

Article

Building a Conceptual Framework: Philosophy, Definitions, and Procedure

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Abstract

In this paper the author proposes a new qualitative method for building conceptual frameworks for phenomena that are linked to multidisciplinary bodies of knowledge. First, he redefines the key terms of *concept*, *conceptual framework*, and *conceptual framework analysis*. *Concept* has some components that define it. A *conceptual framework* is defined as a network or a “plane” of linked concepts. *Conceptual framework analysis* offers a procedure of theorization for building conceptual frameworks based on grounded theory method. The advantages of conceptual framework analysis are its *flexibility*, its capacity for *modification*, and its emphasis on *understanding* instead of prediction.

Keywords: conceptual framework, concepts, conceptual framework analysis, qualitative methods, grounded theory, metasynthesis, sustainable development

Introduction

In our contemporary times, most social phenomena are complex and linked to multiple bodies of knowledge that belong to different disciplines. For this reason, better understanding of such phenomena requires a multidisciplinary approach. Qualitative methods serve as adequate tools for investigating these complex phenomena. Despite the extensive literature that provides logical guidelines for qualitatively deriving theories from text and data (Glaser & Strauss, 1967; Harris, 2003; Miles & Huberman, 1994; Myers, 2009; Strauss & Corbin, 1990), there is a lack of a qualitative systematic method for building conceptual frameworks. This is particularly noticeable in the multidisciplinary literature. Usually, these multidisciplinary phenomena do not even have a skeletal framework, which is defined as

characteristics identified from previous inquiry that provide an internal structure that provides a starting point for observations and interview questions, and for analysis. The researcher proceeds by building on these structures or categories, padding them out or “giving them flesh” and organizing the ways they fit together. (Morse, Hupcey, et al., 2002, p. 1)

To address this gap, I will focus in this article on the process of building conceptual frameworks for multidisciplinary phenomena linked to different bodies of knowledge. Accordingly, I aim to redefine the term *conceptual framework* and to examine its underlying philosophy as well as to propose a new process of conceptual analysis for reconstructing a unified theoretical framework from the multidisciplinary literature. I will then apply the proposed method in constructing a conceptual framework for the multidisciplinary phenomenon of sustainable development. I will conclude with a discussion of the strengths and weaknesses of the new conceptual framework.

Defining concept and conceptual framework

Conceptual frameworks are products of qualitative processes of theorization. To explore the process of building conceptual frameworks, I first define the terms *concept* and *conceptual framework* and then outline the processes and procedures of conceptual framework building.

What is a concept?

When defining of the term *concept*, I follow and adapt the approach of Deleuze and Guattari in their *What Is Philosophy?* (1991), in which they hold that “every concept has components and is defined by them” (p. 15). These “components, or what defines the consistency of the concept; its endo-consistency; are distinct, heterogeneous and, yet, not separable” (p. 19). It is a multiplicity, but “not every multiplicity is conceptual,” and “there is no concept with only one component” (p. 15). Using this definition, we can point to a number of aspects of the term *concept*:

1. Every concept has an irregular contour defined by its components.
2. Every concept has a history.
3. Every concept usually contains “bits” or components originating from other concepts.
4. All concepts relate back to other concepts.
5. A concept is always created by something (and cannot be created from nothing).
6. Every concept is “considered as the point of coincidence, condensation, or accumulation of its own components” (p. 20).
7. Every concept must be understood “relative to its own components, to other concepts, to the plane on which it is defined, and to the problem it is supposed to resolve” (p. 21).

Redefining conceptual framework

Current usage of the terms *conceptual framework* and *theoretical framework* are vague and imprecise. In this paper I define *conceptual framework* as a network, or “a plane,” of interlinked concepts that together provide a comprehensive understanding of a phenomenon or phenomena. The concepts that constitute a conceptual framework support one another, articulate their respective phenomena, and establish a framework-specific philosophy. Conceptual frameworks possess ontological, epistemological, and methodological assumptions, and each concept within a conceptual framework plays an ontological or epistemological role. The ontological assumptions relate to knowledge of the “way things are,” “the nature of reality,” “real” existence, and “real” action (Guba & Lincoln, 1994). The epistemological assumptions relate to “how things really are” and “how things really work” in an assumed reality (p. 108). The methodological assumptions relate to the process of building the conceptual framework and assessing what it can tell us about the “real” world.

