



'Nothing includes everything': towards engaged pluralism in Anglophone economic geography

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Abstract: Economic geography has become increasingly fragmented into a series of intellectual solitudes that has created isolation, producing monologues rather than conversation, and raising the question of how knowledge production should proceed. Inspired by science studies and feminism, we argue for an engaged pluralist approach to economic geography based on dialogue, translation, and the creation of 'trading zones'. We envision a determinedly anti-monist and anti-reductionist discipline that recognizes and connects a diverse range of circulating local epistemologies: a politics of difference rather than of consensus or popularity. Our model is GIS that underwent significant shifts during the last decade by practicing engaged pluralism, and creating new forms of knowledge. Similar possibilities we suggest exist for economic geography.

Key words: economic geography, feminism, GIS, pluralism, pragmatism, science studies, trading zones.

I Introduction

The American pragmatist philosopher, William James, provided the first systematic philosophical treatment of pluralism in May 1908 at his Manchester College, Oxford, Hibbert lectures. He said there:

pluralism, or the doctrine that it is many means ... [that] things are 'with' one another in many ways, but nothing includes everything, or dominates over everything. The word 'and' trails along after every sentence. Something

always escapes. 'Ever not quite' has to be said of the best attempts made anywhere in the universe at attaining all-inclusiveness. (James, 1912: 321)

The more than 500-strong crowd that listened to James (including some well-known philosophers) was none too impressed. But James was none too impressed either. It was a case of him believing that his lecture was a success but the audience a disappointment (Kaufman, 1963: 414; Simon, 1998: 357–58).

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This should not have been surprising. James's pluralism, the idea that no single vocabulary connected different parts of the world, or ensured final coherence, cut against the grain of the dominant Enlightenment philosophy that many of the audience held. Enlightenment philosophy, according to Richard Bernstein (1992: 8), was based on finding a *single* (monist) principle that reconciled 'all difference, otherness, opposition, and contradiction'. But for James monism produced only inflexibility, sclerosis, dogma, and much worse.¹ That is why the world needed pluralism.

The 150-year or so academic history of economic geography has tended towards pluralism, notwithstanding moments, such as during the quantitative revolution of the 1960s and radical political economy of the 1970s, when some economic geographers energetically asserted monism.² The period since the early 1980s has been particularly tumultuous, with a series of different approaches coming and going in quick succession. None has stuck, however, making the discipline appear as pluralist as ever, with difference, otherness, opposition, and contradiction breaking out all over. Yet this has not meant that James's vision has been vindicated. The contemporary American pragmatist philosopher Richard Bernstein (1988) argues that pluralism comes in various shapes and sizes. Of the five kinds he identifies, Bernstein argues that only one is congruent with James's original position characterized by promotion of open conversation and a tolerant community: *engaged pluralism*. The other four, Bernstein contends, are anathema to James's original conception, limiting discussion, deepening old ruts, creating hostile divisions. These are: *fragmenting pluralism*, where 'centrifugal forces become so strong that we are only able to communicate with the small group that already shares our biases'; *flabby pluralism*, where use of other perspectives is a 'glib superficial poaching'; *polemical pluralism*, where the approach 'becomes ... [an] ideological weapon to advance one's own

orientation'; and *defensive pluralism*, where 'lip service' is given to alternatives 'but one [is] already convinced that there is nothing important to be learned from them' (Bernstein, 1988: 15).

In this paper, we argue that while Anglophone economic geography is ostensibly pluralist, with the word 'and' trailing along after many of its sentences, it is not realizing the potential of the position. For its pluralism typically falls within the four unsuitable kinds that Bernstein identifies, especially the first, *fragmenting pluralism*. Fragmenting pluralism is insidious because it creates not so much a monistic world as a world of separate monisms, many solitudes. The effect, we suggest, and clear in some of the discipline's recent debates that we later review, is division, scattering, and Balkanization. In contrast, Bernstein (1988: 15), following James, wants an engaged pluralism that involves 'resolving that however much we are committed to our styles of thinking, we are willing to listen to others without denying or suppressing the otherness of the other'. This does not mean unanimous agreement, with everyone living happily ever after. But it does mean a particular response to conflict and difference, a dialogical one. Here the 'task is to grasp the other's position in the strongest possible light ... not as an adversary, but as a conversational partner' (Bernstein, 1988: 17). The result may well still be disagreement and difference, but it potentially produces a series of benefits that we illustrate throughout the paper: (1) enhanced experimentation, creativity, and innovativeness; (2) the invention of new enabling vocabularies; (3) novel theories; (4) new models of academic debate and discourse; and (5) following John Dewey, 'the practice of hope' (Fishman and McCarthy, 2007). Engaged pluralism, allowing navigation between the Scylla of multiple solitudes and the Charybdis of monism, *should* be the type of pluralism that economic geography seeks.

We use *should* deliberately. Our argument is self-consciously normative, concerned with asserting what the discipline ought to be.

Affirming a normative position is part and parcel of any critical project. Bernstein asks, 'critique in the name of what? What is it that we are implicitly or explicitly affirming when we engage in critique?' (Bernstein, 1992: 317). Our affirmation is engaged pluralism. That does not imply invoking universal or monist principles as justification, or setting down a disciplining manifesto. While we will put forward a series of arguments for our normative position, there is no final, conclusive justification: after all, 'we can never fully anticipate those contingencies which will rupture our affirmations' (Bernstein, 1992: 318). The best we can do, the only thing we can do, is to keep on talking; that is, to engage in continual and open deliberation.³

In making the argument for engaged pluralism, and its exercise in economic geography, the paper is divided into four sections. First, we conceptually elaborate our position by drawing on two bodies of work that usefully amend and develop Bernstein's (and James's) engaged pluralism: writings in science studies, and feminism. From science studies we use Peter Galison's work on 'trading zones', sites at which researchers with very different beliefs plurally engage one another. From feminism, we draw on the insight that the different perspectives to be engaged are often unequally empowered from the outset, and that strategies must be devised to circumscribe such power asymmetries to enable engaged deliberation. Second, we review the recent history of economic geography, concluding that while it hangs together in more ways than one, and is therefore pluralist, it tends to Bernstein's subtype of *fragmented pluralism*. Indeed, the fragmentation is becoming more pronounced, with little evidence of the ameliorative formation of trading zones and strategies of engaged pluralism. Third, while one might argue that engaged pluralism is chimerical anyway, unrealizable, we contend that recent debates in GIS suggest otherwise. Initially the bastion of a technocratic, positivist geography, GIS was challenged

almost two decades ago by a critical social theoretical view. While the ensuing debates initially produced significant discord, subsequent give and take on both sides has created trading zones and deliberative engagements that catalyzed new understandings and possibilities. The partial success experienced within GIS, we suggest, points to the possibilities of engaged pluralism as a model for economic geography. Finally, we reflect on what might be necessary for economic geography to embrace that new model, and in particular the constitution of its own plurality. Just as James's 1908 Oxford audience was hardly a representative cross-section of the globe, the membership of Anglophone economic geography historically has been dominated by a narrow range of participants (males of northern European heritage). While there has been the odd sign of improvement recently, increasing the social and geographical diversity of affiliation remains critical.⁴

II Pluralism, trading zones and deliberative democracy

1 Science and the Stanford philosophers

James's notion of pluralism was initially taken up in political and cultural studies, especially those concerned with race (Menand, 2001: Chapter 14). The idea was also applied to the world of material objects, to the universe. For James, 'the world consists of independent things. Each thing relates to other things, but the relations depend on where you start. The universe is plural: it hangs together, but in more ways than one' (Menand, 2001: 377).

