that relates well to the participants' main concern. When conducting classic grounded theory research, suspending any preconceived notions or biases about what may be happening in the data is essential (Reay et al., 2016). When researchers collect and analyze data with an open mindset with as few preconceived ideas as possible, the opportunity to gain new insights into the reality that exists beyond their understanding can foster a more robust theory (Glaser, 2013). By setting aside these views, researchers can immerse themselves in the data and observe patterns and relationships tightly connected to the participants' voices.

Critical realism and classic grounded theory methodology share a common interest in gaining a deep understanding of reality. Both approaches aim to go beyond surface-level descriptions and explanations to uncover the underlying structures and mechanisms that shape social experiences (Kempster & Parry, 2014). Critical realism agrees that an objective world exists independent of people's perceptions; thus, it warrants a level of investigation beyond the empirical surface to better understand reality (Kempster & Parry, 2011). Comparably speaking, classic grounded theory methodology emphasizes a systematic approach to help unveil the structures and mechanisms that shape social reality (Oliver, 2012).

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

Gaining Insight: Balancing Subjective Experience with Objective Reality

Critical realism seeks to balance the subjective experience with the objective reality (Alvesson & Sköldberg, 2018; Kozhevnikov & Vincent, 2019). Further, it acknowledges that our perceptions and interpretations of reality are subjective and influenced by our experiences, beliefs, and biases (Ackroyd & Karlsson, 2014). However, it also recognizes that an objective reality exists independent of our perceptions and interpretations. To reconcile the subjective experience with the objective reality, critical realism holds that we can gain knowledge and understanding of the objective reality through empirical observation and critical reflection (Alvesson & Sköldberg, 2018; Kozhevnikov & Vincent, 2019). It emphasizes the importance of using scientific methods to study the world around us and develop theories grounded in empirical evidence. At the same time, it recognizes that our understanding of reality is limited and that there is always room for revision and refinement based on new evidence and insights (Kozhevnikov & Vincent, 2019).

Classic grounded theorists seek to gain a deeper understanding of people's lived experiences by using rigorous research methodology involving constant data comparison and analysis (Holton & Walsh, 2017). They acknowledge that their biases and assumptions may influence their interpretation of the data and take steps to reduce this influence by using a systematic approach to analysis and theory development (Glaser, 1978). This includes coding the data to identify patterns and themes, memoing to capture insights and ideas, and constantly comparing and revising their analysis to ensure that it accurately reflects the data (Glaser & Strauss, 2011). This approach helps create a more comprehensive understanding of people's subjective experiences within the objective reality of the world around them.

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

Critical realism and classic grounded theory share a common purpose: both approaches recognize that people's subjective experiences can influence their perceptions of reality (Oliver, 2012). Additionally, both philosophical perspectives and research methodology acknowledge that objective reality exists independent of these perceptions (Kempster & Parry, 2014). With these shared perspectives, research findings are grounded in empirical evidence and sensitive to individuals' subjective experiences.

Unveiling the Root Cause: A Journey into Causal Mechanisms

For critical realists, causation is a fundamental concept that focuses on the relationship between social structures, human agents, and underlying forces that manifest as events (Buch-Hansen & Nielsen, 2020; Sayer, 1999). Events are caused by mechanisms or processes that operate within a particular context. These mechanisms and processes are often hidden and may not be directly observable, but they can be inferred through their effects on observable events (Bhaskar & Lawson, 1998). Critical realists argue that causation does not imply a linear relationship between two events (Buch-Hansen & Nielsen, 2020). Rather, a somewhat complex process of causation produces events (Bhaskar & Lawson, 1998). However, although the same mechanisms can be at play for the event, there is no guarantee that they will occur with any degree of regularity or predictability (Ackroyd & Karlsson, 2014; Clark et al., 2008).

We provide an everyday example to illustrate the concept of causation. When an individual hits their thumb with the hammer instead of the intended nail head, there is no guarantee that the causal mechanisms that came into play for that event will play out the same way the next time. This is because the individual involved in this event experienced pain, gained insight into the effects of gravity and eye-hand coordination, and used reflection to interpret the event. These human experiences produced their own set of causal mechanisms.

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

The individual's response to the event will influence the arrangement and timing of the underlying causal mechanisms for the next hammer swing. Although the event of hammering a nail head is the same, the next time the event occurs, the underlying causal mechanisms or processes have changed and, therefore, do not necessarily take on a linear or predictable pattern. The ability of the individual to produce an exact replica of the initial event is no longer possible; however, some causal mechanisms are in place to allow for another hammer swing to occur. This example illustrates that by better understanding the nature of these underlying causal mechanisms, we can better appreciate the nature of events and, thus, people's subjective experiences (Ackroyd & Karlsson, 2014).