Features of conceptual frameworks

The main features of conceptual frameworks are as follows:

1. A conceptual framework is not merely a collection of concepts but, rather, a construct in which each concept plays an integral role. According to Miles and Huberman (1994), a conceptual framework “lays out the key factors, constructs, or variables, and presumes relationships among them” (p. 440). To discourage loose usage of the term *conceptual framework*, I propose basing conceptual frameworks not on variable or factors but on concepts alone. When variables or factors are used, I suggest employing the term *model*.
2. A conceptual framework provides not a causal/analytical setting but, rather, an interpretative approach to social reality.
3. Rather than offering a theoretical explanation, as do quantitative models, conceptual frameworks provide understanding.
4. A conceptual framework provides not knowledge of “hard facts” but, rather, “soft interpretation of intentions” (Levering, 2002, p. 38).
5. Conceptual frameworks are indeterminist in nature and therefore do not enable us to predict an outcome. Levering (2002) has suggested that “the idea that human behavior can be explained and predicted is roughly based on the concept of external factors being caught in an accidental cohesion, and the idea that human actions can be understood, but not predicted, is based on the concept of freedom” (p. 38).
6. Conceptual frameworks can be developed and constructed through a process of qualitative analysis.
7. The sources of data consist of many discipline-oriented theories that become the empirical data of the conceptual framework analysis. Although conceptual framework analysis generates theories or conceptual frameworks from multidisciplinary bodies of knowledge, metasynthesis, a systematic synthesis of findings across qualitative studies, seeks to generate new interpretations for which there is a consensus within a particular field of study (Jensen, & Allen, 1996; Nelson, 2006; Sandelowski, Docherty, & Emden, 1997). In metasynthesis, which is both hermeneutic and comparative in nature, the researcher aims to expand our interpretation (Sandelowski, 1993) beyond existing qualitative studies from the same discipline (Paterson et al., 2009). Moreover, whereas conceptual analysis aims to produce concepts, metasynthesis produces metaphors, ideas, concepts, and more. Usually, metasynthesis initially selects studies and then identifies key metaphors, ideas, concepts, and relations in each one (Nelson, 2006; see also Campbell et al., 2003; Noblit & Hare, 1988).

Methods of building a conceptual framework

In this article I suggest that building a conceptual framework from existent multidisciplinary literature is a process of theorization, which uses grounded theory methodology rather than a description of the data and the targeted phenomenon. Strauss and Corbin (1990) identified two main points related to the difference between theory and descriptions:

First, theory uses concepts. Similar data are grouped and given conceptual labels. This means placing interpretations on the data. Second, the concepts are related by means of statements of relationships. In description, data may be organized according to themes. These themes may be conceptualizations of data, but are more likely to be precise summaries of words taken directly from the data. There is little, if any, interpretation of data. Nor is there any attempt to relate the themes to form a conceptual scheme. (p. 20)

In a broader sense, “qualitative studies ultimately aim to describe and explain a pattern of relationships, which can only be done with a set of conceptually specified categories” (Mishler, 1990, p. 431).

Extensively used qualitative methods, such as content analysis, thematic analysis, conceptual analysis, discourse analysis, and semiotic and metaphor analysis, aim, in principle, to assess the occurrence and presence of certain words, phrases, themes, metaphors, or constructs and concepts within a given text. These methods are limited for a variety of reasons, “including lack of simple routines, time-consuming data preparation, difficulties in relating textual data to other data, and a lack of a strong theoretical basis” (Carley, 1993, p. 77). They are therefore good for providing description but not for generating theorization. In conceptual analysis, for example, a concept is chosen for examination, and the analysis quantifies its presence and occurrence. On this basis, I hold that the grounded theory method is adequate and extremely useful for building conceptual frameworks from multidisciplinary texts.

Grounded theory is adequate for conceptual framework building due also to its primary characteristics. It is a specific paradigm of inquiry that includes a number of distinct features and involves the use of coding paradigms to ensure conceptual development (Strauss, 1987). It is a research method aimed at the discovery of theory from systematically obtained data (Glaser & Strauss, 1967; Strauss, 1987) and “an inductive, theory discovery methodology” (Martin & Turner, 1986, p. 141), which facilitates “the generation of theories of process, sequence, and change pertaining to organizations, positions, and social interaction” (Glaser & Strauss, 1967, p. 114). Grounded theory perspective is one of the most widely used qualitative interpretive frameworks in the social sciences today because of its use of methods that conform to the “good science” model (Denzin & Lincoln, 1994; Harris, 2003). Orlikowski (1993) has suggested that grounded theory is contextual, procedural, and inductive. Accordingly, it builds a “context-based, process-oriented description and explanation of the phenomenon, rather than an objective, static description expressed strictly in terms of causality” (Andersson, Hallberg, & Timpka, 2003, p. 50; see also Orlikowski, 1993).

