

Boundary-Thinking in Theories of the Present

The Virtuality of Reflexive Modernization

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Abstract

Theories of the present have converged on changes in spatialization or the spatial order of societies. This article discusses the focus on borders and boundaries in programmatic statements on reflexive modernity or remodernization (RM) by Latour and Beck. It is insufficient to say that boundary-marking and border-making become simply more fraught or obvious. There is an historicity and dynamic quality which are central to these analyses which are best understood in terms of the intangible aspects, or virtuality, of borders and boundaries. A dynamic, four-part ontology is advanced to elucidate the functioning of borders as interfaces and liminal zones with their own internal semiotics and emergent meanings and effects. This is the basis of a critique of RM. Further, a more diverse set of methods than might be supposed is required to research boundary phenomena, which social sciences are ill-equipped to undertake.

Key words

■ border ■ interface ■ reflexive modernization ■ remodernization ■ spatialization ■ Ulrich Beck

Theories of the present, such as late capitalism, postmodernism, ‘reflexive modernity’ (Beck, 1994; Lyotard, 1979), or ‘second modernity’ attempt to name the current moment, proposing an epochal identity across diverse and contradictory social trends. While they provide a useful shorthand for more complex processes, their utility is less in their explanatory power than in their heuristic character and the ability to assimilate diverse cultural and economic research results into a single framework. They rely on their rhetorical force as extended metaphors, or literary conceits, as much as upon evidence. Lassoing the present, they organize the data of everyday life into narratives of progress, dystopia and promise. This article raises questions concerning the importance of a discourse

of borders and boundaries to the (European) reflexive modernization thesis which has been discussed by a number of prominent European sociological theorists.¹

This article begins by clarifying the practices and semiotics of borders and boundaries at play in statements of the reflexive modernization thesis. Borders and boundaries are then shown to consist of a set of interacting registers which interact in a dynamic way. These define complex objects (which consist of both physical infrastructure, institutional practices and socially constructed meanings) away from either being understood as simply material or as an equally simple dualism of material and abstract elements. Their intangible qualities are more than abstractions (border as an idea). They include both probabilistic (e.g. risk) and virtual (e.g. performative) aspects. In this article, I aim to establish and explore what is virtual in boundaries and border claims within theories of the present, specifically reflexive modernity.

Boundaries and Borders

While they disagree in their interpretation of the status of reflexive modernization, Ulrich Beck and Bruno Latour both converge on the question of boundaries and border-making in their approach to the thesis of reflexive modernization (Beck et al., 2003; Latour, 2003).² For the purposes of my argument, the term border (from Portuguese and Spanish, via the Old French *bordeure* – ‘edge’) presently denotes territorial or material cases – at least in English, the word refers to a state border, the border of a diagram, a flowerbed planted along the edge of a property. In contrast, boundaries *mark* a border or edge. A marker stone (*bourne*), a line on a map, or even the result of an equation mark the ‘bounds’ of an area. Boundaries are semiotic. They describe a broader set of distinctions that can be material or virtual (i.e. immaterial) – although the term is often used synonymously with ‘border’ (*Grenze*) and to describe edge-conditions (*Rand*) more generally. ‘Boundary’ originates from the Medieval Latin *bodina* via the Old French *bodne*. In discussions of reflexive modernization in English, ‘border’ and ‘boundary’ often appear interchangeably. In this article I use the terms in their strict etymological sense. In everyday usage, depending on local circumstances, these two terms are differently weighted in contemporary experience. In places such as the southern United States, ‘the Border’ – the USA–Mexico border – with its fence and crossing points is a specific thing and a place which takes precedence over notions of cultural boundaries.

