Philosophy and Human Geography

S. Elden, Durham University, Durham, UK

Introduction

Geography has always had a relation to philosophy. Many of the great thinkers of the Western philosophical tradition have written explicitly on many of the key issues of concern to geographers. These have included discussions within metaphysics and physics concerning nature, space, time, place, and the human; logic and epistemology on the nature of knowledge and scientific method; and ethical questions about behavior and its spatial variation, political organization, cultural difference, and our role in the world.

Philosophy, traditionally, included a far broader range of aspects than the university discipline which goes under this title today. Philosophy is, literally, the love (*philos*) of wisdom (*sophia*), and can be argued to provide the foundation for core arguments across the human and physical sciences. The field of physics, for instance, used to be known as natural philosophy, as the term physics derives from the Greek *physis*, nature. One of the key insights of philosophy is that our assumed ideas are dependent on prior argument, and tracing the history of fields of human knowledge can provide insight into how we came to think as we did. Philosophy can be a forbidding area, since it often depends both on conceptual rigor and knowledge of earlier thinkers and their ideas, but its potential impact is substantial. This extends across the range of concerns of geography, for many great philosophers, such as Gottfried Leibniz, René Descartes, or Aristotle were important scientists in their own right, and many of the figures of social/spatial theory who have been so influential in contemporary human geography were trained in philosophy.

Philosophy tends to abstract from particulars, whether through initial observation and generalizing from patterns to produce explanatory theory, or through beginning with reasoned argument which is then used to make sense of the world. Its impact has been felt throughout the history of the discipline. In modern times, both positivism or the spatial science of geography, or the reaction against this in humanism or postpositivist theory have all been uses of philosophical arguments.

The Philosophical Tradition

Early Greek Thought

Within the Western philosophical tradition – the key thinkers and texts since its inception – there are a number of philosophers that have explicitly thought about geographical concerns. From the very beginning of preserved Western thought, in the fragments of the texts of the pre-Socratics (so-called because they preceded Socrates), philosophers have been concerned with the nature of the world. Heraclitus, for example, likened change in the world to a child playing a game, suggesting the elements of chance within rules that shape its destiny.

It was, however, a later group of Greek thinkers that defined much of the way in which philosophy came to think, and the terms within which it did so. Socrates, whose ideas were presented in dialogs by his student Plato, provided a model of philosophical inquiry as well as many of the key questions themselves. Plato's writings, which cover the full range of human inquiry, often do not have specific topics, and issues of interest to geographers appear throughout. His dialog *Timaeus* attempts to provide an explanation for the origin of the universe, with the idea of the creator and the laws governing it. It is also important for its discussion of the *khora*, a term sometimes misleadingly translated as 'space', but which is closer to a notion of place, a location, or a receptacle for something.

Aristotle

Plato's most brilliant student was Aristotle, whose extant works are largely notes for lecture courses, and therefore, tend to be more systematic and less literary than those of his predecessors.

Aristotle wrote on almost all fields of human knowledge, from zoology and biology to reflections on theater and rhetoric. He made a number of analyses of questions in language and logic, and studied political and social organizations in a comparative manner. His *Nicomachean Ethics* contains reflections and arguments not just on ethics, justice, and virtue, but also discussions of the nature of knowledge and the division between practical and philosophical wisdom. His *Rhetoric* offers more than simply an analysis of speech, but discussions of moods and the collective community. In his *Physics* he analyzes a range of concerns around place, nature, and movement, and the *Metaphysics* – so named because it came after (*meta*) the *Physics* – is a collection of theoretical treatises on being, matter, and mathematics.

Aristotle's work demonstrates an early version of what might be called the scientific method, with a combination of abstract reflection with practical observation. He deduced that the Earth had a spherical shape because he

observed lunar eclipses and reasoned this from the shadow cast on the moon's surface. His work on biology and comparative anatomy set the tone for much future analysis. His work on motion in the *Physics* is tied to his understanding of place. For Aristotle, place is an inherent quality of beings, it is their capacity to be present. Yet, the physical extension of an object is insufficient to understand place. Objects have, for Aristotle, their proper place, and therefore, motion is tied to this understanding of place. Heavy things tend downward, and air and fire tend upward. Celestial bodies move in a circular motion. These are natural motions. Aristotle believed that the speed of falling was proportional to both the weight of the object and the density of the medium it is falling through. In Aristotle's theory, place does not move, and only what is movable is in a place. Motion is not spontaneous, and therefore, there must always be a mover, giving rise to the idea of God as the prime mover – the being that initially sets things motion.