Conceptual framework analysis technique: Data, process, and procedure

In the existing techniques of conceptual analysis, “a concept is chosen for examination, and the analysis involves, among other things, quantifying and tallying its presence” (Palmquist, Carley, & Dale, 1997; see also Finney & Corbett, 2007). The focus is on examining the occurrence of

selected implicit and explicit terms within texts. Moreover, Carley (1993) has suggested that “the focus on concepts implicit to traditional content analysis often results in an overestimation of the similarity of texts because meaning is neglected” (p. 77).

Yet, the existing conceptual analysis technique is inadequate for theorizing the concepts that emerge from the text. Therefore, in this article I propose a new technique, which I refer to as conceptual framework analysis, as a grounded theory technique, or tactic, that aims to generate, identify, and trace a phenomenon’s major concepts, which together constitute its theoretical framework. I also aims to develop concepts—each of which has its own attributes, characteristics, assumptions, limitations, distinct perspectives, and specific function within the conceptual framework—that shed more light on the phenomenon represented by the concepts themselves (see Boyatzis, 1998; Jabareen, 2008; Morse & Mitcham, 2002). At the heart of this methodology lies the interplay among induction, derivation of concepts from data, and deduction aimed at hypothesizing the relationship between concepts (Patton, 2002).

The data of conceptual framework analysis

The texts selected for conceptual framework analysis should effectively represent the relevant social, cultural, political, and environmental phenomenon or social behavior, and the multidisciplinary literature that focuses on the phenomenon under study. An important point is that they should also represent practices that are related to the phenomenon. The data should therefore come from a variety of types, such as books, articles, newspapers, essays, interviews, and practices. Most texts and much data represent theories that belong to specific disciplines. When we embark on a multidisciplinary approach, these discipline-oriented theories become the empirical data of the conceptual framework analysis.

The process of conceptual framework analysis

The proposed process is iterative, “requiring a steady movement between concept and data, as well as *comparative*, requiring a constant comparison across types of evidence to control the conceptual level and scope of the emerging theory” (Orlikowski, 1993, p. 310, emphasis added). The technique, as required by grounded theory, suggests a continuous interplay between data collection and analysis (Myers, 2009).

The procedure of conceptual framework analysis

The proposed methodology is composed of the following main phases.

Phase 1: Mapping the selected data sources

The first task is to map the spectrum of multidisciplinary literature regarding the phenomenon in question. This process includes identifying text types and other sources of data, such as existing empirical data and practices. It must begin with an extensive review of the multidisciplinary texts, and it is also recommended to undertake initial interviews with practitioners, specialists, and scholars from various disciplines whose work focuses on the targeted phenomenon. Data collection should be a comprehensive and complete “fishing trip” or “scoping” (Morse & Richards, 2002), and should facilitate holistic mapping and complete data collection to ensure validity (Morse & Mitcham, 2002).

Phase 2: Extensive reading and categorizing of the selected data

The aim in this phase is to read the selected data and categorize it both by discipline and by a scale of importance and representative power within each discipline. This process maximizes the effectiveness of our inquiry and ensures effective representation of each discipline.

Phase 3: Identifying and naming concepts

The aim in this phase is to read and reread the selected data and “discover” concepts (Glaser & Strauss. 1967; Strauss & Corbin. 1990). Its result is a list of numerous competing and sometimes contradictory concepts. Generally, this method allows concepts to emerge from the literature. Indeed, Morse, Hupcey, et al. (2002) have suggested that “qualitative inquiry that commences with the concept, rather than the phenomenon itself, is subject to violating the tenet of induction, thus is exposed to particular threats of invalidity” (p. 68).

Phase 4: Deconstructing and categorizing the concepts

The aim of this phase is to deconstruct each concept; to identify its main attributes, characteristics, assumptions, and role; and, subsequently, to organize and categorize the concepts according to their features and ontological, epistemological, and methodological role. The result of this phase is a table that includes four columns. The first includes the names of the concepts; the second includes a description of each concept; the third categorizes each concept according to its ontological, epistemological, or methodological role; and the fourth presents the references for each concept.

