

Philosophical Revolutions in Social Science Research

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Abstract

The philosophical revolution in social science research has transformed how knowledge is generated, validated, and applied across the disciplines of social science such as economics, sociology, political science, International Relations, psychology, Security Studies all concerned with behavior of humans and societal processes. This revolution reflects shifts away from classical positivist assumptions toward interpretivist, and critical, paradigms, each redefining the aims and methods of inquiry. As social phenomena have become increasingly complex in an interconnected global environment, researchers have sought more flexible, reflexive, and context-sensitive approaches to knowledge production. This paper examines the core dynamics of philosophical revolution in social science research, by discussing major theoretical contributions by social scientists, clearly outlining theoretical frameworks that inform contemporary research practices, and presenting key discussions and insights on how social science research have evolved over the years from positivism, interventionism and critical paradigm. The paper concludes with recommendations for strengthening future social science research through pluralism, ethical reflexivity, and methodological innovation.

Key Words: Philosophical Revolution, Social Science, Empirical Research, Qualitative Research, Quantitative Research

Introduction

Social sciences research has undergone significant philosophical transformation in the last couple of centuries, moving from traditional historical classical perspectives of early traditions of the Aristotle and Plato school to the realm of behavioral empirical and scientific era. The main debate on social science research concerns whether or not social sciences must adopt the methodology of the natural sciences or to what extent should scientific methodology be used in social science research. This debate has lingered for more than a century but still persist due to new advances in social science research. The increasing technological advancement occasioned by the industrial revolution of the 17th century and the advancement in information technology introduced sophistication and more accuracy in the study of social science. The philosophical revolution in social science research comprises some remarkable transformation in some area such as the rejection of absolute objectivity in social science research, the rise of constructivist paradigms, the influence of critical theory, the emergence of feminist and postcolonial theories, and the increasing importance of reflexivity and ethics.

The revolution is basically about fundamental rethinking of what constitutes valid knowledge. Social science researchers in contemporary world are expected to account for subjective experiences, power relations, and cultural contexts that shape social phenomena and society in an increasing globalized world. According to Theodoulou (2002) The goal of social science research is to increase or add to knowledge of human political and social behavior, through three basic ways: through exploration, description and explanation. He further stated that these research process follows well laid stages which include the design stage, data gathering stage and data analysis stage. Each stage of the research process is guided by the chosen research approach- positivism, interpretivism, criticism, and so on. The blend of methodological pluralism using diverse methods informed by varied philosophical traditions has become a veritable tool of social science research. This paper therefore seeks to examine the revolutions inherent in social science research

Research Methods

This paper adopts a qualitative and interpretive research design, relying primarily on secondary data sources. The method includes a review of scholarly literature such as peer-reviewed journal articles, books, and theoretical essays on social science research. A thematic approach is employed, identifying key themes such as positivism, interpretivism, constructivism, critical theory, and postmodernism. The analysis synthesizes insights across disciplines, enabling an interdisciplinary understanding of the philosophical revolution in social science research.

Literature Review

Social sciences is a discipline mainly devoted to the study of society. It seeks to investigate the interconnectedness of people with each other, their behavior, culture, politics, and economic survival and how they create impact in the world generally. The social sciences therefore seek to understand the working of society such as proffering much needed solution to issues of economic development, poverty eradication, forms of government, efficient bureaucracy and unemployment. The result of most social science research information may be used for the development of business strategy and improved government policies, among others. Social science remains a distinct field from the natural sciences because it does not make use of physical laboratories but concentrate on studying the activities of humans in their natural settings. The landmark transformation of the discipline of social science began in Europe from the 17th - 18th century with erudite scholars such as Adam Smith, Jean-Jacques Rousseau, David Easton, Immanuel Kant, and Karl Marx, Max Weber and others thinkers of the time who laid the foundation for the study of social sciences. Social science expresses the idea that scientific methods and results of science should produce objective knowledge and not be influenced by particular perspectives, value commitments, and community bias or personal interests. Objectivity is often considered to be an ideal for scientific inquiry, as a good reason for valuing scientific knowledge, and as the basis of the authority of science in society. The object of this method as now developed involves observation, data gathering (fact finding), generalization, formulating laws (induction), verification / finding / searching for new facts.