Classic grounded theorists seek to understand the root causal mechanisms for how individuals behave in certain social situations and how they perceive the main concern (Kempster & Parry, 2014). Through a rigorous and systematic process of data collection, coding and analysis, researchers identify patterns, trends, and categories within the data (Holton & Walsh, 2017). From there, they look for relationships between categories and patterns within the data, which can help identify the underlying causal mechanisms or processes (Kempster & Parry, 2014). Through this iterative process of analysis and refinement, grounded theorists can generate a comprehensive theory that identifies root causal mechanisms driving it.

Both critical realism and classic grounded theory methodology share complementary approaches to understanding the social world. In practice, critical realism can inform the initial stages of a grounded theory study by helping researchers think about possible underlying structures and mechanisms likely to be the driving factors for the research area of interest (Kempster & Parry, 2014; Oliver, 2012). This can provide a useful starting point for research

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

question development and the focus of data collection and analysis. As the classic grounded theory study progresses, the systematic and iterative approach can further develop an understanding of the underlying processes or mechanisms, thereby driving theory development (Kempster & Parry, 2014).

The Whole Picture: Multiple Perspectives for a Comprehensive Understanding of Reality

Methodological eclecticism is an approach in research where multiple methods are used to arrive at a more comprehensive understanding of complex social experiences (Kroos, 2012). The idea involves researchers selecting the most appropriate methods and techniques to yield the greatest possible understanding of complex social experiences (Clark et al., 2008; Kroos, 2012). Methodologies may include qualitative, quantitative, or mixed methods designs that can be adapted to the needs of the study (Ackroyd & Karlsson, 2014; Kroos, 2012). For example, surveys, interviews, case studies, historical analysis, and comparative analysis are just a few approaches that yield different perspectives (Creswell & Creswell, 2018). Used in combination or in addition to other approaches, these perspectives help to provide a more complete and nuanced understanding of complex social experiences (Oliver, 2012). Critical realism permits the openness of methodological eclecticism to use multiple perspectives to gain a broader and deeper appreciation of the interplay between humans, social structures, and mechanisms to produce observable events (Clark et al., 2008).

Classic grounded theory methodology emphasizes the importance of gaining a comprehensive understanding of reality by using multiple perspectives. This is achieved through constant comparison of data, which involves comparing codes and categories across different data sources such as interviews, observations, and documents. These sources may

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

include conference presentations, newspapers, field observations, social media groups, and other pertinent sources (Holton & Walsh, 2017). Additionally, grounded theorists use theoretical sampling to seek out participants to obtain differing perspectives and experiences. More specifically, researchers use this sampling technique to obtain data for further coding to fill gaps and saturate the core category and related categories (Glaser 1992, 1998). The value of theoretical sampling and the constant comparative method is that they enrich data analysis and contribute to robust theory development.

Critical realism and classic grounded theory methodology share similarities in their quest to gain a comprehensive understanding of reality. Critical realism purports that there are multiple layers of reality and that these layers can only be accessed through a combination of approaches to yield different perspectives (Oliver, 2012). Similarly, classic grounded theory emphasizes the importance of using multiple perspectives to generate a comprehensive understanding of human experiences (Holton & Walsh, 2017; Kempster & Parry, 2014).

Discussion

The Challenges of Critical Realism

Critical realism is a complex philosophical perspective that can pose several challenges for researchers. One of the main challenges is understanding ontology, where critical realism assumes that reality exists independent of our perception. However, our knowledge of it is only partially understood because of the changing social, cultural, and historical contexts through which we view it (Alvesson & Sköldberg, 2018; Kempster & Parry, 2011, 2014). Critical realism requires researchers to move beyond the surface-level observations, consider that there are hidden mechanisms or processes at work beneath the surface, and be willing to explore these causal mechanisms and their interaction with social structures to produce observed

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

phenomena (Bhaskar & Lawson, 1998; Sayer, 1999). It requires researchers to be open to the social and historical contexts of the area being researched. This can be challenging for researchers who may not clearly understand the implications of their research in the broader context. While critical realism can be a complex and challenging philosophical perspective to navigate, taking time to reflect on assumptions, biases, and perspectives can help researchers approach their research in a more informed way (Kempster & Parry, 2011).

Why Consider Critical Realism as a Classic Grounded Theorist?

The critical realist lens is a suitable philosophical lens to explore the complex nature of human experiences. Critical realism allows researchers to delve into the underlying structures and mechanisms that shape our world by acknowledging the subjectivity and context of human experiences (Alvesson & Sköldberg, 2018; Sayer, 1999). The basis of critical realism lies in the understanding that reality exists independent of our knowledge and perception, and that we can only know and understand it through our experiences and perceptions (Archer, 1998; Kozhevnikov & Vincent, 2019). Researchers using a critical realist lens to guide their classic grounded theory study have the power to identify and address various social, historical, and cultural contexts and underlying causal mechanisms that underpin the social experience (Kempster & Parry, 2011; Oliver, 2012). Using a critical realist lens and a classic grounded theory methodology, researchers can feel confident in producing a theory that reflects the realities of people in social encounters.