Boundaries include the limits of fields and classes. They are part of the intellectual apparatus of distinctions between foundational modernist categories such as nature and society, human and technological, rational and irrational, and so on. As the status of these distinctions between value spheres is eroded, so the characteristically ‘modern’ is changed into a ‘reflexive’, ‘re-modernizing’ or ‘second’ modernity. For Latour, this is a qualitative shift, but for Beck a matter of substantive change. The status of borders and boundaries

can serve as a litmus test for the existence of reflexive modernity as opposed to post-modernity: the existence of boundaries whose artificial character is freely recognized, but which are recognized as legitimate [not ironic] boundaries all the same. In other words, reflexive modernity exists to the extent that fictive as-if boundaries are institutionalized into systematic procedures that affect everyday life. (Beck et al., 2003: 20)

For the proponents of reflexive modernization, this is not a matter of a 'post-modern' suspension of boundaries and borders; rather, inviolable borders become harder to maintain. In the context of political and economic challenges to the sanctity of procedures for generating trusted knowledge, challenges to the authority of experts, and to the legitimacy of institutions of governance, the enforcement of borders and boundary-marking becomes more fraught. Hypothetically, 'There is instead a multiplicity of inclusionary and exclusionary practices, and, according to context, a multiplicity of ways that things are bounded off' (Beck et al., 2003: 24). Boundary-drawing is more obvious and less taken-for-granted. Thus, it is more likely to be contested.

What Are Territorial Borders?

A border constitutes space as territory. As such, borders are usually conceived spatially from within a jurisdiction, and are conceived functionally as limits. Even where their precise location is arbitrary or subject to negotiation, borderlines are a location and locus of political certainty imposed on an often-recalcitrant topography. Without borders, there is no territory (Shields, 1992). To the extent that borders are inelastic, they establish the fixity of this shape. To the extent that they are porous to different flows, they establish the degree to which a territory is exclusive (see also Paasi, 2002: 140).

There has been a broader tendency to contrast territorial borders as part of spatial assemblages of 'places' against immaterial and dynamic 'spaces of flows' (cf. Castells, 1996; Sassen, 2002). But geographers recognize that borders are not just material or *concrete* (1) (see Figure 1; Paasi, 2003) but a combinatory – physically traced on the land and in juridical texts, governmental practice and cultural symbols. The intangibility of borders must be recognized for they may be moved and may be marked, reinforced or signalled in different material ways but they remain the borders of this or that state or territory. Borders may be erased, even superseded in a manner that erodes their relevance even in abstract theoretical terms (Shields, 1997). But if not forgotten, a border retains a *virtual* (2) existence which holds the potential to be actualized in the future.

Borders are assemblages with four registers. They are technologies. The border is an abstract, material and virtual interface, a membrane that consists as much of fences or rivers as it consists of *abstract* (3) concepts and political rhetoric, of ways of operating detection equipment, verifying passports, and maintaining databases.

Borders and nations are lived, intangible-but-real 'things' (Conversi, 1995; Rose, 1995). Ontologically, such immaterialities are virtual, in the strictest sense

	Real	Possible
Ideal	Virtual (2) status interface, intangibles, knowledges of citizenships, identities sense of (in)security	Abstract (3) rhetoric, representations, theories and concepts of the border, information flows
Actual	Concrete present (1) Fence, gate, actions, bodies, goods danger . . .	Probable (4) percentage outcomes, trends risk . . .

Figure 1 Ontology of the border

of the term (Shields, 2003) which are performatively actualized via embodied behaviours and concrete objects.³ More simply put, the soft operational culture of a border, the habitual routines of boundary-drawing are the real ‘meat’ of this subject, not the concrete exo-skeleton of gates, fences, signage or border posts. This is a level of detail that is essential to develop the reflexive quality of borders or boundary-practices which evolve and as technologies, are able to learn from mobilities and relations that cross them. This points to a certain memory capacity of borders and boundaries which goes beyond mere semiotics, say, the scarring graffiti or bullet marks on the Berlin Wall.

Fourth, as algorithms, borders are technologies that produce tendencies and respond to risks which are understood in *probabilistic* (4) terms (such as recognizing citizens, screening invasive plants and organisms).⁴ These various aspects respond to, for example, flows of abstract data, tangible and intangible bodies which pass through or are turned back at the border-interface. Borders are thus more than material and involve more than conceptual abstractions. They are also virtual and probable (see Figure 1).