Phase 5: Integrating concepts

The aim in this phase is to integrate and group together concepts that have similarities to one new concept. This phase reduces the number of concepts drastically and allows us to manipulate to a reasonable number of concepts.

Phase 6: Synthesis, resynthesis, and making it all make sense

The aim in this phase is to synthesize concepts into a theoretical framework. The researcher must be open, tolerant, and flexible with the theorization process and the emerging new theory. This process is iterative and includes repetitive synthesis and resynthesis until the researcher recognizes a general theoretical framework that makes sense. Researchers should know how to build their conceptual frameworks. As Miles and Huberman (1994) have suggested, researchers who use qualitative methods “need to know how they are constructing ‘theory’ as analysis proceeds, because that construction will . . . inevitably influence and constrain data collection, data reduction, and the drawing and verification of conclusions” (p. 434).

Phase 7: Validating the conceptual framework

The aim in this phase is to validate the conceptual framework. The question is whether the proposed framework and its concepts make sense not only to the researcher but also to other scholars and practitioners. Does the framework present a reasonable theory for scholars studying the phenomenon from different disciplines? Validating a theoretical framework is a process that starts with the researcher, who then seeks validation among “outsiders.” Presenting an evolving theory at a conference, a seminar, or some other type of academic framework provides an excellent opportunity for researchers to discuss and receive feedback.

Phase 8: Rethinking the conceptual framework

A theory or a theoretical framework representing a multidisciplinary phenomenon will always be dynamic and may be revised according to new insights, comments, literature, and so on. As the framework is multidisciplinary, the theory should make sense for those disciplines and enlarge their theoretical perspective on the specific phenomenon in question.

Case study: The phenomenon of sustainable development

This case study focuses on the multidisciplinary phenomenon of sustainable development. Sustainable development has been addressed in a large number of disciplines, including geography, economics, ethics, law, sociology, anthropology, urban studies, planning, design, and architecture.

A review of the multidisciplinary literature on sustainable development (SD) reveals a lack of a comprehensive theoretical framework for understanding the phenomenon and its complexities (Jabareen, 2004, 2006, 2008). Beatley and Manning (1998) hold that although sustainability is a good thing, it still requires definition and elaboration. Some have argued that the existing definitions of sustainable development are vague (Gow, 1992; Mozaffar, 2001), devoid of operative definitions (Villanueva, 1997), and fraught with contradictions (Redclift, 1987), and that the topic itself is confused (Berke & Conroy, 2000; Redclift, 1994). Others have pointed out that authors on the subject employ unclear symbolic rhetoric (Andrews, 1997; Solow, 1992) and are not even in agreement on what it is that needs to be sustained (Redclift, 1993; Sachs, 1999; Satterthwaite, 1996). Applying the process of a conceptual framework analysis, described above, to the phenomenon of sustainable development not only provides us with a case study of theoretical framework building but also sheds new light on the phenomenon of sustainable development itself.

Findings: Concepts of sustainability

The conceptual analysis undertaken along the lines laid down in the first part of this article identified seven distinct concepts that make up the theoretical world of sustainability (Jabareen, 2008).

Concept 1: Ethical paradox

This concept relates to the apparent contradiction between development, which requires environmental modification and intervention in nature and exhausts natural resources, and sustainability, which is a characteristic of a process or state that can be maintained for an indefinite period. The most frequently used definition of SD appears in the Brundtland report (World Commission for Environment and Development [WCED], 1987) and reads as follows: "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (p. 46). Thus, the role of SD is to mitigate this paradox and to provide a rapprochement between ecological (sustainability) and economic (development) interests to cope with the ecological crisis without affecting existing economic growth (Baeten, 2000; Sachs, 1993).

Concept 2: Natural capital stock

This concept relates to the natural resource assets involved with development. Natural capital stock includes all environmental and natural resource assets (Pearce, Barbier, & Markandya,

1990). Sustainability requires that the stock of natural capital remain constant and not decrease in the long run in order not to endanger the opportunities of future generations to generate wealth and well-being (e.g., Costanza et al., 1997; England, 1998; Geldrop & Withagen, 2000).