The Benefits of Critical Realism for Grounded Theorists

Critical realism offers a useful lens for researchers to situate their research study in human experiences. Moreover, it seeks to understand the structures and causal mechanisms that manifest in observable social experiences (Alvesson & Sköldberg, 2018; Bhaskar & Lawson,

Published by: INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

1998). The critical realist lens helps researchers focus on identifying and addressing the nuanced contexts inherent in social experiences (Kempster & Parry, 2011; Oliver, 2012). By gaining a better understanding of the contextualized aspects of social experiences, researchers can begin to explore the underlying causal mechanisms and, through theory development, provide a well-grounded theoretical explanation for the human experience being studied (Alvesson & Sköldberg, 2018; Oliver, 2012; Sayer, 1999). Critical realism bridges the gap between theory and practice by providing a way to understand how several contexts and perceptions shape social experiences and how classic grounded theory methodology allows researchers to uncover theoretical explanations for these experiences (Alvesson & Sköldberg, 2018; Oliver, 2012). Using a critical realist lens to conduct classic grounded theory methodology, researchers can feel assured of providing a nuanced and holistic explanation of people's social experiences.

Conclusion

Combining classic grounded theory methodology with a critical realist lens provides a comprehensive approach to exploring people's social experiences. Through this philosophical-methodological complement, researchers can better understand the complexities of people's lived experiences, resulting in useful theoretical representations of those experiences. Recognizing the alignment between the foundational principles of classic grounded theory and critical realism may help researchers feel assured in their choice of methodology and philosophical perspective to produce relevant and highly valuable research findings. By gaining an understanding of the challenges and benefits associated with the incorporation of a critical realist lens into classic grounded theory methodology, researchers can be better informed about the choices they make as they embark on their research journey.

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

Understanding the relationship between critical realism and classic grounded theory methodology can provide a foundation for further research and study. Researchers can use this understanding to develop more rigorous, informed research studies grounded in a solid theoretical foundation while remaining open to new insights and perspectives that may emerge through the research process. These new insights can help researchers identify areas for further investigation, thereby advancing knowledge in their respective fields.

References

Ackroyd, S., & Karlsson, J.C. (2014). Critical realism, research techniques, and research designs. In P.K. Edwards, *Studying organizations using critical realism: A practical guide* (pp. 21-45). Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199665525.003.0002

Alvesson, M., & Sköldberg, K. (2018). *Reflexive methodology: New vistas for qualitative research*. (3rd ed.). SAGE Publications.

Archer, M. (1998). Introduction: Realism in the social sciences. In M. Archer et al., *Critical realism: Essential readings* (pp. 189-205). Routledge.

Bhaskar, R. (1998a). Facts and values theory and practice. In M. Archer et al., *Critical realism: Essential readings* (pp. 409-417). Routledge.

Bhaskar, R. (1998b). Philosophy and scientific realism. In M. Archer et al., *Critical realism: Essential readings* (pp. 16-47). Routledge.

Bhaskar, R. (2008). *A realist theory of science.* Routledge. (Original work published 1975)

Bhaskar, R., & Lawson, T. (1998). Introduction: Basic texts and developments. In M. Archer et al., *Critical realism: Essential readings* (pp. 3-15). Routledge.

Published by: INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

Birks, M., & Mills, J. (2015). *Grounded theory: A practical guide*. (2nd ed.). SAGE Publications. Buch-Hansen, H., & Nielsen, P. (2020). *Critical realism*. Red Globe Press.

Clark, A.M., Lissel, S.L., & Davis, C. (2008). Complex critical realism: Tenets and application in nursing research. *Advances in Nursing Science, 31*(4), 67-79. https://doi.org/10.1097/01.ANS.0000341421.34457.2a

Creswell, J.W., & Creswell, J.D. (2018). *Research design: Qualitative, quantitative, and mixed method approaches.* (5th ed.). SAGE Publications.

Danermark, B. (2019). Applied interdisciplinary research: A critical realist perspective. *Journal of Critical Realism, 18*(4), 368-382. https://doi.org./10.1080/14767430.2019.1644983

Davies, C., & Fisher, M. (2018). Understanding research paradigms. *Journal of Australasian Rehabilitation Nurses Association, 21*(3), 21-25.

DeForge, R., & Shaw, J. (2012). Back- and fore-grounding ontology: Exploring the linkages between critical realism, pragmatism, and methodologies in health & rehabilitation sciences. *Nursing Inquiry, 19*(1), 83-95. https://doi.org/10.1111/j.1440-800.2011.00550.x

Glaser, B.G. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory.* Sociology Press.

