
From Geographical Lines to Cultural Boundaries

Mapping the Ontological Debate

TIMOTHY TAMBASSI

p. 150-164

<https://doi-org.ezproxy.cul.columbia.edu/10.4000/estetica.2752>

Abstract

The concept of boundary represents one of the fundamental philosophical issues triggered and required by the reflection upon geography – and ontology of geography specifically. But what kind of entity are geographical boundaries? What sorts of boundary have been identified by contemporary ontologists of geography? How can boundaries be classified from a geo-ontological point of view? What are the main contemporary classifications of geographical boundaries? How can culture and human beliefs influence such classifications? These questions represent the starting point of this paper, aimed at analyzing how the notion of boundary has been conceived by contemporary ontologists of geography, what kinds of geographical boundaries have been identified and categorized, and the influence eventually exerted by cultural diversities and human beliefs on such geo-ontological classifications. Primarily, we will take into account Smith's and Galton's taxonomies, which represent two of the most cited examples of comprehensive classifications of geographical boundaries encompassing physical, biological, psychological, social, and political phenomena. Secondly, starting from Smith's and Mark's considerations, the importance of cultural diversities and human beliefs for geo-ontological classifications will be discussed. As third, we will analyze the possibility of the existence of cultural boundaries and the prospect of categorizations that can influence, in their turn, beliefs, culture and individual or collective behavior. The idea is to show three different modalities through which culture and beliefs may have an influence on (and the power to modify) the definition and the individuation of geographical boundaries.

Termini di indicizzazione

Keywords: boundaries, geography, ontology, classifications, cultural diversities

Testo integrale

There was a wall. It did not look important. It was built of uncut rocks roughly mortared. An adult could look right over it, and even a child could climb it. Where it crossed the roadway, instead of having a gate it degenerated into mere geometry, a line, an idea of boundary. But the idea was real. It was important. For seven generations there had been nothing in the world more important than that wall. Like all walls it was ambiguous, two-faced. What was inside it and what was outside it depended upon which side of it you were on.

Ursula K. Le Guin, *The Dispossessed*, 1974

1. Ontology and geographical boundaries

- ¹ The concept of boundary represents one of the fundamental philosophical issues triggered and required by the reflection upon geography. Its relevance for the geo-ontological debate has been highlighted and studied by different authors,¹ among whom Antony Galton in *On the Ontological Status of Geographical Boundaries*.

Boundaries occupy a curiously ambivalent position in any geographical ontology. On the one hand, it seems uncontentious that the primary spatial elements of geography are regions of various kinds: regions are where we live and where things are located. From this point of view, boundaries are only of interest because they define the limits of regions. But precisely because of this, boundaries can acquire a life of their own. The existence of a boundary can have a palpable effect on the behaviour of objects and people in its vicinity. Disputes over territory automatically become focussed into disputes over boundaries, and the boundary itself can become a symbol for the territory it delineates [...]. Indeed, in ordinary speech there is a slippage between 'within this region/area/territory' and 'within these boundaries/limits/borders', pointing to the ease with which we can pass between thinking in terms of regions and thinking in terms of boundaries.²

- ² Following Galton's reflection, boundaries might embody many different functions. For example, they can regulate motion and/or communication outwards from the inside of a region to the outside (inclusion), or inwards from the outside to the inside (exclusion). In this sense, a boundary can be built in order to keep someone in or others out, or simply to prevent mixing. But boundaries might be crossed: «physical boundaries such as walls usually include gateways or portals by which movement across the boundary is simultaneously facilitated and regulated. Thus, there is another slippage in our thinking, between borders and border-crossings» (Galton 2003: 151). Moreover, certain functions such as inclusion and exclusion might be combined (separation), or again there can be an extent to which separation is not complete (contact). Some other functions such as protection are derived from those. Galton also considers that any geographic line can be thought of as a boundary.