This four-part ontology is a framework through which the internal dynamics of complex objects can be described. Each aspect or ‘register’ is a spatio-temporal mode. Some highlight past tradition; others are oriented toward future effects even while their functionality in the present moment is paramount. ‘Overdimensioned’ in time and space, borders cannot be sufficiently analysed in Enlightenment terms such as real versus ideal – or even more narrowly, material versus abstract. However, the categories making up these old dualisms – such as material versus abstract can be usefully reset into a broader framework if this is also understood to be dynamic. This allows aspects to be juxtaposed, to be understood as co-present ‘registers’ which may undercut or negate each other and affect the functioning of the border or of a boundary drawing projects or discourse.

Boundary Claims in Reflexive Modernity

From this ontological point of view, what is being claimed when theories of the present postulate changes in borderings and boundings? If the 'truth' of an object lies somewhere within a dynamic of defining registers which are abstract, virtual, concrete and even probabilistic, what of boundaries – 'signs' of borders? These are even more strongly virtual, and by no means merely abstractions or representations. The significance of a dotted line on a map is not its own inky materiality. It abstractly represents a border somewhere. However, the history of colonialism is full of examples where lines drawn on maps were figured on the ground only much later. Such lines are more than representations or boundary-marking; they are virtual borders which prefigure concrete lines on the landscape (Shields, 1997). As will be argued below, boundaries can be understood as both spaces and also as infinitely thin dividing lines (bifurcations) between radically different states – between the 'civilized' and 'uncivilized', to give one example. If boundaries have any difference from borders, it is their greater abstraction and virtuality as signs whereas borders are strongly material edges. Boundaries may consist of abstract economic distinctions or lie between value spheres, or socio-economic groups (bands of income or age to suit the purposes of analysis). Or, boundaries may be virtual: cultural distinctions of taste, affiliation and status. As virtualities, these are not known directly, but through their effects or the effect of transgressing them (Shields, 2003).

We know boundaries through their effects. This virtual aspect is of seminal importance to any border or boundary: the border is not of interest merely as a line but as a line with effects. Without an ontology which includes the virtual, these effects – the changes in status, etc. – can only seem to be supernatural, for the scale of their effects goes well beyond what one would credit to a social construction, such as an ideology, a representation or a social convention. Recall that virtuality means 'real but ideal' – we are dealing not with flimsy abstract ideas but something of the durability of an institution or culture. And of the same flexibility: for it is the virtual quality of a boundary that raises it to the stature of more than mere ink or a division in a herb garden, that allows it to be repositioned yet remain 'the same' boundary, and allows it to evolve in its functionality yet remain 'the same', giving borders and boundaries the sort of historicity that is being claimed in reflexive modernization theses. I am not positing an abstract quality, an essence, Platonic Idea, or spirit of boundaries but acknowledging an aspect of the *reality* of borders and boundaries.

Boundaries have a range of significance as limit-objects (*boundes*). Yet a boundary was once a material limit which marked 'the edge' beyond which civilization ceased to exist, or beyond which sailing ships did not return, and perhaps even 'fell off' the world. The terror of these absolute limit-boundaries persists in the popular imaginary. They are routinely tapped by disaster movies: beyond a certain point, lie catastrophic phase changes, unmapped spaces, and formless monstrosities. By contrast, abstract natural divisions are the centrepiece of contemporary culture. In these cases, measurements indicate bifurcations at

which systems shift from one state to another state of dynamic equilibrium – from solid to gas or from one crystalline geometry to another. Boundaries have their own historicity as aspects of all-encompassing cultural formations of spatio-temporal practice, cognition and imagination (Lefebvre, 1991; Shields, 1999).