Medieval Philosophy

The Medieval period is not straightforwardly characterized, but tends to be understood through its relation to theology. Certainly, many of the key thinkers were theologians as well as philosophers – Augustine and Thomas Aquinas among them. In these writers, there can be a tendency to retreat from the understanding of this world in favor of thinking about other matters. Aristotle's work was hugely influential in this period, and he was often referred to simply as 'the philosopher'. Many of the key developments in this period were the product of influences from Arab thinkers, such as al-Idrisi, whose reflections on geography and cartography were important for several centuries.

Descartes and Modern Philosophy

Modern philosophy emerged out of the Renaissance and the coming back into general circulation of a number of texts of the ancients. Somewhat crudely, philosophy of the seventeenth and eighteenth centuries can be seen as an extended debate between the Rationalists and the Empiricists. For the Rationalists, which would include Descartes, Leibniz, and Baruch Spinoza, the world is understandable through the abstract processes of reason. Descartes is the paradigmatic example.

In Descartes' work, the material and mental worlds are strictly divided. Descartes suggested that in order to get knowledge on a firm footing, he would doubt everything of which he could not be certain. He argued that he could not doubt that he was doubting, and therefore, could be sure that he was thinking. Because he was thinking he could be sure that he existed, therefore the famous phrase *cogito ergo sum* – I think, therefore I am. This meant, for Descartes, that there were certain things that could be characterized as *res cogitans*, thinking things. Everything else had a physical manifestation, material or matter. These he characterized as *res extensa*, extended things, because he reasoned that extension in three dimensions was their central, fundamental characteristic.

Other characteristics of material things – such as their weight, color, and shape – were secondary. Descartes' example for this is to take a piece of wax and make a number of observations of it. Heating the wax would cause almost everything to change – its color, shape, and smell, for example – but not that it occupied space, that it was extended. Descartes, therefore, defined a material body as bounded, enclosed in a place, and filling up space. The last part of this is particularly important – space is a container, itself extended in three dimensions, of which objects exclusively filled up a part of it, excluding other objects from that same space. Things can be in the same place – different pairs of shoes in a cupboard, for instance – but not in the same space. Space is bounded and exclusive. Descartes, therefore, understands motion as movement through space, position as the location variously shaped things possess in relation to each other, and shape and its change as dependent on the limit of the extension.

This gives rise to a particular way of seeing and conceiving the material world as a whole. Extension in three dimensions – length, breadth, and depth – is the central characteristic of nature, and geometry is the science that allows us best access to it. In other words, there is a mathematical determination of the material world. Descartes' work on geometry is extremely important in its own right, since he develops an analytic or coordinate geometry which allows geometrical problems to be reduced to numbers – equations, or the length (i.e., the quantity) of lines. Many contemporary geographers have criticized this abstraction and mathematicization, including feminists who see it as masculinist.

For the Empiricists, who include John Locke, Bishop Berkeley, and David Hume, observation of the physical world and generalization of rules from this observation is the correct way to proceed. Prediction may be difficult, but it is not impossible and is based on generalization of experience. Hume famously suggested that all works should be evaluated on two simple criteria – whether they contained "abstract reasoning concerning quantity or number" or "experimental reasoning concerning matter of fact and existence." If the answer was no to both, then he suggested that we "commit it to the flames for it can contain nothing but sophistry and illusion." Empiricism has had a significant impact on what might be seen as a commonsense view of geography, whereby gathering data leads to descriptions of the world and its features and inhabitants.

Kant

Immanuel Kant is generally seen as the most important philosopher since Aristotle. One of his many merits is that he provided a way of reconciling rationalist and empiricist positions within a unified model of thought. He also thought that there were some things that were matters outside the realm of rational thought, such as the existence of God. He convincingly demolished the arguments for or proofs of God's existence, suggesting that this was rather a matter of faith.

In his most important work, the *Critique of Pure Reason* in 1781, Kant tries to bring together experience and reason. He suggests that there are a number of kinds of statements we can make about the world. Statements can be either analytic or synthetic – meaning that they explicate the meanings of terms or add something additional. Analytic statements would be of the form 'all fathers are male' or 'green things are colored' – statements whose negation would be absurd, and which do not need to validated. Synthetic statements would be of the nature of 'Kant was a philosopher' or 'copper conducts electricity' – things that are not inherently self-evident. Statements can also be *a priori* or *a posteriori*. There are some things we know prior to experience and some we know after it. These divisions of statements are not unrelated – it is clear that all analytic statements are *a priori* and that all *a posteriori* statements are synthetic.