Concept of Research

Research is the deliberate seeking of knowledge through empiricism, rationalism and science. It is a deliberate and goal-oriented activity geared towards discovering meaning, provide explanation and understanding where ignorance reigns. Scientific enquiry greatly increases man's knowledge of the physical world (Fisher, 1994). The scientific method in social science research aims at recognizing the inadequacy of existing knowledge to explain a given question, gathering observation in an attempt to find possible answers, Seeking to find a pattern in the observations upon which to base conclusions, choosing the most appropriate conclusion to explain observations and Verifying the derived conclusion by further observation and experimentation.

The turnaround in social sciences raised some critical questions as to whether or not the emerging disciplines of social science whose objects of study were largely not natural organisms could be called science. The general acceptable notion and conclusion is that social science is a science because its method of inquiry is synonymous with scientific method guarantee objective knowledge and render legitimacy to a discipline. The social science just like the natural sciences had resolved most of the philosophical questions with respect to the acquisition of knowledge. There are three main approaches to social science research, namely

Positivism, Interpretivism, and Criticism. These three dimension hinged on the principles that, the object of study of a scientific discipline must be real objects or based on facts, description and explanation in any scientific enquiry must be free from values, that means they must not be value laden and adoption of only the methods likely to secure true outcomes. The key questions also arising from these dimensions are basically, what is the ultimate purpose of conducting scientific research?, what is the fundamental nature of social reality?, what constitutes an explanation or theory of social reality?, what does good evidence or factual information look like?, and where do political values enter into science (Neuman, 2006).

Philosophical Revolution

The philosophical revolution in social science connotes a fundamental change on how social reality is understood and studied. Social science in its formative stage was mainly shaped by positivism, which emphasized objectivity, empirical observation, and the search for universal laws of social behavior. The increasing inadequacy of positivism in explaining the complexity, subjectivity, and diversity of social life necessitated the rise of alternative philosophical perspectives such as interpretivism, constructivism, and critical theory. These approaches contend with the assumption that social facts exist independently of human meaning and interpretation. The philosophical revolution also introduced value consciousness into research. Social science scholars began to acknowledge that researchers are not neutral observers but participants whose perspectives, assumptions, and social positions influence knowledge production. In essence, the philosophical revolution in social science replaced rigidity with intellectual pluralism, by embracing multiple ways of knowing and explaining social reality, social science has become more inclusive, and capable of addressing complex contemporary social challenges.

Empirical Review

The literature on the philosophical of social science research reveals that early discipline of social science was dominated by positivism, which held that social research should emulate the natural sciences by emphasizing objectivity, measurement, and the search for universal laws Comte (1856). Positivism assumption is fundamentally based on the fact that social reality exists independently of human perception and can be studied using empirical observations. However there emerged serious Challenge to positivism in the 20th century from the Interpretivist scholars such as Max Weber, who argued that social reality is constructed through human meanings and cannot be understood solely through objective measurement (Weber, 1949). The positivist further argue that the ultimate purpose of scientific research is scientific explanation of political behaviour, that is, to discover and document universal causal laws of human political behaviour. This conclusion is based on certain assumptions including the fact that society, like the physical world, operates according to general laws. Political behaviour (like any social objects) can be studied in much the same way as natural objects.

Interpretivists on the other hand hold the notion that social actions can be interpreted from the actor's perspective. The rise of critical theory, associated with the Frankfurt School, introduced an emancipatory dimension to social research. Interpretive political science research considers as its goal the development of an understanding of political behaviour and the discovery of how people construct meaning in natural political settings. Rather than seeking to discover abstract general law, an interpretive researcher want to learn what is meaningful or relevant to the people being studied or how individuals experience and exhibit daily political life. Interpretivism strive to understand meaningful political action, not just the external or observable political behavior of people. Political action is the action to which people attach subjective political meanings. This implies that the researcher must take into account the actor's reasons and the political context of their action.

