Ontological and epistemological views in the constructivism paradigm disallow the existence of an external objective reality independent of an individual from which knowledge may be collected or gained. Instead, each individual constructs knowledge and his or her experience through social interaction. This research paradigm represents a change from the focus on explaining phenomena (Erklärung) typical in the natural sciences to an emphasis on understanding (Verstehen), which is deemed more appropriate for investigating phenomena in the human sciences. This change, referred to as the interpretive turn, was initiated during the 19th century through the writings of Wilhelm Dilthey, Edmund Husserl, and Max Weber, among others. These philosophers, especially, articulated how human agency and meaning-making require an approach to the human sciences that is ontologically and epistemologically different from the positivist approach that had been derived from the empiricism of the natural sciences (positivism asserts that causal knowledge of the social world can be obtained objectively through observation and experimentation). During the 20th and 21st centuries, the interpretive paradigm generally labeled as constructivism became more complex with the development of social constructivism, psychological constructivism, and radical constructivism. These approaches to research reflect varying degrees to which knowledge is socially constructed.

Theoretical Antecedents

The antipositivist movement was focused in 19th-century Germany, where scholars sought to describe the inherent differences between the human and natural sciences and, thereby, to develop a paradigm better suited for studying the social world. Essentially, these thinkers saw the need for a science that would investigate the world created by humans—the built environment, social institutions, language, culture, belief systems, and so on—and the meanings humans ascribed to their experience in this social world.
Wilhelm Dilthey (1833–1911)

Dilthey’s contribution to the interpretive turn in the human sciences is in his assertion that humans must be studied within the context of their social and cultural lives. He believed that this investigation should occur systematically and empirically, but not with the aim of developing a mechanistic explanation. Although he thought that there was an underlying order to human experience, this order was developed dialectically through humans’ interactions with their social and physical environments and manifested through meaningful constructions such as myths, religions, and works of art (literary, performance, and visual). The aim of the human sciences is to understand the meaning humans give to their experience. This interpretive understanding, *Verstehen*, is a kind of knowledge that is constructed in the exchange between researcher and participant.

Dilthey’s ideas were influenced by the hermeneutic tradition that originally referred to the interpretation of texts, especially scripture. Dilthey identified hermeneutics as a method for the human sciences due to the hermeneutic dependence on a knowledge of context for interpretation and the circular process of interpretation. In the hermeneutic circle, interpretation develops out of a constant back-and-forth movement between parts and the whole; one understands the meaning of a sentence based on the relationship between individual words. The meaning of individual words depends on their situation within the context of the entire sentence. This applies similarly to passages of text in relation to the entire work and, analogously, to individual experience in the social world. The process is circular in that there is no obvious starting or end point; meaning is dynamic and developed in the very process of interpretation. Dilthey was concerned, however, with the relativism that this process may engender.

Edmund Husserl (1859–1938)

Husserl's contribution to the interpretive turn in the human sciences was through his development of phenomenology. Phenomenology is the study of experience through reflection. The individual reflects on an experience and describes its essences through imaginative manipulation (an intuitive grasping of what is essential about
an instance). It is not a passive process but rather an active sifting through of contingencies and variables to perceive the essential character of an instance or experience. Husserl termed the awareness of the essence of a phenomenon as *Anschauung*—the realization of the insight. The constitution of phenomena within consciousness—the realization or intuition of the essence of an experience—is historically and socially situated. In this way, intuited meaning may be constructed through researcher–participant interaction. A phenomenological methodology is especially common in interview studies in the constructivism paradigm as the researcher asks participants to reflect on their experience of a phenomenon and describe what was essentially meaningful to them. Through this reflection, both the researcher and participant gain insight, or construct knowledge, about the experience.

Max Weber (1864–1920)

Weber emphasized the agency in human experience. Distinguishing action from behavior, which he described as biological and instinctive, Weber described action as guided by meaning and values. The aim of human science is to interpretively understand (Verstehen) the meaning an action has for an individual. This understanding is essential for trying to explain why an action occurs. In this way, Weber was trying to bridge the division between explanation and understanding as aims for social science. Weber, like Dilthey, was concerned with the relativism and subjectivism of the knowledge that may be constructed based on an actor’s description of his or her motivation. Weber's influence on the constructivism paradigm is evident in social sciences research that focuses on participants’ motivations such as studies of teachers’ instructional decisions and planning for curricula.

