

Constructivism

The term constructivism refers to a philosophical stance according to which any reality can only be known through pre-defined categories. The idea is that our world is always pre-constructed by filters, interpretation grids, systems of "representations", or manners of action that determine the configuration of our place and existence in the world and our interactions with it.

Constructivism has over the last two decades become a sort of rallying flag for numerous practitioners in the social sciences. It reflects at once the rejection of a social reality seen as an immutable object, a sort of stuffed animal; and hence not open to change; created by official discourse (religious, state, middle class establishment, scientific and so forth), and a desire to break away from earlier epistemologies of the social sciences (functionalism and structuralism, seen reductively as avatars of positivism). The work by thinkers who deconstructed the systems of categorisation of Western thought (Michel Foucault, Jacques Derrida) played a decisive part in the accession of constructivism to the status of an epistemological stance.

In many respects, constructivism is a form of anti-realism. The notion that it is in no way possible to gain direct access to reality as such is a point common to all present forms of constructivism. This positions constructivism in the wake of traditions dating back over variable periods, and which have the shared characteristic of having fallen into discredit over long periods of time. Sophism, and the famous saying attributed to Protagoras "*Man is the measure of all things*", can be mentioned in this respect. It is read today as stating that for man there is no non-human knowledge, i.e. knowledge cannot be stripped of anthropological systems of representation, which serve as much to construct knowledge as to transmit it. Thus constructivism is an inherited form of Medieval nominalism: reality is too diverse, too multidimensional and too indeterminate for us to apprehend it as such. We use discretizations, filters, intellectual schemas, and other strategies so as to carve out of reality a manageable world commensurate with our lives. The language we speak, whether everyday or specialist, contributes enormously to the sieving process that converts the chaotic infinite around us into a stable and reassuring world. Thinkers as diverse as Jean Piaget, Hilary Putnam, Thomas Kuhn or Nelson Goodman have all contributed to reformulating nominalist arguments.

Another argument was developed by the American pragmatist tradition (William James, John Dewey) suggesting that a representation of reality derives its stability and efficiency from action: having an evolving theory of obstacles enables a car driver to survive on the road; considering problematic suburbs as ghettos in the context a police deployment strategy will work so long as it is possible to "sell" the idea that the containment of populations and problems will prevent their spread. Pragmatism opens up the way towards epistemological constructivism: a scientific theory is true and functional insofar as it achieves success by the action on the real world that it renders possible. It is these operational achievements that are the basis of its legitimacy. Newtonian physics was long considered to be true on account of its explanatory properties, and the enormous number of technical applications that it enabled. T. Kuhn developed the idea that the success of a paradigm resides in its ability to solve puzzles that the scientific community sets out in relation to the natural world.

A more radical; an hence rarer; form is ontological constructivism. This denies real existence so long as we have not - at least - imagined it. Yet it is on this ontological score that nominalism or constructivism are denounced by realists as being a form of relativism, i.e. radical scepticism as to our ability to apprehend reality or reach truths, even when they are only provisional. Numerous thinkers have rallied to relativism (Richard Rorty, Peter Hacker), so obvious is the self-disproving nature of a simplistic form of this doctrine: if there is no truth, then the statement "there is no truth" is itself untenable. However, since the 1970s various forms of anti-realism have emerged that put emphasis on non-rational aspects of the production of knowledge (i.e. not based on experimental validation or invalidation): collective consensus for David Bloor, certain sociological currents of thought in the sciences, and the contingency of certain scientific discoveries (which need to accommodate certain associated but determining material conditions) in the famous book by Andrew Pickering, *Constructing Quarks* (1986), and so forth.

The sudden invasion of sociological or technical explanations to assess the success of a "big theory" in science has generated an enduring rift between scientists and "naturalistic" philosophers on the one hand and constructivist epistemologists and sociologists on the other. The latter may express scepticism as to the neutrality of scientific research, in particular in areas such as medicine, psychiatry or social sciences. They point to the normative effect of categorisation, and the rebound effect on the populations thus categorised. Hence Ian Hacking suggests calling this complex stance social constructionism rather than constructivism. This implies several things: a questioning of the effects of authority on scientific production; a rather "interactionist" sociological stance (an

agreement gradually stabilises via negotiation within a system of players (who are not all academics); nominalism focusing on the "social construction" of objects of knowledge; and the refusal to take up positions on the truth or the stability of "discoveries".

In substance, constructivism is not foreign to geography. From the 1930s and the 1940s American geographers adopted a pragmatic stance which spread through the discipline with the rapid development of regional planning and quantitative and theoretical geography. (1950s and 1960s). For Edward Ullman, for instance, it is the researcher who defines the setting for an investigation of spatial interactions according to cognitive and operational objectives that are not intrinsic (Ullman, 1980). With the notable exception of «Jean Gottmann», American pragmatism proved unattractive to French geographers, in particular those who were involved in the challenges of regional planning (Pierre George, Jean Labasse).

In contrast, what can be noted in France is the coincidence of the diffusion of theoretical and quantitative geography, the emergence of a critique of the realism of classical geography, and a novel attraction towards "utilitarian" or "useful" geography, i.e. able to assist in the elaboration of a world "filled with happy regions" (William Bunge). Indeed, the 1970s saw decisive upheavals in French geography, and one of the defining moments was the Gœpoint conference in Lyon in 1978, "Concepts and constructs in contemporary geography". If the elaboration of a critique of geographical realism was mainly the work of just a few authors (Claude Raffestin in particular, but also Jean-Bernard Racine and a few others), the emergence of a "positive" constructivism was the result of joint efforts, fuelled by the philosophical readings of the new generations (Gaston Bachelard, Jean Piaget and Louis Althusser). Nevertheless, numerous protagonists of the time claimed they were above all positivists (the task was to develop laws of space) and historical materialists.

In empirical practice, this constructivism derived from issues raised by the development of multivariate statistical analysis. In the 1970s the need to select data according to the research question was more or less self-evident. More generally, for the rising generations, the idea of immersion in a "subject" or a field of research without explicit prior hypotheses and protocol for demonstration appeared increasingly difficult to sustain. Thus the requirement of a problematic (Orain, 2003) gradually pervaded the discipline (over a period of some 20 years). In more than one respect, the thesis by Franck Auriac, *Système Économique et espace* ; un exemple en Languedoc (presented in 1979) appears as the prototype of a new regime for research, which can be described, a posteriori, as constructivist. Further to this instance, most authors laying claim to the systemic theory were also, in the wake of Jean-Louis Le Moigne, related to operational constructivism.

Alongside this, the emergence of an anthropo-centred geography interested in "experience", "representations", "well-being" and "spatial justice", under the impetus of very diverse authors, was to question the idea that "objective realities" might be accessible to (or even raise interest among) geographers. The geography of representations (Armand Frœmont, Antoine Bailly) was not slow to criticise the idea of given geographical realities. But it was not so much the multitude of currents of thought in the 1980s as the worldwide advent of a geography of territory in the 1990s that endowed this movement with a specifically constructivist style. It was at this time that typical themes diffused through French geography (agent models, social construction of territory, analysis of urban representations etc). Various currents of thought frequently associated with present-day forms of constructivism, such as interactionism, ethno-methodology, etc. have had an influence on territorial geographers. This explains why it is in this area that something resembling "geographical constructionism" has found its most vigorous expression.

In all, is it possible to conclude to a shift of the geographical community from realism to constructivism? Coexistence is in fact more likely than substitution, and a whole range of very varied stances can be observed, most of the time remaining implicit. And this is not true of France alone: we have indeed too often focused our sole attention on the English-language geographers that belong to the avant-garde.

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