Horkheimer (1972) argued that social science should not only describe society but also critique and transform it by exposing structures of inequality and oppression and for the critical theorists they talk about reflexivity and the role of power dynamics in shaping knowledge, While Feminist epistemologists challenged the androcentric assumptions embedded in traditional research, arguing that social science must incorporate women's experiences and question patriarchal structures (Harding, 1987). Similarly, postcolonial scholars critiqued the Eurocentric nature of social science and called for recognition and blending of indigenous knowledge systems and non-Western epistemologies (Said, 1978).

Theoretical Framework

Positivism in social science began with some scholars such as Comte (1830) who began to see the usefulness of the scientific method in the study of human society. Comte and other scholars of social science believed that the society with its components such as the family, the church, the state among others should be studied and understood. Positivism, is the scientific study of the social world. Its developed abstract and broad universal principles governing the workings of the social realm. A law is a statement guiding the interactions of people in the society, regulating behavior and instituting order for the proper functioning of society. Laws have to be tested against facts in a methodical manner according to positivism. The basic characteristics of social science

research that is normally situated within the Positivist school of thoughts in which it defend tenaciously, include the following.

The belief in the universality of theory and the ability to generalize across contexts, the belief that investigation leads to the discovery of truth or knowledge, the inevitable notion that cause and effect can be separated and analysed, The view that the outcomes of an investigation can be measured, the belief in the scientific research methodology and empirical or analytical approaches, believes in the ability of researchers to observe knowledge. (Neurath, 1973 & Fadhel, 2002). Based on these positive assumption Weber (1949) also argued that social science needed to study social action with a purpose, For him the basic interest of social science is different from that of natural sciences but social science too can be studied just like biological organism. Collins & Makowsky,(1998) or operated upon just as part of the human body such as the liver, the brain, the kidneys, and so on. Therefore, the embrace of scientist methods by the France and British positivism school emerged and became known as the behavioral revolution in American political science. . Behaviorists argue that knowledge about what actually happens in political life can be established through the methodology of the modern science Miller, (1972). Positivism laid a foundation for scientific study of man and society. The theory is apt in examining this essay because philosophical revolution in social science was aided and promoted by the thoughts and theorization by positivism.

Interpretivism

Interpretivism is an offshoot of positivism and arose to address the inherent challenges with positivism, it is traced to the work of sociologist Max Weber and Wilhem Dilthey. The core arguments of Interpretivism is that social reality is socially constructed and understood best through the meanings and individuals attach to their experiences. This paradigm emphasizes qualitative methods, such as interviews and participatory observation, to uncover subjective understandings. Weber (1947) argued that social science study social action with a purpose, for him the basic interest of social science is different from that of natural sciences in terms of its focus on studying human behavior and his activities in society. Dilthey agrees with the view that natural sciences are different from social science, While the former is based on abstract explanation, the latter is rooted in an empathetic explanation (Neuman, 2006). They collectively opined that Social scientists are interested in the cultural or social significance of the phenomenon they study which can neither be derived nor rendered intelligible by the scientific analytical laws. Such cultural significance derives from the fact that the object of social sciences is constituted, on the basis of value-orientation something more meaningful in accordance with the principle of social science research which place emphasis on qualitative research. Knowledge is created rather than discovered. It maintains that understanding is best achieved through interactions between researchers and participants, and that context, culture, and discourse shape interpretation, historically variable, cultural problems and corresponding evaluative ideas accepted in a particular epoch. Different versions of interpretative research have been developed: hermeneutics, constructionism. The theory is apt in examining this essay because philosophical revolution in social science because just like positivism, interventionism enhanced social science quest to understand the workings of society and social relations.