The relativism of knowledge is a persistent issue in the constructivism paradigm. Efforts were made during the 20th century to develop methods for establishing the trustworthiness of knowledge warrants in constructivist research. The degree to which practitioners are comfortable with relativism is reflected in the varieties of constructivism as described in what follows.
20th-Century Developments

Moving into the 20th century, John Dewey's (1859–1952) lifelong investigation of the nature of experience and humans’ interaction with their environment may be considered constructivist in his recognition that knowledge is constructed in social contexts and that students need to be active learners—not passive recipients—of knowledge. Jean Piaget's (1896–1980) theory of cognitive development has been considered constructivist in that through activity a child constructs his or her understanding of reality. Most significant is the work of Russian psychologist Lev Vygotsky (1896–1934), whose sociocultural learning theory states that a child develops higher mental functions through interaction with significant adults and peers. Through these interactions, a child learns language and constructs knowledge specific to his or her culture. Therefore, an individual's understanding is mediated by his or her sociohistorical context.

Constructivism during the latter 20th century included efforts to develop a methodology for understanding the meaning of human experience out of the theoretical foundation laid by German 19th-century thinkers and early to mid–20th-century philosophers and psychologists.

Research and Evaluation Methodology

Egon Guba and Yvonna Lincoln wrote several key works outlining the constructivist paradigm as it relates to social science inquiry, both research and evaluation. They explicitly took up the debate carried on by Dilthey, Weber, and others by articulating how constructivism is different from what they called the conventional paradigm (positivism and postpositivism). Ontologically, reality is relative, multiple, socially constructed, and ungoverned by natural laws. It claims a monistic subjectivist epistemology in which knowledge is constructed between inquirer and participant through the inquiry process itself. Inquiry is carried out through a hermeneutic methodology that is essentially dialectic and iterative and where insights and understanding emerge from the joint construction of inquirer and participant (etic and emic views).
Considering this relativist reality and subjectivist epistemology, there is a need for criteria to judge the merit of knowledge warrants in constructivist research. According to Guba and Lincoln, the positivist/postpositivist strategies for controlling threats to internal and external validity and for assessing the reliability and objectivity of a study are incongruent with the constructivist paradigm. They sought to determine the credibility—not validity—of knowledge warrants in the constructivist paradigm. A knowledge warrant may be deemed as credible if there is consensus among informed and qualified persons. A constructivist inquiry is successful if it presents increasing understanding of its phenomenon. This relates to the criterion of generalizability as external validity in postpositivist research, but in the constructivist paradigm Guba and Lincoln identified transferability as the more salient criterion. The researcher presents increasing understanding of its phenomenon through thick description as described by the anthropologist Clifford Geertz; it is up to readers to transfer this understanding to other contexts and assess the similarity. In constructivist inquiry, an interpretation is considered to be dependable—not reliable—if the inquiry process is tracked, with changes being documented and made available for public inspection. Constructivism rejects the idea that there is objective knowledge in some external reality for the researcher to retrieve mechanistically. Instead, the researcher's values and dispositions influence the knowledge that is constructed through interaction with the phenomenon and participants in the inquiry. To determine whether the researcher's interpretations are not fictitious, data and their interpretation may be confirmed by tracking the data to their original source and transparently presenting the logic of the interpretive process and analytic strategies in the report or narrative. Finally, because constructivist research is naturalistic—inquiry happens in the settings where a phenomenon naturally occurs (e.g., classroom, medical clinic, community center)—the understanding that results must be authentic. Authenticity refers to the balanced presentation of all perspectives, values, and beliefs related to the inquiry. Criteria for determining the authenticity of an inquiry include fairness, ontological authenticity, and catalytic authenticity. Fairness relates to what extent different constructions and value structures are addressed and respected during the inquiry process and its presentation. Ontological authenticity determines how the participant's understanding of an experience or a phenomenon became more informed or substantial (possibly illustrated through member checks or audit trails) as a result of the study. Catalytic authenticity determines the degree to which action is inspired by the inquiry process.
Lincoln and Guba’s discussion of the authenticity criteria came in 2000 in the second edition of the *Handbook of Qualitative Research*. It reflects growing concerns in qualitative research regarding power relations between researcher and participant, the role of the participant in inquiry, and how research may foster social justice.