Boundary drawing is spatial and visual semiosis which describes an encompassing vision of a set of elements or an area or expanse, with a particular stress on the limits of these sets. Boundary drawing is a matter of deciding on what or where is included and what is excluded. It is an aspect of relational, aesthetic reason (in the Kantian sense) and a form of judgement and discrimination or distinction in Bourdieu’s terms. Beck and Latour include examples such as gender, race and the nation-state, to give examples; boundary-drawing as a canonical gesture of modernity. Such boundaries and categorical distinctions are foundational moments to any social order that would be understood as such through the lenses of Euro-American social sciences. However, this is also to say that boundaries are less ‘modern’ than social – what matters here are processes for boundary-drawing, which may be ritual, derived from tradition or a charismatic leader, and/or may be the outcome of institutional processes.

The thesis of reflexive modernization proposes a general shift in not just the legitimacy of borders but in the authority and semiotics of boundaries as discursive entities. The quartet of different registers of boundaries, can be summarized in Figure 2, again with the caveat that these registers are dynamic.

In the discourse of reflexive modernization, border and boundary are not only interchanged rhetorically to relieve the reader. Each term is used in ways that accentuate and blend different internal registers, sliding between them in each sentence – just as we do in everyday conversation to convey the vividness of things. We can see this command in the comment that ‘fictive as-if boundaries are institutionalized into systematic procedures that affect everyday life’ (Beck et al., 2003: 20). Abstract ‘fiction’ is realized in virtual objects (if you permit me to figure ‘boundary’ as such in this case) and is actualized in concrete practices and ‘procedures’. Their probable effects on an idealization – ‘as-if boundaries’ – which combines virtuality (banal routine) and abstraction (everydayness is a theoretical construction) is presented rhetorically as an actual impact on a concrete thing,

	Real	Possible
Ideal	<i>Virtual (ideally-real)</i> dividing effect categorical division	<i>Abstract (possible-ideal)</i> concept, indicator, cartographic convention . . .
Actual	<i>Concrete present (actually-real)</i> line on a map, marker, welcome signage	<i>Probable (actual-possibility)</i> predictable limit

Figure 2 Ontology of boundaries

‘everyday life’.⁵ Elsewhere, there is a suggestive ‘virtual abolition of borders’ (Beck et al., 2003:17). Furthermore,

structural changes that are often referred to in shorthand as ‘vanishing of [*concrete*] borders’ have effects far beyond their immediate impact on the economy. Globalization also has [*virtual*] political and cultural dimensions which, by changing the relation between the local and the global and between domestic and foreign, [*abstractly*] affect the very meaning of national borders, and, with that, all the [*probable*] certainties upon which nation-state society is based. (Beck et al., 2003: 6; my italics)

A border is a line, a limit and an edge. It is also therefore a border zone with a border culture that acts as a focus for anxieties. Borders are marginal spaces: zones of unpredictability at the edges of discursive stability, where contradictory discourses overlap, or where discrepant kinds of meaning-making converge (Lownhaupt-Tsing, 1994: 279). In the 1990s, the border culture of the USA–Mexico *frontera* defining Chicano ethnic identity was theorized in terms of linguistic marginality (Anzaldúa, 1987: 57). This internal life is performative, virtual, and determines the actual operation and effects of borders. But there is a long-standing history to this border-as-virtual space: consider the burlesque image of Charlie Chaplin in the film *Gold Rush*, in which, at one point he zigzags along the Mexico–USA border, pursued by the police on one side and bandits on the other. This surreal image of the border as the only safe territory hints at the different semiosis within the border-as-interface. It derives something of its surreal power from the impossibility of actually inhabiting a borderline itself. It is instead a virtual ‘reality’. Borders are normatively defined as ‘to-be-crossed’, not travelled along. If they are followed, their status changes into virtual, interstitial, or liminoid spaces of ‘inter-action’. Surreality prevails when the border-as-interface reveals that it is a sort of virtual and semiotic force field which translates, connecting and disconnecting the codes of adjacent systems and forms willy-nilly. How does the reflexive modernization thesis deal with semiotic marginality and liminality of dynamic, interactive borders?