This view did not go down well with the Hegelian Oxford philosophers and their notion of ultimate reconciliation (*Aufhebung*; Bernstein, 1992), however. Nor did it go down well later with the rise of positivist-based philosophies (found first in interwar Europe and then after the second world war in North America) that championed a unified world and a unified science (best represented by Otto Neurath's Unity of

Science movement; Reisch, 2005). The subsequent dominance of positivist (logical empiricist) conceptions of science blocked Jamesian notions of scientific pluralism in North America after the second world war. But Thomas Kuhn's (1962) paradigm-shifting work, *The structure of scientific revolutions*, and from the early 1970s the development of science studies, loosened the grip of scientific positivism, creating space to recoup James's pluralism.

One of the groups seeking to occupy that space was a set of philosophers and historians of science at Stanford University. Nancy Cartwright, John Dupré, Peter Galison, and Ian Hacking argued, in accordance with James, that the universe was fundamentally fractured, with no possibility of reduction to a common set of reconciling principles. Rather than unified and indivisible, nature was fundamentally diverse and internally separable. For Cartwright (1999: 1), ours is a 'dappled world, a world rich in different things, with different natures, behaving in different ways'. For Hacking (1983: 219), 'God did not write a Book of Nature ... [but] a Borgesian library, each book of which is as brief as possible, yet each book of which is inconsistent with every other'. For Dupré (1983: 321), science is 'a loosely connected collection of more or less independent theories designed to meet particular theoretical and practical interests'.

For this group, then, science was hopelessly fissured, its lines of breakage reflecting nature's own cracks. Nevertheless, as the Stanford philosophers showed, despite the universe's crevices science remained enormously creative, which stemmed in part from a willingness of scientists to cross specialties, to talk to others in different fields, and to engage in intra- and interdisciplinary conversation. To use the language of Galison (1998), scientists were successful because they developed 'trading zones'; that is, they created opportunities to exchange ideas, concepts, techniques, even machines, forging fresh lexicons, and knowledge. Their success

derived from practicing engaged pluralism. Not that these participants would have said so. Likely they would claim they were good monists, practicing *the* scientific method on a unified nature. But ever since Thomas Kuhn (1962), and later writings in science studies, belief in a singular scientific method and slavish adherence to it by scientists cannot be sustained either logically or historically. Scientists may say that nature is unified, and that their brilliant accomplishments are a consequence of monism, but scrutiny of their practices reveals a different story. Such a discrepancy emerges clearly in Peter Galison's history of twentieth-century particle physics.

2 Peter Galison and trading zones

Galison's history focuses, on the one hand, on microphysics detector machines and, on the other hand, on three different groups of physicists who worked on them: theorists, experimentalists, and instrumentationists. Galison's (1998) argument is that in spite of the entrenched tripartite divide among the physicists the field did not descend into dysfunctional fragmented pluralism. It held together, and in doing so it produced on occasion (literally) earth-shattering results.

This was possible because different participants engaged one another in 'a trading zone, an intermediate domain in which procedures [were] co-ordinated locally even when broader meanings clash[ed]' (Galison, 1998: 46).⁵ The three different groups of physicists represented distinct cultures of inquiry, with diverse languages, interests, and objectives, yet they bargained and traded with one another to realize practical ends. Differences among them were not eradicated. They were acknowledged but put to one side to allow hesitant, provisional, and local cooperation. In Stephen White's (2000: Chapter 1) terms, each of the three groups was characterized by a 'weak ontology'. While there were strong views internally within each group about the nature of subatomic particles and their representation,

they were not so strong as to prevent group members from suspending their beliefs, at least temporarily, to enable cooperation with others who held different (but equally weak ontological) convictions.

For Galison (1998: 47), the key to cooperation was the establishment of 'local languages – pidgin or Creole'. Their emergence permitted interaction and trade among the different physicist subcultures. Notwithstanding differences in ontology, participants constructed pidgin languages, making possible communication and exchange. As a local construction, pidgin was improvised, subject to change, and reflected the historical and sociological circumstances of its manufacture.

For our purposes, Galison's work is interesting because it is such a clear case of engaged pluralism, including strategies of accomplishment. He shows that engaged pluralism is not just an abstract ideal, but is realizable on the ground by adopting open attitudes, and flexible practices. Twentieth-century physics is divided, much like economic geography, defined by different intellectual 'subcultures with individually autonomous and jointly incompatible valuations and understandings' (Baird and Cohen, 1999: 232). Yet, despite its deep differences, engaged pluralism was forged by establishing valuable trading zones, allowing the solution of practical problems. This has not often been the case in economic geography, as we will suggest. Nevertheless, Galison's exemplification of engaged pluralism leaves several questions unanswered. As we will take up below, he seems to think that trade is mutually beneficial by definition (that there is no unequal exchange); and also that it just happens (Adam Smith's natural propensity to truck and barter). Further, the physics that he describes does not entail the breadth of competing epistemologies and ontologies that characterizes Anglophone economic geography. For these reasons, it is necessary to supplement his work, which we do by drawing upon feminist theory.

3 *Pluralism and feminist theory*

Pluralism is not very popular with critical or feminist geographers, who associate it with mainstream political science accounts of the state and democracy. Smith (2005: 896), for example, derisively dubs pluralism 'the intellectual hearth of liberalism'. Given the importance of critical and feminist geography for geography, and our own political sympathies, we need to address this objection. Notwithstanding Smith's claim, our argument is that engaged pluralism is not the same as liberal individualism. Rather, we argue, engaged pluralism makes arguments that parallel those found in feminist philosophy of science and political theory (and influential in critical geography).

The seemingly close association between pluralism and liberal individualism derives from mainstream political theories of pluralism. These theories suggest that a state's actions reflect the pluralist will of the people. In a democracy, with everyone presumed to possess an equal voice, elected politicians will be those whose views best correspond to the plurality expressed at the ballot box. This is the political counterpart to the voluntarist individualism of neoclassical theory (Barnes and Sheppard, 1992) in which the market best allocates goods according to individuals' preferences (and also behind the problematic claim that markets and democracy are natural partners).

Within mainstream political science an alternative to ballot-box pluralism has emerged over the last two decades: deliberative democracy. Here, through a process of deliberation, members of society with different preferences and world-views agree, for example, about policy initiatives. Participants are persuaded (or not) to alter their judgments, preferences, and views, seeking a consensus in which all participants agree on a common strategy of action (Drysek, 2002). In a liberal constitutional deliberative democracy, individuals with different preferences engage in deliberation rather than

voting. Deliberative democracy clearly has affinities with engaged pluralism. The former, however, explicitly assumes that: (1) deliberation involves equal individuals with given preferences; and (2) there are constraints on the forms of persuasion allowed (excluded, for example, are rhetoric, humour, emotion, storytelling, and gossip) (Drysek, 2004).⁶ The key question for us is whether consensus arises within deliberative democracy because of genuine universal agreement, or only because certain voices and views are marginalized and not taken into account. If marginalization occurs, then deliberative democratic consensus is antithetical to the engaged pluralism to which we aspire. But if consensus can be achieved without marginalization then deliberative democracy could offer the progressive possibilities we seek.

