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# FOCUS: LEARNING AS A GEOGRAPHICAL PROCESS

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## Introduction: Learning as a Geographical Process

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In this introduction to the Focus Section “Learning as a Geographical Process,” I provide a context for the four articles that follow, by means of (1) making explicit the threefold rationale for this initiative; (2) relating this initiative with previous geographical scholarship on the problematic of learning; (3) highlighting the significance of the self-referential character of our work; (4) providing a brief outline of the articles that follow; and (5) pointing out the important fact that both “learning” and “geographical process” constitute semantically rich categories and that relating the two involves a many-to-many type of logical mapping. **Key Words:** geographical process, learning, many-to-many mapping, self-reference.

我在这个“作为一个地理过程而学习”的焦点部分的介绍中，给以下四篇文章提供了一个上下文的背景，通过（1）明确地说明这一提议的三方面理由；（2）把这一提议与以往在有关学习问题上的地理研究联系起来；（3）突出我们工作的自我指涉性质的意义；（4）给以下文章提供一个简要的介绍；（5）指出“学习”和“地理过程”都组成了语义丰富的类别，两者的联系涉及到一个多对多类型的逻辑映射。关键词：地理的过程，学习，多对多的映射，自我参照。

En esta introducción al tema de “El aprendizaje como un proceso geográfico” de la Sección Focus contribuyo un contexto para los cuatro artículos que siguen, mediante las siguientes acciones: (1) haciendo explícita la triple racionalidad de esta iniciativa; (2) relacionando la iniciativa con la erudición geográfica precedente relacionada con la problemática del aprendizaje; (3) destacando la significación del carácter auto-referencial de nuestro trabajo; (4) suministrando un breve esquema de los artículos de la Sección; y (5) señalando el hecho notable de que tanto “aprendizaje” como “proceso geográfico” constituyen unas categorías sistemáticamente ricas y que para relacionarlas entre sí se involucra una lógica cartográfica del tipo “muchos-a-muchos” [*many-to-many*]. **Palabras clave:** proceso geográfico, aprendizaje, mapeo de muchos-a-muchos, auto-referencia.

The rationale for this Focus Section is threefold. First, by embracing an instrumentalist epistemological viewpoint, we aim to explore the potential usefulness of learning as a geographical process as a way of thinking. Can we learn something new and interesting about learning if we think of it as a geographical process? What problems is the learning as a geographical process perspective particularly suited to address? Enlightened by looking at learning in geographical terms, what new phenomena might we get the chance to observe? Note that these questions share a distinctly in-

strumentalist and pluralistic flavor and espouse the implicit belief that there is no one correct way to think about learning. Instead, in the spirit of pluralistic epistemology (Preston 2005), we operate from the belief that the best way to understand a given topic is to tackle it from a diversity of perspectives, each conceived as a constellation of epistemic gains and losses. By not asking the question that a realist epistemologist would ask—is learning as a geographical process the correct way to think about learning?—we cast our work as a useful application of geographical reasoning to the

problematic of learning and not as an imperialistic disciplinary attempt to turn the study of learning into exclusive geographical territory.

Second, by choosing to dwell on this particular topic, we hope to attack from a new angle the problem of the excessive internal divisiveness and lack of communication among the diverse subdisciplines that constitute contemporary human geography. The work culminating in this Focus Section started in September 2010, when I began to put together a panel for the annual meeting of the Association of American Geographers (AAG) in Seattle. From the very beginning, I aimed to select a number of distinguished geographers from a variety of subdisciplinary backgrounds: cultural geography, economic geography, geographic information systems (GIS), urban geography, political geography, and so on. It seems to me that learning is a topic that can play the role of connective tissue for the discipline of human geography, precisely because it is a central attribute of what makes us human. By highlighting the spatiality of a process that all humans engage in—learning—we foreground a unifying concern for all human geographers, regardless of the particular subdiscipline with which they identify themselves.

These last observations bring me to the third rationale for this Focus Section, namely, the desire to make the problematic of learning truly central to the concerns of human geographers. The history behind this rationale consists, in my detection, of a discrepancy between the fundamental role ascribed to learning in the human species by philosophers, psychologists, and comparative biologists and the relatively peripheral place it has occupied on the agenda of human geographers. One of the chief concerns of the former group of scholars has been with trying to single out those attributes that most distinguish our species from the rest (Adler and Rips 2008). Although the debate is far from being concluded, one of the key ideas springing from it is that humans have an ability to learn that is unprecedented in any other species and that the success of the human race in achieving ecological dominance can be traced back to that ability. If learning carries such a significant explanatory power for the human saga, it stands to reason that human geographers should systematically consider it in their research and scholarship. Had this been the case, I would not have

organized this Focus Section. Indeed, it seems to me that much of the previous geographical work on learning shares two less desirable properties: it engages the theme of learning in implicit ways, more as a background for some other interest (for a recent exception see McFarlane 2011), and it usually discusses the learning of humans and their institutions without pointing out that the very process of learning can be thought of as quintessentially geographical.