The uniqueness of a boundary is that it is a line which not only divides but which, if crossed, induces a sudden or extraordinary change in the traversing body or object. Any line can be ‘drawn in the sand’. The significance of boundaries is that they mark out two distinct areas of qualitative difference. A small movement in space, across the borderline or boundary, is associated with a change much greater than would otherwise be expected from such a minimal movement. A minimum of effort results in a maximum of distinction (O’Connor, 1997). Crossing boundaries, sudden transitions occur in bodies which might otherwise be unexpected. Bodies move from being insiders to outsiders or foreigners; objects go from being produce to being contraband (Shields, 1996). As an interface or ‘junctural zone’ (Van Loon, 2000), boundaries are not only spatial but are experienced as temporal instants which have a unique and special status: they are the critical moments of opposed situations, spaces, territories and states. Borders and borderlines share this virtual quality as

events that 'happen' in the crossing. Since the space traversed in the interface or 'inter-action' (or the space between the different actions) is infinitesimal (approaching the limit or degree-zero), the distinctions that are generated by this *leap across the boundary* are virtual and qualitative (i.e. different in kind) rather than concrete and probable (quantitative, i.e. different in degree or measure). Crossing a border, my status changes far more than my weight!

Yet in the equivocal semiotics of the interface, infinitesimal distance exists only to suddenly increase (explode or rapidly expand) into infinitely large liminal distances/differences or situations charged with ambiguity. Different states of bodies or objects are required as they pass through the boundary-as-interface.⁶ Beyond the liminoid and the marginal, this raises questions of the syncretic and of boundaries as indicators of 'translations'. Borders are active translation technologies which mediate between phases, states. If a dynamism describes concrete mobilities that traverse the boundary as an interface, there is also a virtual, internal dynamic which operates on its own semiotic terms. In other words, interfacial boundaries have their own specific rules and semiotic orders, distinct from the fields or systems which they lie between. How might the reflexive modernization thesis accommodate this approach which sees the boundary as a interface, rather than like a border – only the marginal edge or effect of a more significant system? The internal logic of borders and boundaries is revealed through stressing their virtuality and probabilistic registers. This takes us beyond mere claims that borders are cultural, political or that they have their own historicity.

Categorical Boundaries across Modernities

Reflexive modernization theories appear to spatialize cases where the erosion or loss of legitimacy of categorical and social boundaries is occurring. The association of borders with boundaries risks oversimplifying discussions of boundaries and appeals mainly to the constitution of territorial states and individuals' bodies (Beck et al., 2003: 17). It does this by invoking a physical discourse of 'drawing', 'making' and 'building' – terms which more often are understood in relation to territorial borders.

Yet reflexive modernization attends less to territorial borders than to cultural boundaries between categories. Different types of border and different boundaries cannot be assumed to map perfectly onto each other as the concrete and virtual registers of the same phenomenon. The emphasis on unstable boundaries repeats well-known spatial descriptions of postmodernization and globalization as involving both continuities and discontinuities in the 'cognitive mapping' and spatial practices of advanced capitalist societies (Flitner and Heins, 2002; Jameson, 1984). Boundaries are socially constructed as shorthand representations. Borders actualize virtualities such as socio-cultural divisions. Both borders and boundaries are therefore intimately connected to the epistemological politics and to the disposition of knowledges (Sibley, 1995). What we need to know is what

registers shift within specific aspects of cultural boundary-marking and within liminoid, 'interfacial' practices.