This issue is important if we return to Galison's work. His trading zones model starts from similar assumptions to those underlying deliberative democracy, with equal partners engaged in a dispassionate process of setting the terms of trade. But Galison ignores the likelihood of unequal exchange, never asking whether theorists, experimentalists, and instrumentalists are equally influential in shaping the nature of what 'can be coordinated' – ie, whether a more powerful group is tailoring trade to its advantage. Yet trade typically does not occur on a level playing field (anthropological myths notwithstanding) because of power differences among different participants.⁷ Similarly, pidgin languages are often largely shaped by the more powerful party (Nettle and Romaine, 2002). Consequently, social power differentials, with their concomitant effects on truth and consensus (for different accounts of this, see Habermas 1984 [1981]; Latour, 1987), compromise the ability to participate within a trading zone, and the evenhandedness of exchange.

While Galison's version of engaged pluralism is weakened because of its neglect of power differentials, we do not think that

weakness is inherent in the larger position. Rather, it is a failure of Galison's particular model and its starting assumptions. This is clear when parallels are drawn between engaged pluralism and arguments in feminist philosophy of science about positionality and situated knowledge that recognize, identify, and redress power differentials.⁸

The link between engaged pluralism and feminist arguments is James's pluralist recognition that how the world 'hangs together' depends upon 'where you start'. In feminist philosophy of science the starting point is the differentially empowered 'situatedness', 'standpoint', or 'positionality' of the investigator. Specifically, Sandra Harding and Donna Haraway argue that the 'situatedness' of western scientific knowledge is highly gendered, reflecting the social characteristics of those (primarily white males) who carry it out. The exclusion of women from the practice of science distorts collective understanding, with science the poorer for marginalizing feminist perspectives (Haraway, 1988; 1991; Harding, 1991; 2003). Third wave feminism further complicates this bipolar model of situated knowledge by asserting the importance of other lines of difference – both social and geographical – and their intersectionality (Mohanty, 2003). Nevertheless, the essential point remains: difference is an inescapable and unavoidable aspect of pluralism, and the peripheralization or exclusion of potential voices from science distorts the knowledge that is produced.

Helen Longino (2002) has delineated normative conditions that she believes allow for difference and the production of knowledge while minimizing marginalization and its effects. She draws on feminism, the philosophy of science, science studies, and (implicitly) pluralism. For her, pluralist difference in academic knowledge is the norm. Specific constellations of factors (eg, social, psychological, material, geographical) continually divide academic inquirers, differentiating their knowledge (Longino, 2002: 184). The task is to engage the resulting

plurality of knowledge without peripheralizing any of the groups that produce it. She thinks this is best achieved by: (1) establishing publicly recognized forums for criticisms of evidence, methods, assumptions and reasoning; (2) recognizing that criticism must be taken seriously, with claims adjusted in the face of adequate criticism; (3) acknowledging the existence of publicly recognized standards for evaluating knowledge claims; and (4) maintaining equality of intellectual authority among all participants. Longino argues, against Habermas and mainstream deliberative democracy, that the end result of interaction in these forums need not and often should not be consensus. Rather, it is, and should be, ceaseless even-handed debate among different approaches. Under these conditions, Longino believes, reliable knowledge is possible.

While feminist philosophers of science address the structural exclusion of key voices, and the consequent distortion of knowledge, they do not fully address how the very terms of engagement can still marginalize such voices even after speakers gain a place at the table. Feminist political scientists have taken this up, however. Concerned that the norms governing communication tend to exclude the marginalized, Iris Marion Young (2000: 49) insists that a pluralist approach to deliberative democracy transforms 'mere exclusion and opposition to the other into engaged antagonism within accepted rules'.⁹ Such deliberation must be constructed so as to empower those currently marginalized, and enable them to veto decisions if their voices are not adequately heard.¹⁰

Chantal Mouffe (1999; 2000) goes further, arguing for agonistic pluralism. In her view, the claim that consensus (or, in science, truth and objectivity) can be arrived at through deliberation once power differences are removed (Habermas's 'ideal speech situation') is a fantasy. This is because what counts as consensus, and even difference, is itself an effect of pre-existing power relations. 'The question ... is not how to arrive at a consensus

without exclusion, since this would imply the eradication of the political ... [C]reation of a unity in a context of conflict and diversity ... is always concerned with the creation of an "us" by the determination of a "them"' (Mouffe, 2000: 15). Agonistic pluralism for Mouffe is a passionate, no-holds-barred, engaged pluralism among adversaries (defined as legitimate foes with whom we share common ground, and in contrast to 'enemies' who are to be 'destroyed'; Mouffe, 2000: 15). Arguing against those, like the deliberative democracy theorists, who would reduce pluralist debate to reasoned verbal exchange, Mouffe contends that under agonistic pluralism 'the prime task ... is not to eliminate passions from the sphere of the public ... but to mobilize those passions towards democratic designs' (Mouffe, 2000: 16).¹¹

In sum, the feminists we reviewed take on, and work through, issues of power and social marginalization in the production of knowledge. This is missing from James's and Galison's accounts of pluralism (although Bernstein's version is better). Feminist theory is important because it sets out the social limits of engaged pluralism, and tells us (normatively) what social conditions must hold in order for engaged pluralism to be realized. It makes clear that once social inequality and prejudice reach certain thresholds engaged pluralism is unattainable. Yet this does not imply that engaged pluralism should be abandoned; rather, the challenge is to change the social conditions underlying it.

III Economic geography

1 The past

From the beginning economic geography has been a discipline with a centre that did not hold. The comparison with economics is instructive, a discipline that from its marginalist revolution in the 1870s was defined by an implacable centre. More than 10 years before the first English-language economic geography text was written, George Chisholm's (1889) encyclopedic *Handbook*

of commercial geography, Stanley Jevons, Carl Menger, and Léon Walras had already delineated economics' monist agenda. It was defined by the study of rational economic choice and the price-based optimal allocation of resources using a body of analytically rigorous and mathematically recondite theory and techniques (for a brilliant historical account, see Mirowski, 1989; 2002; Barnes, 2000, discusses Chisholm and his American counterpart, J. Russell Smith). The economists' agenda still prevails almost a century and half later, while the economic geographers' was barely an agenda to begin with, and certainly little residue of Chisholm's project remains in the discipline's current incarnation.¹² Unlike the economists, economic geographers never settled on a canonical methodology, set of techniques, list of venerated luminaries, disciplinary problematic, or definitive definitions.

This did not prevent some economic geographers from periodically attempting to impose disciplinary order, or monism. The American geographer Richard Hartshorne (1939) tried to do so in his tome *The nature of geography*. Claiming 'there is no boundary between economic and regional geography', Hartshorne (1939: 408) justified his ideographic regionalist position for economic geography on the basis of the discipline's Germanic past. That past proscribed what economic geographers could do, and just as importantly what they could not if they wanted to retain the disciplinary name (Neil Smith, 1989: 92, damningly writes that Hartshorne's *Nature* 'committed geography to a museum-like existence'). Perhaps the most successful attempt at imposing monism, however, was spatial science. Even here, though, there were plenty of non-believers and evidence of epistemological spillage (Scott, 2000; Barnes, 2003).