Glaser, B.G. (1992). *Basics of grounded theory analysis: Emergence vs. forcing.* Sociology Press.

Glaser, B.G. (1998). *Doing grounded theory: Issues and discussions*. Sociology Press.

Glaser, B.G. (2013). *No preconceptions: The grounded theory dictum*. Sociology Press.

Published by: INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

Glaser, B.G., & Strauss, A.L. (2011). *The discovery of grounded theory: Strategies for qualitative research*. AldineTransaction. (Original work published 1967)

Hathcoat, J.D., Meixner, C., & Nicholas, M.C. (2019). Ontology and epistemology. In P. Liamputtong, *Handbook of research methods in health social sciences* (pp. 99-116). Springer. https://doi.org/10.1007/978-981-10-5251-4_56

Holton, J.A., & Walsh, I. (2017). *Classic grounded theory: Applications with qualitative and quantitative data.* SAGE Publications.

Khanna, P. (2019). Positivism and realism. In P. Liamputtong, *Handbook of research methods in health social sciences* (pp. 151-168). Springer. https://doi.org/10.1007/978-981-10-5251-4_56

Kempster, S., & Parry, K. (2011). Grounded theory and leadership research: A critical realist perspective. *The Leadership Quarterly, 22*, 106-120. https://doi.org/10.1016/j.leaqua.2010.12.010

Kempster, S., & Parry, K. (2014). Critical realism and grounded theory. In P.K. Edwards, *Studying organizations using critical realism: A practical guide* (pp. 86-108). Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199665525.003.0005

Kozhevnikov, A., & Vincent, S. (2019). *Critical realism*. SAGE Publications. https://doi.org/9781529745962

Kroos, K. (2012). Eclecticism as the foundation of meta-theoretical mixed methods and interdisciplinary research in social sciences. *Integrative Psychological and Behavioral Science, 46*, 20-31. https://doi.org/10.1007/s12124-011-9187-2

Oliver, C. (2012). Critical realist grounded theory: A new approach for social work research. *British Journal of Social Work, 42*(2), 371-387. https://doi.org/10.1093/bjsw/bcr064

Published by: INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

O'Mahoney, J., & Vincent, S. (2014). Critical realism as an empirical project: A beginner's guide. In P.K. Edwards, *Studying organizations using critical realism: A practical guide* (pp. 1-20). Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199665525.003.0001

Porter, S. (2017). Critical realism: A social theory for evidenced-based nursing. In M. Lipscomb, *Social theory and nursing* (pp.76-90). Routledge.

Rawnsley, M.M. (1998). Ontology, epistemology, and methodology: A clarification. *Nursing Science Quarterly, 11*(1), 1-4. https://doi.org/10.1177/0894318498011001

Reay, G., Raffin Bouchal, S., & Rankin, J.A. (2016). Staying theoretically sensitive when conducting grounded theory research. *Nurse Researcher, 24*(1), 26-30. https://doi.org/10.7748/nr.2016.e1445

Ryan, G.S. (2019). Postpositivist, critical realism: philosophy, methodology and method for nursing research. *Nurse Researcher, 27*(3), 20-26. https://doi.org/10.7748/nr.2019.e1598

Sayer, A. (1999). *Realism and social science.* SAGE Publications.

Schiller, C.J. (2016). Critical realism in nursing: An emerging approach. *Nursing Philosophy, 17*, 88-102. https://doi.org/10.1111/nup.12107

About the Authors

Sandra Carless-Kane is a doctoral candidate with the Faculty of Nursing at the University of Calgary in Alberta, Canada. Sandra has over 10 years of clinical experience in rural acute care and community-based nursing practice. Her teaching experience includes over 20 years of classroom, nursing lab, and clinical instruction in practical nurse and undergraduate nursing

Published by: INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES

programs. Sandra's research focuses on nursing students' learning experiences, with a special interest in student learning transfer between classroom and clinical practice.

Dr. Lorelli Nowell is an Associate Professor and Assistant Dean of Graduate Studies in the Faculty of Nursing at the University of Calgary. Her research interests are inspired by her years of teaching and learning in higher education, her passion to improve student learning experiences, and her desire to positively impact the health and well-being of individuals, families, and communities through quality education. She provides leadership and commitment to nursing education through active engagement in program development and delivery, significant involvement in educational organizations, and influential scholarship in teaching and learning.

Disclosures

Declaration of Conflicting Interests: The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding: The first author received a graduate student scholarship from the University of Calgary in Alberta, Canada, to carry out her doctoral work.

Acknowledgements: We want to thank Donna-Lee Wybert from TextualMatters, for her editorial review.

Published by:
INSTITUTE FOR RESEARCH AND THEORY METHODOLOGIES