Categorical boundaries are often associated with territorial borders in a form of spatial shorthand (Shields, 1991: Chapter 7). Foundational to modernity is not just the drawing of boundaries but the *association* of this practice of spatial division with specific cultural significance such as the border of the nation-state. Culturally, borders once established geographical and historical forms of inclusion and exclusion which correlated the local with insiders, presence and the known while the distant is correlated with outsiders, the foreign and absent (Shields, 1992). In modernist spatializations, borders are thus part of a set of metaphoric and metonymic boundary structure. This allows extended literary conceits to work back and forth in culture. Thus, inside and near have been to outside and distant as inclusion is to exclusion.⁷ The entanglement of the spatial forms of inside–outside and near–far with the absolute binary of presence and absence (existing and non-existing) is akin to the mixing of notions of boundary with a border. This spatialization makes boundaries into limit conditions which are ideal for founding fixed categorical identities and thereby stabilizing the dynamism between the different ontological registers of border and boundaries in an equilibrium.⁸

Especially significant has been the division between nature and society, which is Latour's focus. This is a constitutive part of the institutional order of modern societies. He casts the changes in this boundary as a question of 'diminishing the efficacy of the pure nature/pure culture boundary'. This extends from developments in the biological and life sciences to micro-technological interventions in the human body. Distinctions are not only de-naturalized and have to be worked up or are the matter of explicit choice and struggle, 'More exactly the hard *labour of boundary making* between the two will become highly visible – as visible as the building of a fence around a park to make it "wild"' (Latour, 2003). 'Efficacy' signals a situation not unlike a child's sand wall built at the beach: continuous building is necessary as waves eat away at it. However, Latour emphasizes human – social – agency of 'boundary making' and does not do the hard labour of inquiring into the causative powers of the boundary-as-interface. Beck presents a broader discussion, and differentiates between borders and boundaries when he hypothesizes that these become 'not boundaries so much as a variety of attempts to draw boundaries. In a similar manner, border conflicts are transformed into conflicts over the drawing of borders' (Beck et al., 2003: 17). What are the implications of a shift out of equilibrium to more dynamism in the exchanges and mobilities between the ontological registers? It would appear correct to highlight the internal dynamism between registers such as the performative actualization of the virtual in the concrete. Hypothetically, boundary-drawing is not just 'more fraught', borders less legitimated: the internal dynamism of both borders and boundaries is heightened, bringing their less tangible registers to our attention.

If there is a distinction between theories of postmodernity and reflexive modernization, it is that whereas postmodern theories argued for the erasure or

at least suspension of such divisions, reflexive modernization hypothesizes the recreation of political institutions to cope positively with ambiguity. However, it would be necessary to discipline not just equivocal representations of the border but virtualities such as the development and evolution of borders, of their related practices and of the internal semiotic dynamics of boundaries-as-interfaces.

The thesis of reflexive modernity posits a crisis in this structure of antinomies, but the situation is not one of 'across the board' change. Which antinomies, which boundaries are problematized? How and for whom? This is less a theoretical question for sociologists than an urgent problem for those caught at or desperately attempting to cross different social, economic and political boundaries (Simone, 2004; Yuval-Davis, 1997). Indeed, a weakness of theories of reflexive modernity has been their explicit focus within the borders of Europe, as if the world beyond did not exist and as if European borders were not problematic (consider the debate over Turkey), multiple and non-isometric, depending on the phenomena being investigated.

Political boundaries and territorial borders continue to be strongly enforced despite the paradox of imprisoning migrants because no clearly defensible logic for deporting them can be reached. Whether the border is an ocean (Indonesia–Australia), chain-link fencing (Mexico–USA; Britain–France at the Channel Tunnel, Israel–Palestine), land-mines (North–South Korea) or fire-breaks, surveillance devices and motion detectors (Canada–USA; Finland–Russia), borders have never been more strongly policed. But they appear to be less often touted as defences against a menacing absence or 'evil without'. Rather, they are part of a mosaic of boundaries designed to stratify territory and slow down mobile enemies. The purpose and ambitions of present borders are less absolute and more 'negotiated'. Further, they are more obviously 'machinic' – marked, policed and staffed.