**Variations of Constructivism during the 21st Century**

Along with the methodological developments in the constructivist paradigm is an ongoing philosophical exploration of the nature of constructivism. Although categorization is essentially flawed because there are blurred boundaries among various theories, recent scholarship (e.g., D. C. Phillips’s writing) aims to provide some clarity regarding the complex landscape of constructivism by offering descriptions of major trends in the paradigm. Phillips delineated the following trends in an edited volume focused on constructivism in education.

**Psychological Constructivism**

Psychological constructivism addresses the epistemological questions of constructivism and is especially relevant to education as it deals with how people learn and, thereby, how instruction should be carried out. Essentially, knowledge is not acquired but rather is made (or constructed). The learner is an active participant in building knowledge, not a passive recipient of information. The educational theories of Dewey and the psychological theories of Piaget are especially influential in this realm, as is Jerome Bruner’s conception of learning as individual meaning-making.

**Social Constructivism**

Social constructivism addresses the ontological–epistemological questions of constructivism in describing the bodies of knowledge developed over human history as social constructs that do not reflect an objective external world. Everything we know
has been determined by the intersection of politics, values, ideologies, religious beliefs, language, and so on. Vygotsky's sociocultural learning theory, especially his work regarding language development and his theory of the zone of proximal development, is influential in this realm, as is the scholarship of the contemporary social psychologist Kenneth Gergen.

Radical Constructivism

Radical constructivism is an extreme form of psychological constructivism. It asserts that any external world is entirely a construction of an individual and exists in that person's consciousness as his or her subjective experience. Ernst von Glasersfeld's writing reflects and describes this position. For example, in Catherine Twomey Fosnot's edited volume on constructivism, von Glasersfeld related this idea to the concept of environment in educational contexts, both the physical classroom environment and the psychological learning environment. He urged educators to remember that, from a radical constructivism epistemological view, a teacher's perception of the learning environment he or she has created (physical and psychological) is experienced and known differently by each student in that environment. Therefore, according to von Glasersfeld, there is no absolute external learning environment; there is only the perceived learning environment built in each individual student's mind.

Research in the Constructivist Paradigm

In terms of methods, constructivist qualitative research studies typically emphasize participant observation and interviewing for data generation as the researcher aims to understand a phenomenon from the perspective of those experiencing it. The researcher's understanding is co-constructed with that of the participants through their mutual interaction within the research setting and dialogic interaction through researcher-initiated data generation efforts such as interviewing.

Guba and Lincoln's work on developing criteria for determining the trustworthiness of interpretations produced within the constructivist paradigm provides some specificity to
how one may conduct and digest research in this paradigm. The preceding historical discussion and delineation of constructivist theories provides possible conceptual frameworks to guide and understand research in this paradigm. For example, Husserl's phenomenology, adapted and developed by contemporary qualitative researchers such as Max von Manen, is a common methodological framework for constructivist research studies. Vygotsky's sociocultural learning theory is an oft-cited theoretical framework in constructivist educational research. For example, Christine Thompson and Sandra Bales described the nature of preschool and kindergarten children's talk surrounding voluntary art activities in an art classroom using a phenomenological methodology in that they observed and recorded students' speech and drawing acts within the specific social context of an art classroom and reflected on what these acts might mean for the role of speech in early childhood artistic expression. They used the theories of both Vygotsky and Piaget to understand students' use of language in this specific context and area of cognitive development.

## Future Directions

The general constructivist paradigm is becoming obscured by the dominating influence of the transformative paradigm in 21st-century qualitative research. The transformative paradigm, which includes feminist critical theory and participatory action research methodologies, grows out of the ontological, epistemological, and methodological foundations of constructivism but has an explicitly social reconstructionist agenda that aims to promote social justice through research and evaluation.

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See also

- Context-Centered Knowledge
- Hermeneutics
- Interpretive Research
- Phenomenology
- Relativism
• **Social Constructionism**

**Further Readings**