Concept 3: Equity

This concept relates to the social aspects of SD. Equity is a broad term that encompasses environmental, social, and economic justice; social equity; equal rights for development; equal economic distribution; freedom; democracy; public participation; and empowerment. Sustainability can be achieved through an effective balancing of social, environmental, and economic objectives and through a more equitable distribution of resources (Agyeman, Bullard, & Evans, 2002; Berke & Kartez, 1995; Healey & Shaw, 1993; Meadows, Meadows, & Randers, 1992; Robinson & Tinker, 1998; Scruggs, 1993; Stymne & Jackson, 2000). Moreover, sustainability is also a matter of distributional equity, or intragenerational and intergenerational equity, emphasizing a need for present and future generations to share the capacity for well-being (Boyce, Klermer, Templet, & Willis, 1999; Solow, 1991; Stymne & Jackson, 2000).

Concept 4: Eco-form

This concept relates to the form and design of various human communities, urban spaces, and buildings that is most desirable from an ecological perspective (Jabareen, 2006, 2008). A key strand of research into sustainability strategies has focused on ecological design and on defining the urban forms that enable built environments and buildings to function in more sustainable ways than at present. This concept suggests that better design contributes both to reducing air pollution and increasing energy efficiency. (e.g., Edwards, 1999; Haughton, 1999).

Concept 5: Integrative management

This concept represents the integrative strategy of sustainable development, which suggests integrating social, economic, and environmental concerns in planning and management to achieve sustainability (Commission on Sustainable Development, 2001; Council of Europe, 1993; Dodds, 2000; Robinson & Tinker, 1998; WCED, 1987).

Concept 6: Utopianism

The utopian concept envisages a sustainable human society and habitat based primarily on sustainable development. Utopias related to SD often envision a perfect society in which justice prevails, people are content and live and flourish in harmony with nature, and life moves along smoothly without abuses and shortages. The power of utopian thinking, which is properly conceived of as a vision of a new society that questions all the presuppositions of present-day society, is its inherent ability to see the future in terms of radical new forms and values (e.g., Dobson, 1990; de Geus, 1999).

Concept 7: Global political agenda

This concept represents a new global, national boundary that transcends the practical and theoretical implications of the discourse of SD and that has become a central element of environmental policies around the globe (Dodds, 2000). Since the Rio Summit in 1992, sustainability has increasingly been conceived of as a challenge for global management to organize intelligent, scientific, and instrumental management of the earth. This concept, however, reflects deep disputes between northern and southern countries (e.g. Jabareen, 2008; World Summit on Sustainable Development, 2002).

Table 1. Conceptual framework of sustainable development and selected sources of data

<i>The Concept</i>	<i>Inquiry Character</i>	<i>Selected Sources of Data</i>
Ethical paradox	Ontological concept	Philosophy and ethics
Natural capital stock	Epistemological concept	Ecology, environmental studies
Eco-form	Methodological concept	Design, architecture, planning, and urban studies
Utopianism	Methodological concept	Literature
Global political agenda	Methodological concept	Civil society, political sciences
Integrative management	Methodological concept	Management and urban planning studies
Equity	Methodological concept	Ecology, environmental studies, ethnic studies, and feminist and gender studies