Critical Theory

Critical theory can be traced to the time of classical Greek thought on sovereignty and democracy to be considered, as well as the thinking of Plato, Weber and Aristotle (Devetak, 2005). It was further improved upon by social scientist such as Emmanuel Kant (1724-1804), Hegel (1770-1831) Karl Marx (1818-1883), in the nineteenth century Critical Political Science. However, in the twentieth century critical theory became most closely associated with the Frankfurt School of thoughts, It is in the work of Max Horkheimer, Theodor Adorno, Walter Benjamin, Jürgen Habermas that critical theory acquired a renewed potency and in which the term critical theory was coined and used in social science. The theory examines the challenge structures of inequality, focusing on power, ideology, and social justice in society. It assumes that research is never neutral and that scholars must reflect on their positionality and often influence by environmental factors abound in society.

It was largely an attempt to recover a critical and emancipatory potential that had been overrun by recent intellectual, social, cultural, political, economic and technological trends (Devetak, 2005). Unlike Contrary the positivists and interpretivists, the goal of Critical theory to change the world. It seek to critique and transform social and political relations by revealing the underlying sources of political relations and empowering people, especially the less powerful in the society. These three theoretical paradigms in the discipline of social sciences collectively guide the analysis of how philosophical shifts have transformed social science research. The theory is relevant for this study because critical theory just like positivism, interventionism has transformed the social science into a discipline that seeks to address societal challenge and reduce the pervasive inequality and injustice in society.

Findings and Discussion

The factors discussed below underscore the revolutionary depth of the philosophical revolution shaping modern social science which evolved over the centuries.

The Growing Acceptance of Methodological Pluralism in Social Sciences

Social sciences have witnessed astronomical development to the extent that that no single method or philosophical approach can fully capture the complexity of social phenomena in the contemporary world. Mixed-methods research, triangulation, and interdisciplinary collaborations have become increasingly common to address complex issues in the social science through scientific methods of inquiry. The adoption of Methodological pluralism became a profound revolution in the social sciences by challenging early traditional assumptions about how social reality should be studied and explained. Traditionally, social science research was influenced by the belief that a single, superior method, often modeled after the natural sciences, could adequately explain social phenomena. Methodological pluralism counter the positivists by asserting that no single method of enquiry can capture the full complexity of social life, thereby redefining what counts as valid knowledge in the social sciences. Joshua (2013). The core argument therefore of methodological pluralism is that social reality is multifaceted, context-dependent, and shaped by meaning, power, culture, and history. Methodological pluralism legitimizes the coexistence and integration of these approaches, arguing that different research questions require different tools.

Furthermore methodological pluralism strive to democratize social inquiry, by adopting interpretive and participatory methods, which encourage marginalized voices and local knowledge

that were often excluded by purely statistical approaches in social science research. This trend has wider implications for policy-oriented and applied research, as it enables scholars to generate first hand insights that are not only empirically grounded but also socially relevant and ethically informed.

The increased use of reflexivity in social science research as a major revolution

The popular use of reflexivity in social science research represents a major intellectual and methodological revolution that has reshaped how knowledge is produced and interpreted in the contemporary world. Reflexivity is the conscious and systematic examination of the researcher's role, assumptions, values, and influence in the research process. Unlike earlier positivist traditions that emphasized researcher neutrality and objectivity, reflexive approaches acknowledge that social research is inherently shaped by the perspectives, social locations, and power relations of those conducting it. Researchers are increasingly expected to reflect on their biases and assumptions. Reflexivity acknowledges that researchers influence the research process and that complete objectivity is unattainable in a research endeavor of any mold. Reflexivity is derived from the notion that researchers can stand outside the social world they study. Instead, reflexivity recognizes that researchers are embedded within cultural, political, and historical contexts that influence research questions, data collection, analysis, and interpretation. By making these influences explicit, reflexive research enhances transparency and ethical accountability. Drost (2011)

The rise of reflexivity has revolutionized qualitative and interpretive research traditions, including Development research, feminist research, and postcolonial studies. These approaches challenge hierarchical researcher participant relationships. Emphasis on reflexivity therefore constitutes significant revolution in social science research. It has shifted the focus from detached observation to engaged understanding, fostering more ethical, inclusive, and socially grounded knowledge based studies.