This leaves the question of whether synthetic *a priori* statements are possible. Hume had denied that they were, whereas Kant thinks they are. For Kant, they are combinations of concepts and particulars, of reason and experience. While the Empiricists suggest all our knowledge must conform to experience, Kant says all experience must conform to knowledge. What this means is that we can only experience within our conceptual frame. Kant, therefore, suggests that experience is a 'necessary' condition for knowledge (thereby criticizing the Rationalists), but it is not a 'sufficient' condition for knowledge (thereby criticizing the Empiricists). Kant's famous phrase is "thoughts without content are empty, intuitions without concepts, blind."

The conceptual frame from within which we experience the world means that, for Kant, our minds are constructed in a particular way. He suggests, crucially for geographers, that space and time are *a priori* concepts – that is they precede experience – which serve to structure the world we perceive. He calls these the transcendental esthetic, from the Greek *aisthesis*, perception. We cannot think without using these concepts – they are like seeing through a pair of irremovable, tinted glasses. Space and time for Kant are thus part of our perceptual apparatus, the way in which we perceive the world, not that which we perceive, which means that we experience within space and time rather than experience space and time themselves. Space and time are, therefore, determined in advance in Kant's thought, the material world is understood before it is experienced, and therefore, what we experience is conditioned by our prior knowledge. The limits of the system, thus, become the limits of the experience; the composition of the thought of nature becomes the limits of nature itself. Nature ceases to be what it might be except in terms of the system through which it is understood.

Kant wrote a number of other important works, including two further 'critiques' – *The Critique of Practical Reason*, in 1788, and *The Critique of the Power of Judgment*, in 1790, dealing with ethics, esthetics, and teleology. He also lectured on anthropology and physical geography for a number of years. While he edited the former into a book, *Anthropology from a Pragmatic Point of View*, in 1798, the *Physical Geography* exists only as a compilation from lecture transcripts. Kant thought that, together, anthropology and geography provided knowledge of the world, which served as empirical grounds for his thought. Both of these were taught for their pragmatic dimension – what they could provide as guides for our moral and practical life. This leads Kant to what he calls 'moral geography,' which looks at the customs and characters of different peoples and some outdated and discredited views of race. Kant provides extensive discussions of contemporary thinking on the Earth and its terrain, earthquakes, climate, rivers and water, flora, fauna, and minerals. The final part of the book is a series of descriptions of particular regions and places in the world. While much of the detail may be outdated and therefore of merely historical interest, Kant's way of structuring geographical knowledge and its relation to his thought as a whole is of enduring importance. This importance lies both in the way he understands geography as a counterbalance to history, and in terms of the organization of knowledge. For Kant, all perceived things are located in logical classifications, such as those of Linnaeus; and in space and time. Logic deals with the first; physics with space and time, and of these, geography deals with space; history with time. Geography, therefore, allows us access to the ordering and categorizing of the world. Indeed, Kant distinguishes geography, as the description of the whole world, from topography, as the description of single places, and chorography, as that of regions.

Kant's actual impact in geography has been erratic, with the schema for the relation between time and space and geography and history more important than the empirical and analytical details. Yet his wider philosophical thinking of the categories of space and time have been profoundly important in shaping the way subsequent philosophies of this topic have engaged with these topics. Georg Wilhelm Hegel's philosophy, and in particular, his political philosophy of the state as an organic whole were influential for German geopolitics of

the late nineteenth and early twentieth century, in particular in the work of Friedrich Ratzel.

After Kant, philosophy becomes much less of a unified discipline. Indeed, the two dominant paradigms of Western philosophy can often barely agree on who counts as a philosopher after this date. The continental European tradition would include Hegel and the German romantics, Karl Marx, Friedrich Nietzsche, the phenomenology movement best exemplified by Edmund Husserl, Martin Heidegger, and then a range of post-World War II thinkers in France, such as Jean-Paul Sartre, Michel Foucault, and Jacques Derrida. Analytic, or Anglo-American, philosophy on the other hand tends to take its influence from other sources, such as Gottlob Frege and Ludwig Wittgenstein, the American pragmatists, and the ordinary language philosophers who analyzed how language works instead of abstract reason. Both of these traditions, and the debates within them, have much to say about aspects of geographical concern.