Whether or not it functions as a boundary depends on a variety of factors. As a first high-level generalization, a line can be conceived in two ways: from the point of view of possible motion along it, and from the point of view of possible motion across it. Conceived in the first way, a line is a way or path; in the second, a boundary, barrier or gateway. As Couclelis and Gottsegen put it, 'a freeway is a way or a barrier depending on which way you look'. Many boundary functions are therefore defined in terms of 'across' rather than 'along'. They have to do with how a boundary regulates movement or communication across it.³

- ³ But what kind of entity are geographical boundaries? What sorts of boundary have been identified by contemporary ontologists of geography? How can boundaries be classified

from a geo-ontological point of view? What are the main contemporary classifications of geographical boundaries?

- These questions represent the starting point of this paper, aimed at analyzing;
- how the notion of boundary has been conceived by contemporary ontologists of geography;
- what kinds of geographical boundary have been identified and categorized;
- the influence eventually exerted by cultural diversities and human beliefs on such geo-ontological classifications.

4 Given the above, we will take primarily into account Smith's (1995)⁴ and Galton's (2003) taxonomies, which represents two of the most cited examples of comprehensive classifications of geographical boundaries encompassing physical, biological, psychological, social, and political phenomena. Secondly, starting from Smith's and Mark's (1998) considerations, the importance of cultural diversities and human beliefs for geo-ontological classifications will be discussed. As third, we will analyze the possibility of the existence of cultural boundaries and the prospect of categorizations that can influence, in their turn, beliefs, culture and individual or collective behavior, showing three different modalities through which culture and beliefs may have an influence on (and the power to modify) the definition and the individuation of geographical boundaries. The idea behind this paper is that a study on the influence of cultural diversities and human beliefs on geographical boundaries should not be considered as an exclusive trait of border studies.⁵ Rather, it might be something that properly characterizes our way to classify boundaries, also from an ontological perspective.

2. *Bona fide* and *fiat* boundaries

5 From a geo-ontological point of view, the first attempt to classify geographical boundaries systematically comes from Barry Smith (1995), who presents a taxonomy of spatial boundaries applied in the areas of geography and of administrative and property law. Such a taxonomy is based on the exhaustive and exclusive distinction between *bona fide* (or physical) and *fiat* (or human-demarcation-induced) boundaries.

6 *Bona fide* boundaries (shorelines, river-banks, coastlines and so forth) are boundaries in the things themselves, are a matter of qualitative differentiations in the underlying reality, and correspond to genuine discontinuities in the world (Smith 1995: 476). Accordingly, they exist even in the absence of all delineating or conceptualizing activities on our part, independently of all human cognitive acts and demarcations.

7 In contrast, political and administrative boundaries, state and provincial borders, property lines and borders of postal districts provide examples of fiat boundaries, which are delineations that do not correspond to any genuine heterogeneity on the side of the bounded entities themselves. Rather, fiat boundaries exist only in virtue of the different sorts of demarcations effected cognitively and behaviorally by human beings. So, they do not exist independently of human cognitive acts and owe their existence to acts of human decision or fiat, to laws or political decrees, or to related human cognitive phenomena. Such boundaries may:

- lie entirely skew to all boundaries of the bona fide sort (e.g. the boundaries of Utah and Wyoming);
- involve a combination of fiat and bona fide portions (e.g. the boundaries of Egypt and Uzbekistan);
- be constructed entirely out of bona fide portions which, however, must be glued together out of heterogeneous portions in fiat fashion in order to yield a boundary

that is topologically complete, especially because they are not themselves intrinsically connected (Smith, 1995: 477).

- 8 Obviously, the exhaustiveness and exclusiveness of the distinction between bona fide and fiat boundaries is not meant to deny neither that there are types of spatial boundaries which are difficult to classify under one or another of the two rubrics, nor that it may be necessary to introduce a more detailed categorization than this simple dichotomy⁶ (Smith 1995: 477). According to the last point, Smith and Varzi, for example, introduce some specific fiat boundaries that have a mathematical definition, such as the Equator or the tropics of Cancer and Capricorn. In such cases, «the question of their ontological status is part-and-parcel of the larger question of the existence and status of mathematical entities in reality» (Smith and Varzi 2000: 402). Moreover, among these mathematical boundaries, Smith and Mark (1998) also include GIS fiats that are artifacts of a certain technology and that might be considered as specifically scientific fiats.