Far from contributing to the collapse of institutions, this situation has seen the birth of new institutions (such as International Courts of Justice such as at The Hague) and new efforts, including theoretical schemas such as 'reflexive modernization'. These function precisely thanks to the breaching of the nationalist geographical and political boundaries of legal jurisdiction. Other important legal moments would include the American accession to apply at least aspects of the Geneva Convention to prisoners at Guantánamo Bay. In neither case are borders eliminated but rather there is a shift in their historico-cultural semiotics and ontological dynamics. However, one negative impact is not the appearance of new political struggles over boundary-projects but the disappearance of discussion as borders are reinforced by dint of sheer reactionary force against terrorist 'wars without frontiers'. These projects attempt to reinforce the linear and controlled articulation of ontological registers one with the other. A particular stress is placed on limiting the internal mobility between registers internal to strategic entities such as borders.

One example is found in the policing of social margins and controlling everyday life as a means of forcing difference back into clear distinctions between identity and non-identity, social being and nothingness. However, this

undermines the efficacy of boundaries by restricting their vitality as active interfaces. It forces a creative socio-geographical dynamic back into a more positively differentiated grid more strongly marked by judgements of presence and absence (of civility, of whiteness, of wealth, of normality). Reflexive modernity is a diagnosis of a situation in which bodies and populations no longer take their identity from their location within fixed borders so that citizenship and belonging are a norm. Yet it also risks being the academic filigree on a normative project to legitimate new norms of boundary drawing and new border practices. This amounts to an effort to reground the institutional system of the state – a modernist construct. This should be critiqued as a proposal that the virtuality of objects and social arenas be more subtly and microscopically governed, potentially foreclosing areas of freedom and creativity.

Conclusion

The thesis of reflexive modernization entails a general shift in not just the legitimacy of borders but their semiotics. Divisions may remain intact while changing in significance, efficacy or relevance. Beck and Latour conceive of boundaries as changing socially-constructed objects but devote less attention to the precise registers or forms of division which that may be shifting. The nature–society division is highlighted above as an example of the crisis of boundary-making. The argument here has been that borders and boundaries have complex ontologies and spatio-temporal form as interfaces. They are not just edges.

Change may be promoted by increased dynamism permitted by the unbinding of a spatialization of being as proximity and presence, but needs to be understood as happening at different rates and in different registers. Rather than collapsing borders or boundaries down into one or two registers such as their concrete manifestation and the abstracted ideologies which announce them, all aspects need to be acknowledged. As translation machines or interfacing technologies, boundaries between nature and society may not be shifting as much as promoting and discouraging traffic in new ways.

Pushing the argument further, the reflexive modernity thesis appears as a new *jurisprudence* which aspires to resolve courses of action in the face of unclear categories, whether Beck's boundary struggles, or Latour's hybrid natural-social 'dishevelled quasi-objects'. These are surely neither concrete bodies nor socially constructed meanings or abstractions but virtual objects. I call this a jurisprudence because more than exegesis or interpretation is necessary – the virtual potentials of borders and boundaries must be performatively actualized in concrete operations on material bodies.

The context is greater internal dynamism and more complex, dynamic and diverse relations across borders and boundaries. In such situations, the statistical methods of social science and policy making are inadequate tools for governance – to wit, the failures of police agencies across the OECD to account for and assess

the changing powers of a multitude of variables and insurgent forces either actually through contacts on-the-ground or probabilistically. Borders must be rethought, not only beyond materialist-idealist dualisms that privilege only the concrete and abstract but beyond the statistical risk assessment of actual possibilities. To warrant the label 'reflexive' requires also rethinking our appreciation of the internal life of liminal, equivocal border zones: these spaces are the crucibles in which virtual aspects of the border are actualized as outcomes and effects – the actual operation of the border or boundary.

Given early twenty-first-century geopolitics and moralities, the vitality of boundaries and borders cannot be in doubt. Yet I have warned that their vigour derives in part from an increased internal dynamism that also promotes virtual, hybrid forms and emergent meanings. More than empirical or probabilistic methods will be necessary to define the internal mobilities and inter-active objects of boundaries. The virtuality of borders and boundaries suggests that new questions be asked and asked in new ways. But, if they lack the theoretical apparatus, are the social sciences methodologically equipped to research the virtual?