The rising focus on Power and Inequality in social science research

Developments in social science research has witnessed a sustained interest on power and inequality, marking a significant shift in how social realities are analyzed and explained. A proactive shift from interest in social order, stability, and functional integration, sometimes treating inequality as a peripheral or inevitable feature of society by early traditional social science thinkers. Contemporary social scientist, however, has consistently recognized power relations and structural inequalities as central forces shaping social outcomes, identities, and opportunities. This transformation manifests in both theoretical innovation and heightened global awareness of persistent and emerging forms of injustice across several society and civilisation. Critical, feminist, and postcolonial perspectives have highlighted the need to examine how social structures shape knowledge production. This has led to more inclusive research approaches that value marginalized voices such as women, people with disability, the poor and other vulnerable groups in society. The focus on these group ensures that social science transform and addresses some of key challenges facing mankind and bridge the wide disparity between the rich and poor as well as the developed and developing countries.

The focus on power and inequality is propelled by the notion that power operates not only through formal political institutions but also through economic structures, cultural norms, knowledge systems, and everyday social interactions. The revolution in this regard is influenced by critical theories which interrogate how power is produced, maintained, and resisted across multiple levels of society. Inequality is no longer viewed solely in terms of income or class, but also through intersecting dimensions such as gender, race, ethnicity, religion, disability, and global location. This complex approach reveals how domination creates unequal social experiences. Joshua (2013). The increased attention to power and inequality responds to contemporary social realities, highlighting the rising economic gap between the rich and poor, persistent gender and racial inequalities especially in developing countries, migration crises, and global power imbalances which exposed the inadequacy of earlier models of social science studies

The rising focus on power and inequality no doubt represents a transformative development in social science research, by trying to proffer solution to the questions of domination, exclusion, and resistance. Social scientists are better equipped and trained to understand complex social problems and more susceptible to conceiving and implementing policies and programmes that will bring about social change.

The Gradual Advancement from Universalism to Contextualism

Another important transformation in social science research over the past few centuries has been the gradual shift from universalism to contextualism. This transition reflects deeper reconsiderations about how social reality is understood, studied, and explained. While universalism seeks general laws applicable across societies and cultures, contextualism emphasizes the appraisal of social phenomena within specific historical, cultural, political, and spatial contexts. The movement from one to the other marks an important intellectual advancement rather than a complete rejection of earlier approaches. Bajpal & Bajpal (2014) asserts that Universalism dominated early social science, particularly during the positivist era. Influenced by the natural sciences, early theorists such as Auguste Comte and Emile Durkheim believed that society could be studied through objective, value-neutral methods to uncover universal social laws. This approach enabled comparability, prediction, and generalization, which were essential

Social science is moving away from attempts to develop universal theories toward context specific explanations tailored to explain and understand specific phenomena and situations. This reflects a broader movement toward situated knowledge.

Social scientist began to recognize that social phenomena do not exist in a vacuum but are shaped by local meanings, power relations, and historical trajectories. Furthermore contemporary social scientists highlighted how institutions and behaviors vary across contexts, by stating that explanations divorced from social and cultural settings risk misinterpretation and analytical distortion. The gradual movement from universalism to contextualism represents a critical change in social science research. It reflects analysis within specific contexts while remaining theoretically informed, social science is better positioned to produce credible, and socially relevant knowledge in an increasingly complex world

Revolution in research Validity and Reliability

Validity and reliability have been an integral aspect of any scientific research, serving as benchmarks for the credibility and trustworthiness research. They are acceptable standards derived primarily from positivist assumptions about objectivity and measurement. However, over time, social science research has undergone a profound revolution in the area of validity and reliability. This transformation reflects in the shifts toward interpretivism, critical theory, and methodological pluralism as social science continue to reinvent itself to meet the challenges of a changing world.