3. Legal *fiat* boundaries and normativity

- 9 As we said, among *fiat* boundaries Smith includes the boundaries of nations or postal districts, which are social entities, analogous to rights, claims and obligations. To be more precise,

[There] are fiat boundaries in the social world – such as those drawn by real estate developers or by international boundary commissions – which can be compared to rights, claims, obligations, and other sorts of social object. They have a quasi-abstract character in the sense that they are relatively isolated from causal change. But they are not completely isolated: there is standardly a point in time at which they begin to exist, and while they exist they may be associated with specific systems of legal or other sorts of sanctions. Further, they manifest a type of generic dependence upon associated beliefs and customs on the part of relevant human beings, so that they may be sustained in being from generation to generation.⁷

- 10 Usually, when the legal system takes a fuzzily bounded region, it has to add a rule (or a norm) to crisp up that boundary. In this sense, another key point for a possible categorization of geographical boundaries can also be the analysis of the varieties of normativity behind them. In line with this, it might be useful to examine the consideration proposed by Zaibert and Smith (1999, 2007), who sketch some elements of the ontology of legal and socio-political institutions, by paying attention to the normativity connected to those features. Without claiming to be exhaustive, the two authors maintain that the development of such an ontology must find ways to account for the normative force generated by the normativity of constitutive rules. This means that it is possible to identify at least three varieties of normativity relevant for the ontology of social reality:

- the logically-derived normativity «that is closely associated with, if not identical to, the normativity involved in games like chess or poker» (this type of normativity pervades the world of social and legal and political institutions);
- a normativity that is «in no obvious way connected with logic, and which has been the focus of traditional natural law theories» (i.e. “murder is wrong” or “lawmakers ought not to pass laws which conflict with moral obligations”);
- the normativity that is «related to the immanent logical structures of mental phenomena and not to conventional games and institutions» (i.e. “to do harm intentionally is more blameworthy than to do harm unintentionally” or “to believe that someone did something blameworthy, is to believe that he ought not to have done it”).⁸

- 11 However, if we accept the existence of these varieties of normativity, how can we apply them to the geographical boundaries? In other words, how could the identification of, at least, three kinds of normativity behind an ontology of legal and socio-political entities influence the classification of geographical boundaries? Could we really classify geographical boundaries from this normative standpoint? May we talk about normative boundaries? If yes, how many and what kinds of normative geographical boundaries may we identify? Or again, may we talk about a normative function of boundaries rather than a specific sub-class of geographical boundaries?