Spatial science's monism derived from a rival philosophy to James's pragmatism, scientific positivism (Barnes, 2008: 1547–48). Bertrand Russell, for example, argued that because pragmatism was not anchored in

science it had no means of securing reality. Under pragmatism 'ironclads and Maxim guns [would] be the ultimate arbiters of metaphysical truth', Russell (1910: 123–24) wrote. There was only one truth, revealed by a singular scientific method. This became the message of spatial science, at least from its more committed supporters. Allen Scott (1998), for example, one of its early practitioners having attended Northwestern University as a graduate student in the early 1960s, said in an interview in which he was asked to reflect on that period:

I remember being in a frame of mind where I thought that anything and everything useful to be said in academic, scientific terms was going to be said mathematically. That there was the whole other world that always interested me of humanistic values, of art, music, and literature. But that was ... another world; that was not the world of scholarship as I saw it. That was the world of one's personal cultivation and enjoyment. But the scientific world was the work of eventually mathematizing every statement we could make about the earthly condition ... I knew ... that positivism would be the light that would guide us ever onwards. (Scott, 1998)¹³

William Bunge was an equally enthusiastic believer, and evangelist for spatial science's monotheism. 'Geography is a strict science', he asserted on the first page of his *Theoretical geography* (Bunge, 1966: x), a foundational volume for the movement. Even though Bunge subsequently lost faith in America, turning to radical geography and later leaving the country, he maintained his faith in science: 'I believe in science; in the powers of rational thought in the midst of seeming chaos; in our ability through reason to achieve a just, humane, and natural order for all, the only stable order. Science not policemen, created what order man has achieved' (Bunge, 1971: 137).

Bunge and Scott were at the extreme end of the spatial science movement, but Barnes (2004) suggests, on the basis of oral histories conducted with a number of pioneer spatial

scientists, they were representative of a larger faith. Spatial science was upheld as the means to the Truth, its methods revealing the underlying economic geographical reality. It was a monist vision. But it could not be sustained. It was not true to the variegated history of economic geography as a discipline which had never been constrained by a single method or approach. It was not true to the historical moment of an increasingly pluralist 1960s in the west, the decade (ironically) in which spatial science burgeoned in the United States. And it was not true to its own scientific logic as assorted contradictions, inconsistencies, and *aporias* later revealed – as demonstrated often by those who had defended that very same logic only a few years earlier (Olsson, 1980). Monistic spatial scientific economic geography began to unravel.

2 The present

It was not just spatial science that unravelled from the 1970s, but the larger discipline. Over the next three decades economic geography passed through a period of ‘twists and turns of substantive focus and sudden changes in theoretical mood’ (Scott, 2000: 18) as it variously took up Marxism, the locality project, critical realism, feminism, regulationism, institutionalism, culture, poststructuralism, relationalism, ‘General Darwinism’, and even a reconstructed (or in some critics’ eyes unreconstructed) spatial science. It is in this sense that economic geography has never been more pluralist. But, as is implicit in James and explicit in Bernstein, pluralism is not useful unless there is engagement among its parties. We believe that this has been largely absent from contemporary economic geography. Admittedly, many of the supporters of these various positions have talked of the desirability of engagement, to reach out, to forge connections, but the reality often has been unsatisfactory forms of pluralism of the kind that Bernstein identified (Grabher, 2009: 120, uses the term ‘decentred’). Too often, there

was only ‘lip service’ paid to pluralism, or ‘glib superficial poaching’, which in the end produced only a fragmented rather than an engaged pluralism.

A key postspatial science volume that opened up the potential for engaged pluralism in economic geography was Doreen Massey’s (1984) *Spatial divisions of labour*. From our perspective, its importance was widening the kinds of objects and ideas that were legitimate for economic geographical study (providing the possibility for a focus on what Lee, 2006, later called ‘the ordinary economy’). After Massey’s book, economic geography seemed no longer so closed and airless, its broader mandate encouraging both new kinds of participants and approaches (Barnes *et al.*, 2007). But the space that she set out for engaged pluralism was rarely occupied over the subsequent 25 years. The many different approaches proposed (such as those enumerated above) often established themselves by claims of exclusivity, making clear not only what they were for but also what (and whom) they were against. The result was a combination of periodic outbreaks of conflict and rancour, and stretches of deathly silences as people stayed behind their stockades, keeping their heads down, doing their own thing with their own tribe. Such bouts of conflict and rancour are well known and include the Marxist attack on the locality project (Smith, 1987), the feminist critique of Marxism (or at least David Harvey’s version; Deutsche, 1991; Massey, 1991), the poststructural disparagement of regulationism (Gibson-Graham, 1996), and the institutionalist take-down of the new economic geography of Krugman (Martin, 1999). Perhaps even more damaging, however, were the silences when backs were turned.

For reasons of brevity, we cannot provide a blow-by-blow disciplinary appraisal of the last quarter-century’s history (Scott, 2000 and 2006, provides useful reviews, although in line with our argument his history comes with blind spots given his

scepticism of poststructuralism). Instead, we examine two debates that we believe reveal something about the problems of, but also the possibilities for, engaged pluralism in economic geography: the debate around the catalytic ‘interventions’ of Ash Amin and Nigel Thrift (2001; 2005; 2007); and the recent discussion of evolutionary economic geography – touted as possibly yet another subdisciplinary turn (Grabher, 2009).

3 *The Amin-Thrift debates*

Amin and Thrift’s 2001 paper ‘What kind of economic theory for what kind of economic geography?’ produced 11 responses; and their 2005 paper ‘What’s left? Just the future’ garnered reactions from Smith (2005), Harvey (2006), and Hudson (2006), as well as a reply by Amin and Thrift (2007). We recognize that focusing on these sometimes acrimonious debates opens us to the charge of prejudicing our conclusion by reviewing only works that illustrate the fragmentation that we claim is present. Our responses are that: (1) the debates, especially the first, were significant for the discipline, especially in the UK; (2) they illustrate well the full array of pluralist positions within the discipline; and (3) they exemplify the kinds and levels of opposition required to be overcome if conversation as engaged pluralism is to be realized.

In their first ‘intervention’, Amin and Thrift (2001: 4) contend that a ‘turning point is being reached’. How economic geography turns out, they suggest, depends upon ‘the direction the discipline takes and the kind of economic theory that is practised’ (pp. 4–5). Either it can side with the heterodox economics that ekes out an existence at the edges of mainstream economics (Lee, 2007) and ‘draw young researchers back into economic geography, as they see the place of a different kind of economic theory in a post-disciplinary social science’ (Amin and Thrift, 2001: 8); or it can side with ‘formal economics’, with which ‘certain parts of economic geography still yearn for a

rapprochement’ (p. 5). But, and it is a big but, formal economics is a potentially dangerous beast, and ‘we would be fooling ourselves if we believe that we can lie down with the lion and become anything more than prey’ (p. 8). The upshot is that Amin and Thrift’s world is indissolvably cleaved in two: the good pluralist world of heterodox economics, and the bad monist world of formal economics. And the monist world is so bad that economic geography could not survive in it. They offer no choice, eschewing engaged pluralism, dismissing from the beginning any contact with mainstream economics.