Positivism

Positivism within geography can be described as the use of modern scientific method. Although undoubtedly more influential within physical geography, this has had a significant impact within human geography as well.

Like Hume, positivism suggests that there two kinds of meaningful statement. Those that are logically true, such as those concerning the nature of mathematics or language; and those that are verifiable through empirical observation. Anything else is metaphysical and, ultimately, meaningless. This leads to an emphasis on observation, which is based only on what is directly seen rather than inferred, and the primacy of this over theoretical propositions. Models and theories should be developed from their basis in this empirical observation. Observation could be guided by a prior hypothesis, so that rational thought structured the process of inquiry, but this hypothesis was open to testing, and therefore capable of being disproved. In this, the positivists were influenced by early twentieth-century philosophers, particularly those of the Vienna Circle. One of their number, Karl Popper, proposed that the criteria for validity in science should not be that there are examples which prove it, but that there could be those which would disprove it. In other words, the strength of a theory is not that it is sufficiently general that it appears to explain, but that it is sufficiently narrow and focused that if a prediction proved untrue the theory would be exposed. This is the criterion of falsifiability. For Popper, and others, this meant that the explanatory claims of much social science were not scientific at all.

In social science and human geography more specifically, this led to the development of a number of quantitative and statistical techniques. The aim was to ground geography as a spatial science, with the removal of value judgments and the utilization of scientific methods. This is sometimes known as the quantitative revolution in geography. David Harvey's 1969 book *Explanation in Geography* was a key text in this field, but it also extends to some forms of cartography and locational analysis. It also provides much of the conceptual foundation to the claims of Geographic Information Systems (GISs), which in practice is strongly associated with Empiricism.

Humanism and Marxism

There have been various reactions to positivism within geography. Humanist geography emphasizes the individual experience of place, and suggests that general theories neglect the unique perceptions of people and groups. Some elements within this strand of geography adopted ideas from phenomenology and existentialism, stressing the sense of place as opposed to the abstract geometries of space. Yi-Fu Tuan's *Topophilia*, in 1974, and *Space and Place: The Perspective of Experience*, in 1977, were important texts. For others, the insights of hermeneutics allowed human geography to be situated within the humanities rather than the social sciences.

Marxist thought was relatively late in terms of its influence within geography, compared to other social sciences and humanities disciplines. It can be seen as part of a wider trajectory of radical geography. Marxist geography has both introduced the arguments of Marxism, particularly political economy, into geographical analysis, but also provided the introduction of a spatial element in Marxism. In the first, there is an emphasis on questions of value, rent, and appropriation. The second is potentially more challenging, since it attempts to redress the imbalance of historical materialism, with an emphasis on temporal chance, with a historical and geographical materialism, which takes space as a crucial determining context to all social interaction and struggle.

David Harvey's *Social Justice and the City*, in 1973, was a crucial mediating text in introducing Marxist ideas into geography, but it was arguably his *The Limits to Capital*, in 1982, which had a more profound impact. This study looks to fill the 'black boxes' of Marxist thought from a geographical perspective. The French Marxist philosopher Henri Lefebvre's *The Production of Space*, in 1974, first translated in 1991, also had an important impact. In this work, Lefebvre provides a summary of philosophical theories of space, and proposes an understanding of space through a combination of physical, material attributes; mentally conceived space; and the lived spaces of social interaction. He proposes a historical investigation of these different spaces, simultaneously challenging traditional Marxist accounts of time and space.

A range of other Marxist thinkers have proved influential within the discipline. Althusser's work on ideology and power in the modern state and Gramsci's work on Fordist production, hegemony, and the structure of political action are two other particularly important examples, but traces of a Marxist approach and politics are widespread.

Radical geography also makes use of other approaches, such as feminist philosophy and anarchist thought. Its key contribution has perhaps been to raise the political question within geography again. Feminist thought in geography draws on a range of thinkers, many of whom – such as Julia Kristeva and Luce Irigaray – engage with a feminist re-reading of the Western philosophical tradition.