Traditional criteria for evaluating research have been considerably altered over time. Qualitative research emphasizes credibility, transferability, and authenticity rather than statistical reliability while quantitative research rely on statistical reliability and validity.

The revolution in validity and reliability emerged as qualitative and mixed-methods research gained currency in social science research. As scholars began to question traditional criteria grounded in interpretation rather than measurement. As a result, validity expanded beyond technical accuracy to include concepts such as credibility, authenticity, and reflexivity. Similarly, emphasis also shifted toward dependability and transparency in social science research. . Bajpal & Bajpal(2014)

Improvement in research validity and reliability remains one of the major and significant advancement in social science inquiry. Through the systematic technical definitions toward context-sensitive, reflexive, and pluralistic standards which has impacted social science to produce meaningful, credible, and socially relevant knowledge

The revolution of Information Technology on contemporary social science research

Information technology (IT) has considerably transformed social science research, enhancing how data are collected, analyzed, stored, and disseminated. This significant transformation constitutes a methodological and epistemological shift in social science that has expanded the scope, speed, and sophistication of social inquiry. Data availability remains an important and significant aspect of how IT has impacted social science research. The use of digital platforms such as social media, online surveys, government databases, search engines and mobile technologies generate vast quantities of real time data on social behavior, attitudes, and interactions. Asika (1991) This “big data” environment enables researchers to study social phenomena at unprecedented scale, resulting in, sustained use of these medium of communication for political mobilization, consumption, and social networks connections which can enrich the process of research with greater precision and depth. Information technology has also revolutionized data collection methods, through administration of online questionnaires and virtual interviews, which reduce geographical barriers and research costs while increasing participant diversity. Researchers can now engage with hitherto inaccessible populations and conduct empirical studies with greater efficiency. At the same time, digital tools enhance accuracy by automating data entry and minimizing human error.

In terms of data analysis, IT has introduced powerful computational and statistical techniques. Software for qualitative analysis, statistical tools, network analysis, and machine learning which allow researchers to handle complex datasets and uncover hidden relationships. It also enables enhanced interpretation of data by presenting findings in accessible and compelling formats, facilitating both academic understanding and policy engagement.

Conclusion

The philosophical revolution in social science research represents a transformation from narrow empiricism toward a more inclusive, reflexive, and context sensitive understanding of society. By embracing pluralism, challenging power structures, and acknowledging the subjective dimensions of knowledge, contemporary social science has no doubt been better equipped to address the complexities of human societies. While debates among positivists, interpretivists, critical theorists, and constructivists persist on how best to position social science to articulate and solve man's myriad of developmental challenges, the future of social science is embedded in integrating diverse approaches to stimulate richer, more ethical, and more socially relevant knowledge in an increasing globalized world.

Recommendations

1. Sustain the Promotion of the use of epistemological Pluralism in the social sciences.
Research institutions should encourage training in diverse philosophical paradigms and Methodologies capable of expanding Social science research.
2. The need to Strengthen Reflexive Practice thereby reducing bias in social science research.
Scholars should engage in ongoing self-evaluation to minimize bias and enhance research Integrity.
3. Encourage the use of critical theory in social science research to ensure mainstreaming of outcomes. Incorporate marginalized groups, social science research should systematically include voices from underrepresented groups to improve inclusivity and relevance of the discipline.
4. The need to uphold ethical sensitivity in social science research is always desirable and should be sustained to ensure credibility of the research process. Ethical considerations should be embedded throughout the research process, especially when studying human population.
5. Social science research should incorporate and utilized the opportunity offered by Interdisciplinary Collaboration, in that regards social issues require insights from other Disciplines necessitating the need for collaboration.
6. Social science research should leverage on the use of available digital and technological aids such as SPSS, internet sources, Artificial intelligence used in acceptable manner

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