The 11 responses that followed also claimed openness and made declarations of pluralism (including ones we wrote). But frequently, as with Amin and Thrift’s own paper, the pluralism was qualified. Every perspective should get their chance, except ... (fill in the blank). All theoretical perspectives are equal, except some are more equal than others. For example, Martin and Sunley (2001: 152) ‘welcome a multiperspectival economic geography’, but they then exclude what they term ‘cultural essentialism’, their name for Amin and Thrift’s approach, criticizing it as ‘intolerant’, deploying ‘vague theory and thin empirics’, and characterized as ‘a loose assemblage of ill-defined concepts, fuzzy metaphors, or mere neologisms’ (Martin and Sunley, 2001: 153). Again, while Henry Yeung calls for a ‘politics of engagement’, he immediately limits that engagement by saying that the central problem of the discipline is ‘too much distraction from other branches of the social sciences’ (Yeung, 2001: 172, 169). The point is clear. Despite the rhetoric of openness, there remains guardedness about what should be allowed. Boundaries are erected even when push does not come to shove, precipitating a fragmented rather than engaged pluralism.

If Amin and Thrift’s first intervention was about excluding and dismissing formal economics from economic geography, the second one assayed doing something similar to traditional Marxism. Again, on the surface their

proposal appeared to favour pluralism. They write of their desire to ‘map a pluralist and forward-looking position whose grounding principle is the promotion of emergence through the process of disagreement’ (Amin and Thrift, 2005: 221). At the end of their paper, though, as in their previous article, they draw up a dualism (encapsulated in a two-column table). There is theorization of capitalism that they do not like and associated with Marxism, ‘capitalism as system’, set against the theorization they do like, capitalism as ‘systemic promiscuity’ (p. 237).

While Neil Smith’s (2005: 899) commentary on their paper concludes by saying ‘let one hundred flowers bloom’, he is not keen on Amin and Thrift’s particular blossom, subjecting their position to a withering critique. Indeed, for him pluralism is the problem, the ‘justificatory mulch of today’s neoliberalism’ (p. 896). So much for allowing many flowers to bloom. There is a similar equivocation in Ray Hudson’s (2006) response. While seemingly open-minded in his discussion of economic geography – ‘I argue for a pluri-theoretical approach’ (Hudson, 2006: 387) – in the end the only theories that he thinks are worth discussing are on some form of Marxism. Even here, not all Marxist theory is appropriate. Analytical Marxism, for example, ‘leads to the omission of consideration of a range of qualitative influences and processes ... and in this way ... conceded too much to the critics’ (p. 385). Such seesawing between a purported pluralism and the assertion of a single approach, Marxism, runs throughout the essay. So, on the one hand, ‘this is a complex world and as a result we need a variety of theoretical perspectives in seeking to understand it’. On the other hand, ‘in the last instance the class structural power of capital will assert itself as decisive’ (p. 388).

The most recent iteration (Harvey, 2006; Amin and Thrift, 2007) demonstrates how such exchanges easily get locked into polemical pluralism, particularly when opportunities to shape national disciplinary

cultures are at stake. Again, while both essays have moments when they invoke the importance of different views, neither shows any inclination to take the critiques of the other seriously enough to question their own position.

This is one example, but it illustrates the fragmented pluralism that often characterizes the contemporary discipline, leavened at times by defensive pluralism, and out-and-out monism. Lip service is paid to the benefits of an engaged pluralism, but then, to use Smith’s (2005: 892) metaphor, ‘the portcullis’ comes down, separating those on the inside who are legitimate conversation partners from those remaining outside who are not: depending upon who it is, variously orthodox economists, Marxists, or the ‘heterarchical Left’.

4 *An evolutionary turn?*

The debate over an evolutionary turn is different in that it points to the possibilities of an engaged pluralism. Even here there remain conversational holdouts and, apart from some opening statements asserting a willingness to talk, little of substance has yet been achieved. It is still early days, however. Yet this case provides insight into not only the processes that create and sustain disciplinary fragmentation, but also strategies that might be deployed to reverse it (and going to Longino’s suggestions discussed above).

Evolutionary economics has a muddled history and nature. It has been linked to: (1) political economy;¹⁴ (2) a third-way alternative to Marxism, institutional economics, associated with the late nineteenth- and early twentieth-century maverick American economist, Thorstein Veblen; and (3) a late twentieth-century bastardized version of neoclassicism, Douglas North’s new institutionalism. Given this varied intellectual provenance, evolutionary economics seemingly has the potential to be the epitome of engaged pluralism. So far it has not, but MacKinnon *et al.* (2009a; 2009b) argue that this time has come.

Evolutionary economics applies Darwinian notions of variety, selection, inheritance, retention, and adaptation to institutional economic change (Hodgson, 2009). In economic geography, evolution was used during the 1950s and 1960s to understand the firm (Robert McNee's 'the geography of enterprise', 1960). In the 1990s the emphasis was on regional development and bound to issues of an appropriate institutional structure ('institutional thickness'), and problems of regional technological 'path-dependence' and 'lock-in' (institutional economists from Veblen onwards stressed the close relation between technological form and surrounding institutional structure; Barnes, 1997). Over the past five years, evolutionary economic geography became increasingly analytical and formalized, drawing especially on the works of economists such as Richard Nelson, Sidney Winter, Stan Metcalfe, and Giovanni Dosi.¹⁵

There are two points to make about the evolutionary turn. First, even this latest guise contains an impulse by some to separate, to draw a line around the body of this work and cut off conversation with at least some potential partners. For example, in a recent editorial introducing the 'evolutionary' turn, Boschma and Martin (2007: 539) say that while 'Marxist economic geographers might well claim that their approach ... is strongly evolutionary in nature', they would be wrong. The Marxist approach reduces to either 'teleological imputation' or 'unexplained episodic shifts' (Boschma and Martin, 2007: 539), both of which are anathema to an evolutionary economic geography that represents a 'different way' (p. 539). Their strategy, as MacKinnon *et al.* (2009a: 144) note, is 'to distance evolutionary economic geography from the legacy of Marxian political economy'. Boschma and Frenken (2009) also draw a line separating evolutionary from institutional economic geography, describing them as 'orthogonal'

to one another (Boschma and Frenken, 2009: 152).¹⁶ The rhetorical implication is separation, partition, and isolation (see also comments by MacKinnon *et al.*, 2009b: 177–78). Such divisions present evolutionary economic geography as self-sustaining and autonomous but at the cost of setting up 'us' against 'them'.

Second, however, other economic geographers argue that evolutionary economic geography is a potential site for precisely the kind of engaged pluralism we propose (particularly MacKinnon *et al.*, 2009a; 2009b). Whereas Boschma, Franken, and Martin want to solidify the form of evolutionary economic geography by setting up a sub-disciplinary stockade, MacKinnon *et al.* encourage cross-subdisciplinary exchange and trade: 'rather than the construction of some kind of theoretically separate evolutionary economic geography', their focus is 'evolution in economic geography, not an evolutionary economic geography ... Evolutionary economic geography is an evolving and pluralist project' (MacKinnon *et al.*, 2009a: 129). They go on to discuss, in effect, what we earlier called 'pidgin' (although they do not use the word) – terms that effect trade by acting as a bridge between, in this case, different subdisciplines. MacKinnon *et al.* (2009a: 140–44) single out 'path-dependence' and 'lock-in' as such terms: concepts that are important because they are used in theoretical contexts that range from Krugman's 'new economic geography' to Storper and Walker's Marxist analysis of capitalism's 'inconstant geography', from Martin and Sunley's (2006: 411) institutionalist 'path as process' to Grabher's (1993) network account of lock-in. Although these particular individuals have yet to engage in such trade, MacKinnon *et al.* argue that the possibility exists, allowing the pluralist potential of the field to be realized. In pointing to that potential, they follow some of Longino's precepts: the use of publicly recognized forums

for criticism, maintenance of equality of intellectual authority, and judgment based on common standards of evaluation.