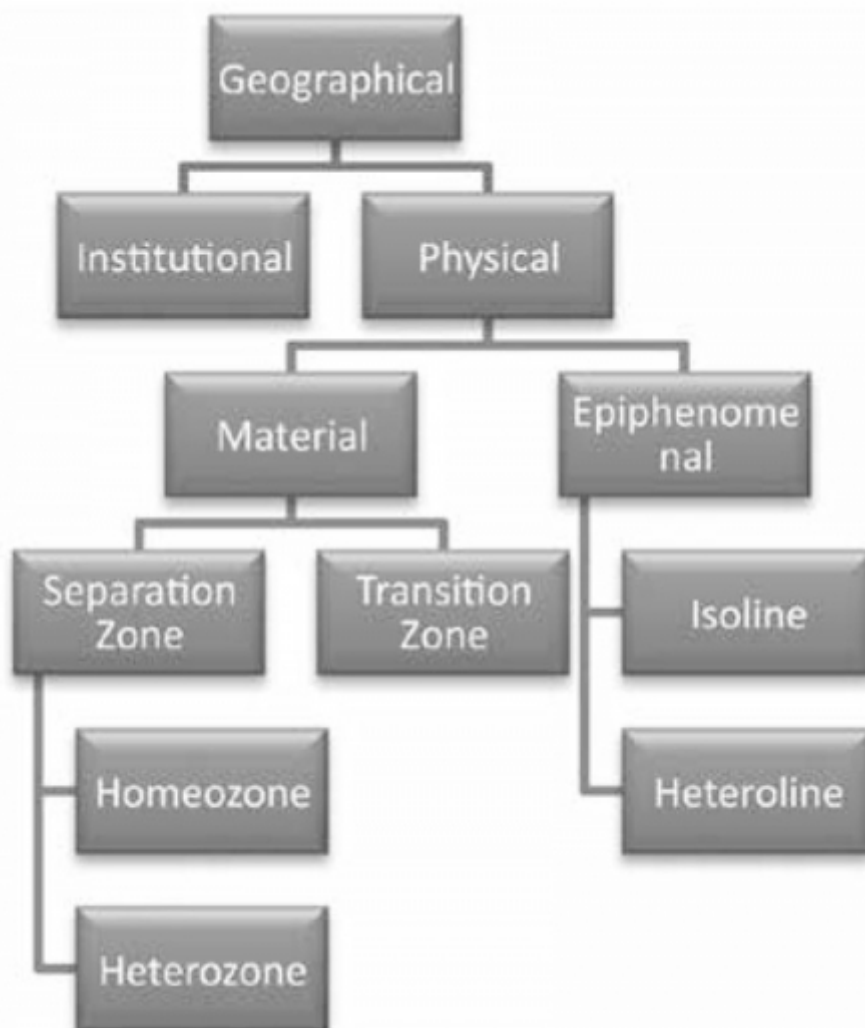
4. Physical and institutional boundaries

- 12 If Smith's classification is primarily focused on the notion of fiat boundaries, the taxonomy of Galton turns out to be more heterogeneous with bona fide boundaries (or physical boundaries, according to his terminology), presenting some specific subclasses of them.
- 13 Figure 1 represents the topmost levels of his categorial hierarchy, which takes the form of a tree structure with a top-level distinction between physical and institutional boundaries. The highest category in the hierarchy is the category of geographical boundaries that, according to Galton, «exist by virtue of the distribution of matter and energy in space and time, but [...] may differ as to just how their existence depends on such distribution» (Galton 2003: 152-153). At the second level, the distinction between physical and institutional boundaries is captured by appealing to the variety of dependence of the boundary on material facts. In the case of institutional boundaries, such a dependence is mediated by individual or collective human intentionality. To be more precise, institutional boundaries are stipulated to exist by human attitudes. In this sense, they include all international and intranational boundaries such as those between administrative regions, and those defining land ownership.
- 14 All other boundaries are physical ones and are divided, first of all, into material and epiphenomenal boundaries. In the latter case, boundaries depend on matter for their existence but have no material or phenomenal substance in itself. In this sense, they exist by virtue of the distribution of matter in space and time but are not themselves made of matter. Conversely, in the case of material boundaries, there is some material substance (or phenomenon) which constitutes the boundary, and the location of the boundary is the location of its material or phenomenal constituents.
- 15 Material boundaries are further subdivided in separation zones and transition zones. In both kinds, the boundary occupies a zone whose material or phenomenal contents differ in character from those of the regions on either side. In a transition zone, the character is intermediate between that of one side and that of the other. In a separation zone, the character of the zone is distinct from, and not intermediate between, the characters of the regions it separates. (Galton 2003: 153-154). Moreover, separation zones can also be divided in homeozones which separate like from like, and heterozones that separate unlike regions (ivi: 154). Finally, the last subdivision concerns the nature of epiphenomenal boundaries. One kind of epiphenomenal boundary is an isoline for a field, defined as the locus of all points in the field with the same attribute value. The other kind of epiphenomenal boundary is an heteroline, that is any line (or area) of separation between areas of different attribute values.
- 16 In conclusion, we have also to underline that, in Galton's opinion, all the distinctions proposed are not (in every case) entirely clear-cut. Indeed, some cases can be classified in different ways depending on how they are interpreted, and we may find intermediate cases which seem to occupy a middle ground between two positions in the classification (ivi: 152). Moreover, there can be several cases in which a boundary of one type can evolve into, or otherwise give rise to, a boundary of another type (ivi: 159).