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Notes

- 1 For an overview of the state of research on boundaries from the political to the psychological, see Van Houtum et al. (2005).
- 2 In a nutshell, reflexive modernization refers to reflexive processes of social change which act back on the established norms of modern society to 're-modernize' it. It posits a normative and homeostatic modernity which is now changing or being 'updated' or 're-modernized' in ways which utilize the same processes that produced 'first modernity' but are now reflexively leading to a qualitatively distinct 'second modernity.' Concerning boundary discourses in modernization programmes of the mid-twentieth century, see Flitner and Heins (2002). I refer to the programmatic proposal and discussions for research on reflexive modernity which are now a few years old but remain germane to current social science (for critiques see Murdock, 2004). Although I closely compare and contrast the positions and English-language reception of Beck and Latour, this should not be mistaken as an article about these two individuals' research. I will not deal with the translations and elisions of border/boundary in terms such as *Rand* and *Grenze*, for example (see Beck et al., 2001). Rather, they are figures for two related positions, which they set up in contrast to a hypostatized theory of postmodernity and hypotheses of a postmodern condition. All three arguments turn on putative changes in institutionalized regimes of spatiality and specifically on boundary-making.

- 3 Strictly speaking, the term virtual denotes an intangible object – ‘real but not actual, ideal but not abstract’ in Proust’s memorable turn-of-phrase. Only since the mid-1980s has it been widely used to refer to computer-mediated communication and digitally-generated simulations. The recent usage revives the older meaning of virtual, with its roots in the Latin *virtu*, but it obscures the wider importance and history of these phenomena, even as digital technologies returned the virtual to the agenda after being repressed by dualisms contrasting the concrete and the abstract see Shields (2003).
- 4 The discovery and mathematical exploration of the probable are one of the most significant contributions of the social sciences to civilization, but all the while the Virtual was not only neglected but mis-recognized as Abstract. The result: understandings of the Actual improved, but understanding of the Possible was bifurcated and knowledge of the Ideal and of the Real (these are not opposition) were both impoverished.
- 5 Rather than dignifying this as a critique, this rhetorical performance is banal. It reflects the strategies we have at hand for communicating vitality of our world and tactics by which we attempt to not only understand but to ‘get ahead’ of the flow of events – on anticipatory power, see O’Connor (2003) and Anderson (2002).
- 6 Deleuze refers to this as a ‘*skeleton-space*’ because so much significant seems to be missing, like a skeleton whose organs and flesh are missing. There are

missing intermediaries, heterogeneous elements which jump from one to the other, or which interconnect directly. It is no longer an ambient space [of flows] but a vectorial space, a vector-space, with temporal distances. It is no longer the encompassing stroke of a great contour, but the broken stroke of a line of the universe, across the holes. The vector is the sign of such a line. It is the genetic sign of the new action-image, whilst the index was the sign of its composition. (Deleuze, 1989: 168; see also Shields, 1997)

- 7 Presence and absence are no longer so strictly spatialized and actualized as near and far, and thus no longer fit so perfectly (if they ever did) with inside and outside. Instead, forms of the virtual reappear, such that virtual presence is now not only technically feasible but culturally acceptable, prompting political debates over virtual membership and partial inclusion.
- 8 This entanglement dates back to the Latinization of Parmenides and of Aristotle’s discussions of presence (*parousia* – e.g. Aristotle, 1970 IV: §222a). As Derrida notes, in the Latin *presentia* it becomes ‘impossible to distinguish rigorously between presence as *Anwesenheit* (presence here) and presence as *Gegenwärtigkeit* (presence now)’ (1970: 90–1). Truth becomes a form of presence. Heidegger’s analyses mark perhaps the high point of this metaphysical tradition.

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