In sum, our larger argument was that while economic geography from its beginning possessed the potential to realize pluralist engagement it was a promise rarely fulfilled. Instead, the reality was a fragmented pluralism interspersed with a few (unsuccessful) attempts at monism. Clearly, as our last example showed, there is some sentiment for a different model, engaged pluralism. But is it feasible? To address this question we turn to a field that shows the challenges involved in achieving engaged pluralism, and also the benefits from its accomplishment: GIS. In 1990, Anglophone GIS scholarship was fractured, along lines that were just as sharply drawn as in economic geography. But, rather than keeping the portcullis closed, the diverse participants researching GIS found ways to wedge it open, making space for the passage of conversation. In Galison's terms they developed trading zones (Bernstein's engaged pluralism; Longino's conditions for pluralist knowledge production), enabling them to cope with the world by manufacturing new knowledge. Economic geography did not have to turn out the way it did and, as we will argue in the concluding section, it can learn from GIS.

IV GIS and critical geography¹⁷

1 The past

The rapid growth in the 1970s and 1980s of geographical information systems (GIS) as an area of research, application, student interest and influence within geography caused a stir. Notably, it led to ambitious, high-profile claims that GIS was making possible a new integrated and scientific geography (Dobson, 1983; Openshaw, 1991). Published at a time when human geographers were moving substantially away from spatial science, such claims catalyzed a series of responses from critical human geographers (reviewed in Pickles, 1995; 1999).¹⁸ These criticisms

focused on both epistemological and practical implications of the spreading influence of GIS within geography. GIS was seen as a Trojan horse for the reassertion of broadly positivist approaches within human geography because of its quantitative and empirical nature and of the leading role played in GIS by protagonists of the 'quantitative revolution'. These critics argued that GIS was in danger of overpowering postpositivist approaches, thereby circumscribing geography's ability to make sense of the world. Social theorists saw this kind of scientific approach as reifying the *status quo*, reinforcing an empiricist epistemology that ruled out the investigation of alternative possible worlds other than that one in which we live. They also noted that certain conceptions of space (particularly, geometric and relative space) and certain forms of reasoning (particularly, Boolean logic) are embedded within GIS, making it unable adequately to represent both non-European conceptions of space and the communicative rationality of everyday life. Finally, increased use of GIS in society was seen as likely to enhance current social and geographical inequalities because of the emerging digital divide. As a consequence, critics argued that GIS facilitated practices by those with access to the technology of surveillance, social engineering, opinion formation and warfare (Pickles, 1991; Smith, 1992; Lake, 1993). In short, GIS in the 1990s was attacked for many of the same reasons, and from a similarly broad gamut of critical epistemologies and political commitments, as was spatial science in the 1980s.

These attacks provoked equally sharp responses from GIS specialists, who found the critiques simplistic, unduly pessimistic and even paranoid, and indicating a lack of understanding of and experience with GIS, and/or a lack of patience or aptitude for the rigors of science. They also resented the implication that GIS specialists are unconcerned with social issues and unaware of the social implications of science. Accordingly, between 1983 and 1993 there was little

communication between what had become two cultural solitudes: those critical of and those specializing in GIS (Pickles, 1999). In short, polemical and fragmenting pluralism prevailed, separating pro- and anti-positivist camps.

This intellectual divide was challenged at Friday Harbor in 1993, when the National Center for Geographic Information and Analysis (NCGIA) sponsored a conference that brought together prominent researchers from both camps (Poiker and Sheppard, 1995). Notwithstanding early tensions, caricatures cracked as participants came to know and appreciate the breadth of skills and interests of those from what they had seen as the other side. A common desire to learn from one another emerged among those present, stimulating development of a 'GIS and society' research agenda, formulated at a second meeting in Annandale, MN, in February 1995. This was one of several forums within which an active research program in GIS and society emerged, with collaboration taking a variety of forms: joint research by GIS specialists and social theorists; jointly organized sessions at GIS and geography conferences; the invitation by members of the 'opposite' camp to participate in predominantly GIS or social theory initiatives; and new conferences. The space for engagement between previously polarized fields of research created by these initiatives, in turn, attracted new participants. Young scholars, in particular, no longer felt compelled to identify themselves as either a geographic information scientist or a social theorist, and creatively acquired substantial expertise in both areas.

By the end of the 1990s, this constructive engagement, an emergent engaged pluralism, meant that overlapping cultures of respect were replacing separate cultures of indifference (notwithstanding the continuing reluctance of some influential critical geographers and GIS specialists to engage one another).

2 *The present*

Recently, there has been a substantial shift in the discursive frame within which research transcending the GIS social theory divide is set: from 'GIS and society' to 'critical GIS' (Schuurman, 1999; Harvey *et al.*, 2005). It is by now broadly accepted, and not only among those participating in these exchanges, that GIS is not inherently positivist. Research into geographic information systems and technologies research need not be quantitative, logico-deductive, or empiricist. Many kinds of qualitative information and situated perspectives (images, narratives, sketch maps) can be incorporated within a conventional GIS without being incorporated into its Boolean logical structure, and GIS can be much more than its current practices. An emergent area of research here is 'neo-geography': the study of the cultural mapping practices, in all realms of everyday life, and catalyzed by the digital mapping technologies and social networking practices associated with Web 2.0. Notwithstanding the tendency of standard GIS tools to represent the world via 'the god-trick of seeing everything from nowhere' (Haraway, 1991) and other difficulties in capturing key elements of feminist theory, GIS can be tweaked in ways that allow it to represent situated and embodied perspectives on the world, and empower women (Kwan, 2002). Schuurman (2001) highlights the emergence also of considerable epistemological and ontological reflection in mainstream GIS, particularly along lines of experiential realism (cf. Couclelis, 1999).

Critical GIS has also attracted a wide variety of scholars who do not approach it from a critical theory background. Beginning with the 2002 Association of American Geographers meeting, critical GIS sessions have provided a vehicle to explore a range of issues, from those central to the GIS and society research agenda (such as public participation GIS), to technical papers seeking to address representational limitations of GIS, to ways

of combining GIS with qualitative methods, to postpositivist epistemologies and ontologies. A new generation trained in new courses that promote engagement between GIS and critical geography has become vocal. It seeks to break down divides between the two formerly antagonistic epistemic communities (cf. Schuurman, 2000). A further marker of engaged pluralism is the willingness among participants to rethink the very meaning of the terms and communities that are at stake: 'critical' and 'GIS' (Schuurman, 2001; Sheppard, 2005; Wilson and Poore, 2009).