5. Boundaries, cultural diversities, human beliefs

17 As we said, the claim of exhaustiveness of these taxonomies should not appear as a restriction for the existence of other kinds of geographical boundaries. On one side, we should consider a certain degree of arbitrariness regarding both what is categorized and how it can be categorized. In this sense, also the functions of the boundaries that we want to categorize might assume a significant role. On the other side, we could also change the classification system (or propose a new one) and then our boundaries might move, some of them disappear, new ones might have to be created. Moreover, it is important to remember that the natural language (and its evolution over time) and, more generally, cultural diversities and then human beliefs have contributed (and still contribute) to the categorization and the generation of (new kinds of) boundaries. Specifically, regarding the last point, the following two quotes from Smith and Mark (1998) may help us to clarify some specific issues.

Geographic categorization involves a degree of human-contributed arbitrariness on a number of different levels, and it is in general marked by differences in the ways different languages and cultures structure or slice their worlds. It is precisely because many geographical kinds result from a more-or-less arbitrary drawing of boundaries in a continuum that the category boundaries will likely differ from culture to culture (in ways that can lead to sometimes bloody conflict as between one group or culture and another).⁹



Research on this topic must be careful to distinguish the domain of the real world from the domain of computational and mathematical representations, and both of these from the cognitive domain of reasoning, language, and human action. Human practice is an important part of the total ontology. Cultural differences in categorizations are more likely to be found for geographic entities than for objects at table-top scales. Geographic ontologies are more strongly focused on boundaries, and a typology of boundaries is critical. Work involving formal comparisons of geospatial and cartographic data standards and dictionary definitions in a variety of languages will provide an important starting point for the cross-cultural experiments with human subjects that will be needed to refine the details of the ultimate ontology of geographic kinds.¹⁰

- 18 Without dwelling on the possible influence of Horton's distinction between primary and secondary theories (and beliefs)¹¹ on Smith and Mark's purpose, we could say that such cultural differences might act differently depending on the entities (in our case, boundaries) we want to categorize. On the matter, with reference to bona fide and fiat geographical entities, Smith and Mark assert that

bays, peninsulas, etc., are parts of spatial reality, physical parts of the world itself. But they are parts of reality that would not be there absent corresponding linguistic and cultural practices of demarcation and categorization. In a world with our everyday human practices, a bay or a hill is just as real as a chair or rock. The former are real consensus fiat objects, the latter are real bona fide objects. Bona fide objects are for obvious reasons more likely to be objects of categorizations that enjoy a high degree of cross-cultural invariance. Fiat objects, in contrast, because they are inculcated into the world by cognition, are more likely to show cultural dependence¹².

- 19 Therefore, if we accept such a conclusion or, at least, that some geographical boundaries (in particular, according to Smith and Mark, some fiat boundaries) included in our categorizations or our categorization itself might be, in some way, culturally influenced, then may we talk about cultural boundaries? And what about the possibility of a categorization of geographical boundaries which (in turn) may have an influence on cultural diversities, human beliefs and individual or collective behaviors?

6. Cultural boundaries?

- 20 To answer the first question, it may be useful to extend our analysis to (some) international and intranational disputes on boundaries that, in my opinion, might provide some significant examples of these specific kinds of boundaries. For example, what is the kind of boundary which divides Kosovo and Serbia? Where can we locate the border between Russia and Ukraine? Is there a boundary between Padania and the rest of Italy? If we consider the first of the three cases – the border between Kosovo and Serbia – it is easy to imagine how, for Kosovan separatists, this boundary may indicate a dividing-line between two distinct States. Conversely, Serbian nationalists can have a different opinion, considering it as a boundary between two distinct geographical areas, which belong to the same Serbia. The same question can be extended to international affairs, in which Kosovo has been recognized as an independent State by United States, Canada and Norway (among others), while, for example, countries such as Argentina, Russia and Brazil have not. Consequently, the boundary between Kosovo and Serbia can be respectively considered as a national or a regional boundary, depending on the country that draws this specific classification. Moreover, the issue might also be expanded to the spatial representation of the boundary at stake. Indeed, given a map that assigns a different color to each different State, we could easily imagine assigning the same color or two different colors to Kosovo and Serbia, depending on which type of entity Kosovo is taken to be. And if we admit that in these (or other) situations, culture and individual or collective beliefs actually exert some influences on the classification of boundaries, we could perhaps go

further and assert that a classification might also include some boundaries that depend on such factors and give them the name of cultural boundaries.