An illustration of the first property is the recent debate in human geography over the centrality of representations (Anderson and Harrison 2010). Whereas the conventional view emphasizes that we learn by acquiring, creating, and updating mental representations of the world out there, nonrepresentational theorists (Thrift 2008) have challenged this entrenched perspective, suggesting instead that the world is its own representation, that we get by through being immersed in the world and dwelling in the middle of things. Put differently, if a representationalist would argue, like Simon (1996), that memory is the environment of thought, a nonrepresentationalist would flip things around to claim that the environment is the memory of our thought. Even though I worded this debate to show that it really is about how we learn, the fact of the matter is that the organizing label for it has been representation(s) or lack thereof and that this explicit focus has obfuscated the underlying theme of learning.

Two illustrations of the second property are (1) the earlier scholarship undertaken within behavioral geography (including cognitive geography; for historical overviews of these fields see Johnston and Sidaway [2004, 139–63]; Gold [2009]; and Montello [2009]), and (2) the surge of interest about the learning of economic agents in economic geography (Hudson 1999; Bathelt, Malmberg, and Maskell 2004). Behavioral geography is a label used to denote, first, a broader intellectual movement highly influential in geography between 1965 and 1980 and concerned with the role of cognitive processes in spatial decision making and, second, a distinct subdiscipline of human geography, incorporating cognitive geography as one of its foci. Although behavioral geography has generated useful research on topics such as the learning of geographical

knowledge (Golledge and Stimpson 1997), the role of cognitive processes in spatial decision making (Wolpert 1964; Kitchin and Blades 2002), cognitive maps (Gould and White 1974; Portugali 1996), human perceptions of natural hazards (Burton, Kates, and White 1978), and the relation among geography, experience, and imagination (Lowenthal 1961), it has come under the attack of both humanistic and radical geographical approaches, which has resulted in its “increasing peripherality and remnant status” (Gold 2009, 283) and its being perceived as a “limited extension of spatial science” (Gold 2009, 282). From the standpoint of this Focus Section, my main criticism of behavioral geography is that it left the processes of learning themselves undertheorized and failed to think of them as geographical through and through. It is one thing to study the learning of geographical knowledge (e.g., mental maps, navigation, way-finding); it is quite another to analyze how the process of learning itself is geographical. Not surprisingly, even some of the key proponents of the field were led to admit in retrospect “the conceptual weakness that bedeviled behavioural geography” (Gold 2009, 287).

My second illustration of the second property is much more recent and pertains to economic geography. Economic geographers have been increasingly under the sway of the narrative of the knowledge economy and, therefore, have come to emphasize not only the explanatory function of learning in understanding the nature of competitive advantage but also the learning benefits ensuing from the geographical clustering of economic agents. In so doing, they have come very close to theorizing learning as a geographical process (Hudson 1999; Bathelt, Malmberg, and Maskell 2004). It is one thing to notice that the aim of learning has geographical consequences (e.g., the clustering of economic agents and the creation of agglomeration economies), however, and quite another to become aware of how the learning of economic agents itself is a geographical process. These twin properties of much of the earlier geographical scholarship on learning explain why learning (as such) does not currently have a distinct entry in either the *Dictionary of Human Geography* (Gregory et al. 2009) or the *International Encyclopaedia of Human Geography* (Kitchin and Thrift 2009).

## The Problem of Self-Reference

That it is hard work to explicitly think of learning as a geographical process became apparent to me in an ironic kind of way at the AAG meeting in Seattle. Even though I had been reflecting on the topic for months, it was only the immediate pressure of finding something intelligent to say in the introduction to the panel that made me realize in the evening before the panel debate that our discussion bears the interesting characteristic of being self-referential. Self-referentiality has long been identified as the most perplexing attribute with which logicians have had to wrestle and refers to the curious worlds of thought that open up when a set of statements refers to itself (Hofstadter 1980; Adler and Rips 2008). Metaphorically, the image of a dog vainly chasing its own tail is apt to elicit the same kind of intellectual dizziness that accompanies any and every attempt at self-referential reasoning. It occurred to me that there are two loops of self-referentiality in our discussion of learning as a geographical process.

The first pertains to learning and the second to its geographical character. With regard to learning, most of the panelists confessed at one point or another that they were intrigued by the theme of the panel and that they accepted my invitation from a spirit of adventure and curiosity, fully aware that it meant that they had to go out on a limb and force themselves to think outside their comfort zone. That is, in the very process of meeting to discuss about learning, we ourselves learned new things.