3 Assessment

Of course, the emergence of a trading zone between GIS and critical human geography has been neither as easy nor as smooth as the above narrative might suggest. As noted above, Galison's notion of trading zones tends to gloss over questions of power and implementation. First, this trading zone did not happen organically, but was catalyzed by an institutional intervention with its own agenda, itself a result of pressure brought on NCGIA to diversify its conception of GIS and broaden its relation to geography. Despite such catalysis, many leading (generally male) figures on both sides have refused to enter the trading zone because their identity is so invested in belonging to one side or the other. Second, persistent inequalities of influence also mean that there is unequal exchange, which reproduces tensions, with traditional GIScience holding the distinct upper hand. This is hardly surprising given the centrality of mainstream GIS to war-making, policing and surveillance, capital accumulation, and political campaigning. Thus the relabeling of GIS as Geographic Information Science triggered concerns about what it meant to invoke 'science' in this context (Pickles, 1997; Wright *et al.*, 1997). International GIS conferences held annually since 2004 have had very limited participation from those who see themselves as engaging between critical geography and GIS. The diversity within

critical GIS sessions at the 2002 AAG meeting, noted above, declined by the 2004 AAG meeting where sessions focused more narrowly on qualitative methods and GIS (broadening again at the 2008 meeting). Critical GIS is not central in the canonical US GIS program (at UC Santa Barbara), nor the influential critical human geography programs at Berkeley and UBC (although it is present, eg, at Ohio State, SUNY Buffalo, UCLA, and the Universities of Washington and Minnesota). There is also geographical unevenness: engaged pluralism between GIS and critical geography has been more common in North America than elsewhere in the first world, and rarer still among scholars located in the global south.

Ceaseless debate also means ceaseless power struggles, with epistemologies and politics both at stake. Without doubt, the generation of scholars that was weaned on these interactions will find themselves embroiled in other debates and divisions that challenge engaged pluralist ideals and regress into other less desirable forms of pluralism and even monisms. It is always possible that trading zones will wilt again. Yet this is exactly what ceaseless pluralist engagement should be about: passionate argument among recognized adversaries (albeit not enemies), with all voices empowered, intellectual hegemony always up for grabs, and new differences emerging.

V Conclusion

In this paper we argued that economic geography can and should engage more actively across its manifold paradigms and fashions (thereby becoming an exemplar for the wider discipline). Such engagement is necessary to avoid not only monism (as in economics), but also a fragmented pluralism of ships passing in the night. Engaged pluralism can be compatible with the values and epistemological commitments of science studies and feminist philosophy of science, but trading zones satisfying the norms of engaged pluralism do

not just happen. Inclusive trading zones need to be actively established. Moreover, without lively intervention unequal exchange is likely, and requiring the counter of agonistic engagement stressed by Mouffe. In effect, our challenge to economic geographers (indeed to all geographers of whatever stripe) is to initiate exchange, to trade their various local epistemologies and theories with those of others, and in the process to create new knowledge. The larger result, as in the case of GIS, can be a more vibrant, interesting discipline, capable of generating complex, shifting understandings that reflect and shape equally complex and dynamic materialities. Less we be misunderstood, we are not suggesting that engaged pluralism is the only effective form of knowledge production; intense 'local exchange and trading systems' within epistemological paradigms will remain vital. But knowledge production that is dominated only by localized exchanges fails to take advantage of economic geography's pluralist potential.

Realizing this potential will not be easy. The conditions of possibility for engaged pluralism are shaped by broader cultural and institutional contexts which are less than favourable. The commodification of universities, and the competitive individualism it reinforces, easily undermines the kind of mutual and passionate engagement that we advocate (Sheppard, 2006). A focus on the university as a site of expertise can also mitigate engaged pluralism because of an emphasis on narrow, technical forms of inquiry, and belief in self-correctness ('we know we are right'; Collins and Evans, 2007). Moreover, there are the internal obstacles within a discipline. Inquiry is sometimes taken over by the *ad hominem*, by internal sociological questions of who sits at the disciplinary centre. In our view, the intensity of the debates around the two Amin and Thrift articles partly reflects the current predominance of this latter tendency. It will take substantial collective will, and a retitling of intellectual culture, to change.

It will also be important to pay attention to and reveal the networks through which particular positions and issues come to dominate economic geographers' debates in and across particular times and spaces. Bringing networks out of hiding means attending to and seeking 'to intervene in the work of translation by which such networks are formed' (Braun and Disch, 2002: 510).

The ocean is a great deal larger than we often recognize. We have restricted ourselves, at least implicitly, to considering only those already sitting around the table. Yet many others are left out altogether, and they must be engaged if economic geography is to flourish and the transferability of its concepts assessed. Young (2000: 23) argues that 'all those affected [must be] included in the process of discussion and decision-making', but that is hardly the case to date. At issue are those groups systematically left out of a predominantly white, Anglophone, and male subdiscipline. Additionally, there must not only be greater social inclusiveness, but geographical as well (Sheppard, 2006). We need to interrogate the conditions under which our (pluralist grouping of) local epistemologies travel and are exported elsewhere, and, just as importantly, to appreciate the possibility of importing and engaging with others' local epistemologies/situated knowledges.

Finally, relatedly, are the difficulties of learning to listen and appreciating difference. Partly this a problem of language, which in geography frequently means that others must learn English if they are to be heard (see contrasting views by Desbiens and Ruddick, 2006, and Rodríguez-Pose, 2006). Partly, also, it is the entrenched character of national geographical traditions that can form a thick 'crust of convention', proving dauntingly impervious. This was evident in a conference session in which this very paper was presented. Given at the Second Global Conference in Economic Geography in Beijing in June 2007, a conference of over 350 participants from more than 30 countries, we hoped the paper would provoke engaged

pluralism. Instead the various commentators, who included a Russian, an Australian, a Netherlander, a Japanese, an Englishman, and us, respectively Canadian (Barnes) and American (Sheppard), produced a stilted and constrained conversation, and much talk at cross purposes. It became even less like a conversation when yet more voices were added during the discussion period: closer to Babel than dialogue (cf. Liu, 2009).

We are thus not minimizing the difficulties of achieving engaged pluralism. There are no easy solutions, no foolproof strategies. But to avoid the dangers of fragmented pluralism, and to gain the benefits of engaged pluralism, we must try harder and fail better. From just the story we told, it is clear that success is not going to be epiphanic, all at once, a Billy Graham moment on the big stage. If engaged pluralism does occur, it will be hesitant, provisional, won yard by yard, realized bit by bit by small acts. In that light, while the Second Global Conference in Economic Geography might have failed in its large set pieces in the cavernous lecture theatre, it seemed more successful in smaller, ordinary spaces: in the tea room, at the lunch table, at the bar, at the buffet counter at the banquet, in the many family restaurants that surrounded the convention centre. In them we observed hesitant signs of connection as people from different origins at first cautiously and later more confidently engaged one another. Engagement did not mean agreement, let alone convergence, but it implied a willingness to listen and to take seriously other people's ideas. These were, of course, limited steps, but they were also glimmers of hope for the possibility of engaged pluralism. Kevin Hetherington (1997) invokes Foucault's idea of a heterotopia, a place where differences coincide and ricochet productively off one another, to describe the informal spaces of Paris's Palais Royale that helped transform the Ancien Régime into revolutionary France. We do not claim that the spaces around Beijing's International Convention Center were the sites of a similar

revolution in economic geography, but they showed at least that one might be possible. It is another version of 'the audacity of hope'.