Postpositivism in Contemporary Geography

Besides the alternatives offered by humanism and radical geography, positivism has also been challenged by more scientifically minded approaches. The arguments of philosophers of science, such as Thomas Kuhn and Paul Feyerabend, have proved influential in rethinking the development of scientific knowledge, which has helped some to think about geographical advances. Kuhn, in *The Structure of Scientific Revolutions*, in 1962, proposed understanding scientific development through the notion of paradigms, which provide a framework of understanding within which science takes place. Most science is therefore 'normal science', operating within previously agreed rules and laws. Only some science truly challenges, opening up the possibility of a paradigm shift. Feyerabend's *Against Method*, in 1975, argued that there was no single model of approaching science and that to impose one would hinder scientific progress. This theoretical pluralism is, he believed, less restricting on science.

In human geography, a range of contemporary philosophers have been influential with geography. Many of these have been appropriated under the rubric of social/spatial or sociospatial theory, but their insights can also, and perhaps better, be understood as philosophical. Michel Foucault, Jacques Derrida, and Gilles Deleuze have all had an impact in a broadly conceived, poststructuralist geography. This has been concerned with challenging the disciplinary range of what geography is, the binaries that traditional geography has tended to think with, and to emphasis the emotional, cultural, and nonsystematic elements of the interaction between humans and the world.

To turn the relation the other way round – to ask of the geography of philosophy – is to raise a wide range of issues. While some approaches of this kind would smack of a geographical determinism, locating particular kinds of thoughts within a particular place or tradition, there can be more productive work done. Philosophers regularly speak of contemporary French thought, German romanticism or idealism, English empiricism, and the Scottish enlightenment, for instance, and there is a long-running debate about whether there is such a thing as a distinctively American philosophy. More productive work has been done by geographers of thought and science, such as Trevor Barnes, Anne Godlewska, David Livingstone, and Charles Withers. In their last book together, *What Is Philosophy?*, Deleuze and Félix Guattari proposed a concept of 'geophilosophy', which they claimed was founded by Nietzsche. But perhaps the most interesting geographical issue is the way that most discussions of philosophy – including this account – is of Western philosophy, that which can be derived from a lineage back to ancient Greece. This, of course, neglects important thought that has its roots in India, China, or other non-Western locations. This is rarely taught in philosophy programs, and has had much less impact on philosophical thinking in geography.

In summary, it is clear that many of the issues of concern to geographers have also been analyzed by philosophers. Geography has always been based on philosophical positions, but until relatively recently these were largely unexamined.

See also: Critical Geography; Enlightenment Geography; Human Geography; Mapping, Philosophy; Phenomenology/Phenomenological Geography; Positivism/Positivist Geography; Quantitative Revolution; Radical Geography.

Further Reading

Casey, E. S. (1997). *The Fate of Place: A Philosophical History*. Berkeley, CA: University of California Press.

Cloke, P. and Johnston, R. (eds.) (2005). *Spaces of Geographical Thought*. London: Sage.

Deleuze, G. and Guattari, F. (1994). *What Is Philosophy?* London: Verso.

Elden, S. (2009). Reassessing Kant's Geography. *Journal of Historical Geography*, Vol. 35.

Glacken, C. J. (1967). *Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century*. Berkeley, CA: University of California Press.

Gregory, D. (1978). *Ideology, Science and Human Geography*. London: Hutchinson.

Gregory, D. (1994). *Geographical Imaginations*. Oxford: Blackwell.

Hartshorne, R. (1958). The concept of geography as a science of space, from Kant and Humboldt to Hettner. *Annals of the Association of American Geographers* 48(2), 97–108.

Harvey, D. (1969). *Explanation in Geography*. Oxford: Blackwell.

Hubbard, P., Kitchin, R., Bartley, B. and Fuller, D. (2002). *Thinking Geographically: Space, Theory, and Contemporary Human Geography*. London: Continuum.

Livingstone, D. (1992). *The Geographical Tradition: Episodes in the History of a Contested Enterprise*. Oxford: Blackwell.

Martin, G. J. (2005). *All Possible Worlds: A History of Geographical Ideas*. New York: Oxford University Press.
May, J. A. (1970). *Kant's Concept of Geography and Its Relation to Recent Geographical Thought*. Toronto, ON: University of Toronto Press.
Peet, R. (1998). *Modern Geographical Thought*. Oxford: Blackwell.
Romm, J. S. (1992). *The Edges of the Earth in Ancient Thought: Geography, Exploration, and Fiction*. Princeton, NJ: Princeton University Press.
Soja, E. W. (1989). *Postmodern Geographies*. London: Verso.
Tuan, Y.-F. (1977). *Space and Place: The Perspective of Experience*. Minneapolis, MN: University of Minnesota Press.