But this more obvious “learning by talking about learning” self-referential loop was itself embedded into a second loop of self-referentiality that pertains to our specific focus on learning as a geographical process. The very process of having a set of panelists from around the world meet in Seattle in a particular conference room at a table in front of a geographically diverse audience to talk about learning as a geographical process was itself an instance of learning as a geographical process. The loop of self-referentiality can be extended forward in time to our returning home, writing down the final drafts of our papers with the memories of the debate fresh in our minds (the intellectual haunting of one place by an earlier one, preserved

as memory; i.e., learning), and submitting them to the assessment of peer reviewers of unknown geographical locations. Hopefully, the loop will close with the dissemination of this issue of *The Professional Geographer* containing our Focus Section to a broad audience of geographers, who themselves will be able to learn about how a set of scholars think about learning as a geographical process precisely because their learning is itself a geographical process (spatial diffusion of knowledge in a geographical network of scholars through the mediation of an “immutable mobile”—a printed journal issue or a PDF file).

## The Articles

I encouraged the contributors to the Focus Section to be heterodox, daring, and creative, to either open up new ways of thinking about learning or to reflect on how mainstream meanings of learning (e.g., in the context of teaching) can be enriched by a geographical sensitivity. Indeed, the four articles in this Focus Section amply illustrate the observation that there are many ways to think geographically about learning. Schuurman’s article engages with the relevant literatures in technology studies and cognitive neuroscience to investigate how the spread of the Internet and related technological advances is creating a new geographical reality that compels us to learn in new ways. It thus sensitizes us to how seemingly intraindividual processes of learning actually depend on broader social and technological shifts that are profoundly reconfiguring the environments in which (and about which) we learn. Le Heron’s article has the great merit of connecting our Focus Section with a set of long-standing institutional projects<sup>1</sup> in a number of places in geography that have been pushing the agenda of learning and geographic pedagogy. Through a situated interrogation of New Zealand geography’s crisis and reawakening, Le Heron takes the idea of collective learning further than most, by emphasizing what institutions do for disciplines and how they might be used differently. He provides a compelling interpretation of the political dimensions of geographical learning, reminding us that unless geographers know how to operate effectively in institutions, create institutions, and play their institutions

politically, the discipline will not thrive intellectually. Le Heron thus shows how our future as a community of scholars depends on forms of collective or institutional learning that must be thought of as geographical. Finally, the articles by Godlewska and Simandan investigate, albeit at radically different scales, how spatial dislocations are a geographical process that engenders deeper forms of learning. Godlewska discusses an experiment in teaching her graduate students about place by “dis-placing” and “re-placing” them from one seminar to the next in different meaningful places in Kingston, Ontario (ranging from art galleries to cemeteries). The same kind of place-rich pedagogy, but stripped of its university context and of a teacher–student framework, is of interest in my own article, where I aim to enrich existing theorizations of how people learn to be wiser by proposing that the large-scale geographical dislocations inherent in the process of international migration constitute one process that is conducive to the acquisition of wisdom.

## An Exercise in Many-to-Many Mapping

I would like to end this introduction by suggesting that these ensuing four articles, however diverse and daring, can only begin to hint at the rich opportunities encapsulated in the theme of learning as a geographical process. The explanation for this wealth of potentialities is ultimately traceable to semantics and formal logic. The theme of learning as a geographical process connects two semantically rich categories: learning and geographical process. The category of learning encompasses, among other things, subcategories as diverse as immunological learning (how our immune system learns to deal with previously encountered pathogens; Simandan [2011b]), Pavlovian learning (automatic conditioned responses to stimuli in our environment such as stopping when seeing a red light in traffic), declarative learning (the conscious acquisition of facts and theories; “know that”), procedural learning (the mastery of skills such as drawing a map using GIS; “know how”), perceptual learning (the ability to notice ever finer and subtler distinctions in the world as the result of the sedimentation of prior knowledge; e.g.,

a meteorologist who first learns the basic types of clouds and later learns to distinguish subtypes within each type; “know with”), and social or institutional learning (how cultures and collective actors learn; emphasis on the distributed and shared attributes of knowledge; e.g., Le Heron, this issue). The category “geographical process” is just as semantically rich as “learning” is (Doel 1999; Gould 1999; Johnston and Sidaway 2004). When speaking of geographical processes, we might have in mind things as diverse as the dynamic properties of the environments in which we dwell (see Simandan [2011a] for an elaboration of Hogarth’s distinctions between “kind environments” which facilitate learning from experience, and “wicked environments” which hinder it), place-based processes, issues pertaining to scalar shifts, the hidden logic of landscapes, processes of spatial diffusion or spatial aggregation, and the nature of geographical dislocations. In formal logical terms, because both learning and geographical processes are semantically rich concepts, the attempt to marry them generates a combinatorial explosion of potential new meanings characteristic of many-to-many mappings. We hope that this Focus Section will be a stone thrown in a pond and that the many ripples that will follow will unsettle and refresh human geography in ways that will allow us all to learn. ■

## Note

<sup>1</sup> Three examples that readily come to mind are the work carried by the Education Commission of the International Geographical Union, by the *Journal of Geography in Higher Education*, and by the International Network for the Teaching and Learning of Geography in Higher Education.

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