21 To answer the second question – that is whether a classification (of geographical boundaries) may (in turn) have an influence on cultural diversities, human beliefs and individual or collective behavior – it might be helpful to recall straightforwardly the declaration provided by the Serbian tennis player Novak Djokovic. After winning the Australian Open 2008, he sent a video message to Belgrade, where 150,000 of his compatriots were demonstrating against Kosovo’s declaration of independence. To show his solidarity with the demonstrators, he said: “We are prepared to defend what is rightfully ours. Kosovo is Serbia”.¹³ I would suggest that in this case Djokovic (as well as the demonstrators) did not intend to propose a classification of geographical boundaries. Rather, he intended to reiterate a pre-existing classification, or better, his position on a classification of a specific geographic boundary. In other words, his declaration (and the transmission of the video message) seems to be the result (and the consequence) of some of his beliefs about that specific boundary. Such beliefs, in turn, could probably be interpreted as the result of various factors and especially of his belonging to a political party that had previously formulated such a classification. Now, accepting such an interpretation probably would lead us to support that the classification proposed by the political party, or better the position expressed by such a political party regarding the categorization of a specific geographic boundary, could have influenced Djokovic in uttering such a declaration and sending the video message. More generally, we could go even further and argue that some classifications of geographic boundaries (or parts of these classifications) might exercise (or even, might be functional to exercise) an influence on beliefs, cultures and behaviors. In line with this assumption, it could be noteworthy to ask whether or not the specific influence of previous classifications on our system of beliefs is to be taken into account in establishing a classification of geographical boundaries. In other words, does the idea that some boundaries, some types of boundaries, or some classifications having an influence – or being specifically created to have it – on beliefs, culture, and (also) on individual or collective behavior put forward something new, from an ontological point of view? Should we take embrace this aspect in our classification of geographic boundaries? Are we faced with a new type of boundaries in which culture is somehow implicated? Or again, are we faced with a new kind (or with a specific subclass) of cultural boundaries? Could we talk of boundaries generated by beliefs on an earlier classification? If it would be the case, is there something that associates and/or distinguishes them from what we have previously identified as cultural boundaries?

7. Three levels of cultural dependence

22 Showing some modalities through which culture, practices and beliefs with a potential influence on the classification of the geographical boundaries (and *vice versa*) might improperly lead to equate, at least, three different levels on which the influence operates.

23 Indeed, it is one thing to maintain that the notion of boundary can be culturally determined. Another thing is to say that some kinds of geographical boundaries may show a certain degree of cultural dependence – in particular, according to Smith and Mark, some fiat boundaries and some specific subclasses of them. Finally, one more thing is to assert that, once a taxonomy (of geographical boundaries) has been accepted, our culture and beliefs can influence us in categorizing a specific boundary (for example, the boundary between Kosovo and Serbia) within a class of boundaries rather than within another one (for example, whether the same boundary might be classified as a national or a regional boundary). In other words, the cultural dependency can occur at least:

1. at the level of the recognition/identification of the notion of boundary;
2. at the level of the identification of different kinds of boundaries;

3. at the level of the classification of a specific boundary within the different kinds of boundaries previously identified.

24 Now, although the first of these three levels of cultural dependence might appear, at a first glance, tautological and non (very) informative – we could for example ask what else to add other than the notion of boundary as culturally determined – the considerations of Galton may help to clarify some specific issues. In particular, is the author right in saying that any geographic line can, in principle, be thought of as a boundary? And what if we thought differently? Which criteria could be used to distinguish, among geographical lines, the subclass of boundaries? In other words, it could be said that what is at issue at this level is the definition of geographical boundary that, *de facto*, determines what can be included in our classification. In this sense, according to various features such as our beliefs, culture and to our way of considering a definition more compelling than others, we could be willing to accept a certain explanation, to opt for another one, or even to propose a new one. Consequently, the list of entities belonging to our classification of geographical boundaries might change in accordance with the definition we endorse.