The conceptual framework of sustainable development

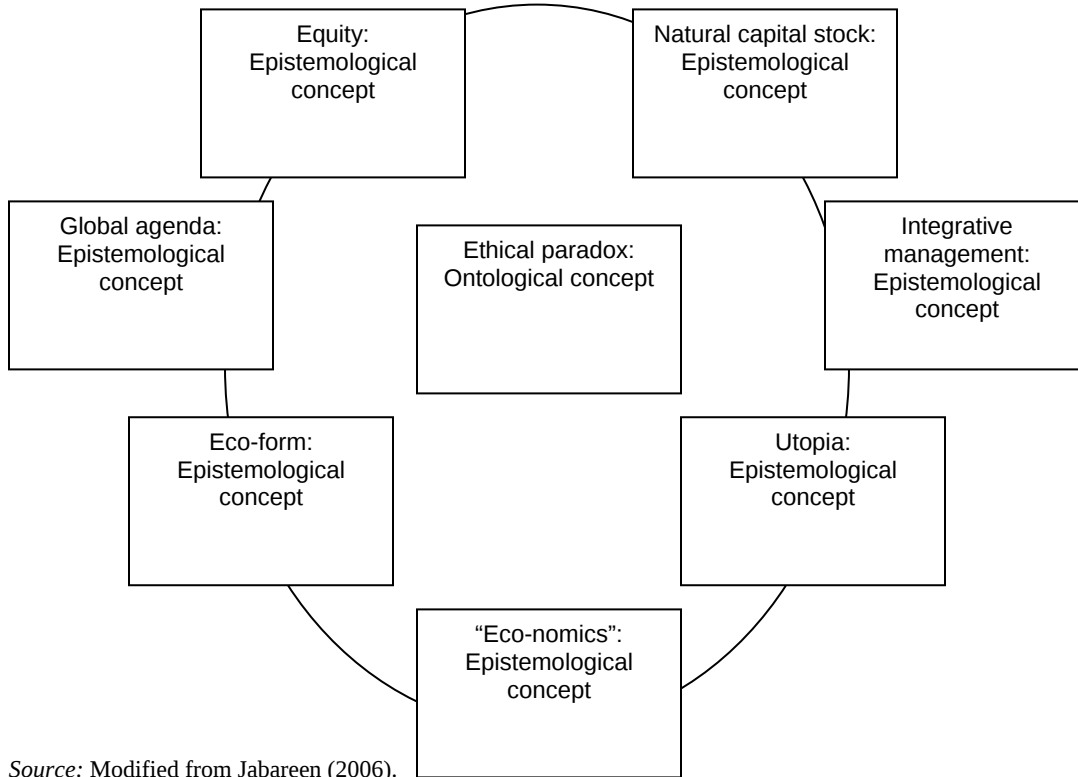
Each of the seven concepts identified above as collectively constituting the theoretical framework of sustainable development represents distinctive aspects of the theoretical foundations of sustainability. As shown in Figure 1, these concepts have interwoven relationships with one another. The concept of ethical paradox is the framework's ontological basis and sits at its core, articulating the paradox between sustainability and development in terms of ethics. In other words, the epistemological foundation of the theoretical framework of sustainable development is based on the unresolved and fluid paradox of sustainability, which as such can simultaneously inhabit different and contradictory environmental ideologies and practices. Consequently, SD tolerates diverse interpretations and practices ranging from "light ecology," which allows intensive intervention in nature, and "deep ecology," which allows only minor intervention.

Concluding thoughts

In this article I have proposed a new qualitative method for building conceptual frameworks to better understand phenomenon linked to multiple bodies of knowledge situated in multiple disciplines. First, it includes a redefinition of *concept*, *conceptual framework*, and *conceptual framework analysis*. *Concept* has some components that define it. All concepts are characterized by a number of features: an irregular contour defined by its components; a history, some "bits" or components that come from other concepts, and elements that can be traced back to other concepts. *Conceptual framework* is defined as a network, or "plane," of linked concepts that together provide a comprehensive understanding of a phenomenon. Each concept of a conceptual framework plays an ontological or epistemological role in the framework. Conceptual frameworks are not merely collections of concepts but, rather, constructs in which each concept plays an integral role. They provide not a causal/analytical setting but, rather, an interpretative approach to social reality. Finally, they are not determinist frameworks.

As we have seen, conceptual frameworks can be developed through an eight-phase qualitative process of analysis, referred to here as conceptual framework analysis. As building a conceptual framework is a process of theorization, it uses grounded theory method rather than a description of the data and the targeted phenomenon. The sources of data are theories generated by theories in multiple disciplines, which become the empirical data of the conceptual framework analysis carried out in the article. The data themselves are composed of various texts addressing the social, cultural, political, or environmental phenomenon in question and the multidisciplinary literature on the subject.

Figure 1. The conceptual framework of sustainable development



Although conceptual framework analysis certainly has its limitations - such as the fact that different researchers may have different conceptions of the same phenomenon and may create different “planes” and conceptual frameworks, and possible difficulties finding suitable texts and data - it also offers some important advantages.

Flexibility. It is based on flexible conceptual terms rather than rigid theoretical variables and causal relations.

Capacity for modification. Conceptual frameworks can be reconceptualized and modified according to the evolution of the phenomenon in question or as a result of new data and texts that were not available at the time the framework was first developed. This is consistent with the basic premise that social phenomena are evolutionary and not static.

Understanding. Conceptual frameworks aim to help us understand phenomena rather than to predict them.

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