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Notes

1. By monism we mean a belief that all variety is reduced to a single entity or notion, the attribute of 'oneness' (Schaffer, 2007). Menand (2001) argues that James's work, and American pragmatist philosophy in general, emerged as a reaction to the US Civil War, itself the product of dogmatic adherence to monist principles. James's writings and those of the pragmatists were an attempt to repair the resulting damage, to offer a different model of democracy, culture and ideas based not on another monism but in part upon pluralism.
2. There are no extended histories of economic geography *per se*, but Barnes (2000; 2003; 2004) provides a set of potted histories that discuss different forms of economic geography during various historical phases of the discipline.
3. Such an attitude is classically pragmatist. Life under radical contingency means that we never know how things will turn out. 'Everything that can happen by chance, sometime or other will happen by chance', as Charles Peirce (1982, volume 4: 544) put it. We must always be prepared to change our view, to experiment, to adopt new ways, to be receptive to novelty. We must be open-minded, pluralist and pragmatic (Barnes, 2008).
4. It might appear paradoxical for Anglophone human geographers to argue, as we do, for the necessity to make room for non-Anglophone voices in economic geography, and even more paradoxical to do so in a paper that focuses exclusively on the Anglophone literature. Partly this reflects our own limited

- knowledge of the non-Anglophone literature, notwithstanding our desire and effort to broaden. While regrettable, we do not think that such a constraint is crucial for the particular argument we want to make here. Our argument is directed at the specificity of an Anglophone literature that we contend is overly introspective, containing barriers to engaged pluralism. That said, we recognize that there is an enormous amount to learn from non-Anglophones about both economic geography and engaged pluralism, and we look forward to coming to know this work.
5. One of the referees, using Imre Lakatos' (1978) vocabulary, asked whether those associated with a 'progressive research program' would ever trade with those associated with a 'degenerative research program'. The implication of the referee was that a dying research program would have nothing to offer by way of trade. Lakatos made clear, however, that research programs were irrefutable, with always some life in them. Our contention is that life can be rekindled by trade, even transforming a 'degenerative research program' into a progressive one. One example perhaps is when Paul Krugman (2000) took ideas from the degenerating program of regional science, and mixed them with a set of ideas from the new trade theory in economics. Regional science took on a new lease of life, and Paul Krugman received the 2008 Nobel prize in economics.
 6. In fact, participants in pluralist debate, whether over the nature of the world or health care, are neither equal nor sovereign individuals. For this reason Laclau and Mouffe (1985) conceptualize a radical form of democracy, a radical pluralism, which does not seek resolution through bridging difference. Difference is not given in advance but is a 'political effect' (Braun and Disch, 2002: 508), and consensus is not to be expected.
 7. Galison uses the metaphor of 'silent trade'. Gudeman (2001: 95) explains: 'According to the story, one person leaves objects in a clearing for a stranger who places a counter-offering and leaves; the first individual returns and takes the offering or leaves it for more; the other person then returns, and the negotiation continues until an acceptable rate of exchange is reached. According to the story, trading is a natural impulse of humans that takes place without shared language or law.' Close analysis of stories of silent trade told to European travelers, however, has shown the metaphor to have no known basis in real behaviour. Rather, such stories were told to Europeans to mislead them about gold trading routes in North Africa (de Moraes Faria, 1974; Smith, 2003).
 8. Pluralism is clearly also at stake in feminist theory, although feminists have rarely made an explicit connection to pragmatist philosophy (Duran, 1993; Mottier, 2004). Véronique Mottier (p. 323) puts it thus: 'There is a natural affinity between key elements of pragmatism and feminist thought. Both privilege social and political practice over abstract theory, they evaluate theory from the point of view of its concrete effects on marginalized groups, including women, and both share a common emphasis upon the development of theory from subjects' grounded experience. Nevertheless, the history of relations between pragmatism and feminism is largely one of a failed rendezvous.'
 9. Neither Young nor Longino show any inclination to connect their thinking to pragmatism, but both see themselves as offering pragmatic accounts (Young, 1994; Longino, 2003).
 10. Drysek's (2002) engaged pluralist critique of deliberative democracy is very similar.
 11. Although rarely discussed, passions are often present, especially in academic exchanges, and often contributing to fragmented pluralism. Passion, for example, was always on the surface of Bill Bunge's work that we discuss briefly in the next section, most famously in his brilliant but tortured book, *Fitzgerald* (Bunge, 1971). Peter Gould (1999) would sometimes let his oppositional passions loose, for example, as he did against poststructuralism in his essay 'Cathartic geography' ('Sometimes you feel that things are just not right ... and your sense of fairness wells to the surface'; Gould, 1999: 79). The point is less to eradicate passion (impossible anyway), than to ensure it does not overwhelm, making conversation with those holding different views impossible (as it sometimes did for Gould). We owe this larger point to Roger Lee. Mouffe also makes a second relevant argument: that practices should be emphasized over arguments under agonistic pluralism.
 12. The difference between economics and economic geography might be conceived, following the Stanford philosophers, and John Dupré in particular, as between a unity of science view (the economists) and a disunity of science view (the economic geographers). It is the difference between conceptualizing the economy as a self-contained, integrated whole, the elements and operations of which are presumed reducible to a handful of formal explanatory principles (economics), and conceptualizing the economy geographically as fractured and disparate, weakly linked bits and pieces requiring separate theories, concepts, and understandings (economic geography). The latter view has been presented by Roger Lee (2006: 414) as 'the ordinary economy', and defined as all the 'contradictions, ethical dilemmas and multiple values that inform the quotidian business of making a living'. For Lee (2006: 422, 427), the result is 'economic geographies are inherently diverse ...

- [and] never monistic'. To take economic geographies seriously, Lee (2006: 429) writes, 'implies an analytical acceptance rather than a constrained and formalized reduction ... Such a reduction leaves analysis open to being precisely wrong rather than roughly right.'
13. Along with several others in the discipline, Scott later rejected positivism. We interpret that rejection as his recognition of the disunified character of the economy, that it is too heterogenous and diverse to be reduced to a single set of equations. By the late 1980s, the equations that he earlier developed in the 1960s and 1970s for linear programming and commodity production were nowhere to be found as he grappled with a complex economy that now included a variegated city and state (Scott, 1988a; 1988b).
 14. Marx was an admirer of Darwin and sent him a copy of the first volume of *Capital*. But while Marx read Darwin, Darwin did not read Marx. The pages in the copy of *Capital* that Marx gave to Darwin remained uncut.
 15. A good review of evolutionary economic geography is found in Essletzbichler and Rigby (2007). The papers collected in the September 2007 special issue of the *Journal of Economic Geography* convey well the current form of evolutionary economic geography.
 16. To be orthogonal, two linear vectors must be independent.
 17. The interested reader can find a more complete account in Sheppard (2005).
 18. Here, 'critical' refers to the broad palette of post-positivist epistemologies, and related political commitments, that have come to dominate Anglophone economic, and human, geography since the early 1980s (Blomley, 2006; 2007; 2008; Sheppard, 2006).
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