25 Obviously, also a reflection on the other two levels might help to clarify the heterogeneity of the influence of culture, practices and beliefs with regards to the classification of geographical boundaries. But how to distinguish these two levels? Or better, how to discriminate between a kind of boundary and a specific boundary? How can culture, practices and beliefs influence such levels of classification?

26 An example of a specific boundary, the categorization of which depends on culture and individual and collective beliefs, might be represented by the aforementioned boundary between Kosovo and Serbia. Indeed, without taking into account other possible alternatives, such a boundary can be regarded as a national or a regional one, according to our beliefs and culture. In particular, we can easily see that, in this case, it is not called into question the modality of classification, nor is the choice of the kinds of boundaries identified. Instead, what is involved is only the choice whether to include this specific boundary in a particular subclass, rather than in another one.

27 Finally, as a possible example of a kind of boundary the identification of which can be influenced by culture and individual and collective beliefs, we could, for example, examine a specific class of fiat boundaries provided by Smith: the property boundaries. Indeed, if we have a little doubt in accepting the fact that a wall, a hedge but also an imaginary line can constitute (of course, not necessarily) a boundary between two different properties, we could hardly imagine the same in a society that does not know or has never known (or also that does not accept) the concept of property. Within such a society, although entities such as walls, hedges and so forth can still be considered as boundaries (according to the aforementioned reflection of Galton: «any geographic line can be thought of, in principle, as a boundary»), they might not, *de facto*, be considered as property boundaries, because this concept, in principle, does not exist in this context. The same line of reasoning might easily be extended to national borders before the birth of the concept of nation, to GIS boundaries before the development of these technologies and so forth.

8. Conclusion

28 The aim of this article has been twofold. On the one hand, it has been shown how the notion of geographical boundaries has been classified from a geo-ontological point of view by Smith and Galton. On the other hand, some perspectives regarding the possible influence of culture, practices and (individual and collective) beliefs on the modalities of classification of these boundaries have been provided. Firstly, it has been discussed the possible existence, among the geographical boundaries included in our classifications, of cultural boundaries, i.e. boundaries the recognition and location of which are, in some way, influenced by beliefs and/or culture. Then, we have discussed the possibilities of

categorizations of geographic boundaries that can influence beliefs, culture and individual or collective behavior in turn. Finally, three different modalities through which culture and beliefs having an influence and the power to modify the definition and the individuation of geographical boundaries have been distinguished and presented.

29 Obviously, the proposed analysis is not intended to be exhaustive. First of all, it does not exclude the existence of other possible cases in which culture and beliefs might have a grip on our classification of geographic boundaries. Secondly, what has been proposed is limited to the analysis of fiat cultural boundaries and has excluded the possible influence (that is difficult to deny) of culture and beliefs on the classifications of bona fide/physical boundaries – but also on the distinction between physical or bona fide boundaries and institutional or fiat boundaries itself. As third, with a remark on the preliminary nature of this reflection, it should be stressed that the possible inclusion of cultural boundaries in our classifications might lead to a series of issues related to how to trace precisely the distinction between what can be classified as cultural, non-cultural or non-entirely cultural. In other words, paraphrasing the words of Galton, also the distinction here purposed can also be not entirely clear-cut and some cases can be classified in different ways depending on how they are interpreted. On the one hand, we may find intermediate cases which seem to occupy a middle ground between the various kinds of cultural influence proposed. On the other hand, there can also be several cases in which a cultural boundary of one type can evolve into or otherwise give rise to a boundary of another type and vice versa.

Bibliografia

AGNEW, J.

– 2008, *Borders on the mind: re-framing border thinking*, “Ethics & Global Politic”, 1, 4: 175-191.

BURROUGH, P.A., FRANK, A.U.

– 1996 (eds), *Geographic Objects with Indeterminate Boundaries*, London, Taylor & Francis

CASATI, R. SMITH, B., VARZI, A.C.

– 1998, *Ontological tools for geographic representation*, in N. Guarino (ed.), *Formal Ontology in Information Systems*, Amsterdam, Ios Press, 77-85.

CASATI, R., VARZI, A.C.

– 1999, *Parts and Places: The Structures of Spatial Representation*, Cambridge (Ma), The MIT Press.

COUCLELIS, H., GOTTSEGEN, J.

– 1997, *What maps mean to people: Denotation, connotation, and geographic visualization in land-use debates*, in Hirtle, S.C., Frank, A.U. (eds), *Spatial Information Theory: A Theoretical Basis for GIS*, vol. 1329 of *Lecture Notes in Computer Science*, Berlin, Springer: 151-162.

FEBVRE, L.

– 1925, *A Geographical Introduction to History* [1922], eng. trans. by E. Mountford, J.H. Paxton, New York, Knopf.

GALTON, A.

– 2003, *On the Ontological Status of Geographical Boundaries*, in Duckham, M., Goodchild, M.G., Worboys, M.F. (eds), *Foundation of Geographic Information Science*, London - New York, Taylor & Francis: 151-171.

HORTON, R.

– 1982, *Tradition and modernity revisited*, in Hollis, M., Luke, S. (eds), *Rationality and Relativism*, Oxford, Blackwell: 201-260.

JONES, S.B.

– 1945, *Boundary-Making: A Handbook for Statesmen, Treaty Editors, and Boundary Commissioners*, Washington DC, Carnegie Endowment for International Peace, Division of International Law.

KOLOSISOV, V.

– 2005, *Border studies: Changing perspectives and theoretical approaches*, “Geopolitics”, 10, 4: 606-632.

MARK, D.M., CSILLAG, F.

– 1989, *The nature of boundaries on ‘area-class’ maps*, “Cartographica”, 26, 65-78.

NEWMAN, D.

– 2006, *The lines that continue to separate us: borders in our ‘borderless’ world*, “Progress in Human Geography”, 30, 2: 143-161.

– 2010, *Territory, Compartments and Borders: Avoiding the Trap of the Territorial Trap*, “Geopolitics”, 15: 773-778.

PAASI, A.

– 2013a, *Borders*, in Dodds, K., Kuus M., Sharp J. (eds), *The Ashgate Research Companion to Critical Geopolitics*, London, Ashgate: 213-229.

– 2013b, *Borders and border crossings*, in Johnson, N., Schein R., Winders, W.J. (eds), *A New Companion to Cultural Geography*, London, Wiley-Blackwell: 478-493.

PRESCOTT, J.R.V.

– 1965, *The Geography of Frontiers and Boundaries*, London, Hutchinson.

SMITH, B.

– 1995, *On drawing lines on a Map*, in Frank, A.U., Kuhn W., Mark, D.M.(eds), *Spatial Information Theory. Proceedings of COSIT '95*, Berlin - Heidelberg - Vienna - New York - London - Tokyo, Springer, 475-484.

SMITH, B., MARK, D.M.

– 1998, *Ontology and geographic kinds*, in Poiker, T.K., Chrisman, N. (eds), *Proceedings of the 8th International Symposium on Spatial Data Handling (SDH '98)*, Vancouver, International Geographical Union: 308-320.

– 2001, *Geographical categories: an ontological investigation*, “International Journal of Geographical Information Science”, 15, 7: 591-612.

SMITH, B., VARZI, A.C.

– 1997, *Fiat and bona fide boundaries: Towards an ontology of spatially extended objects*, in Hirtle, S.C., Frank, A.U. (eds), *Spatial Information Theory: A Theoretical Basis for GIS*, vol. 1329 of *Lecture Notes in Computer Science*, Berlin, Springer: 103-119.

– 2000, *Fiat and Bona Fide Boundaries*, “Philosophy and Phenomenological Research”, 60, 2: 401-420.

VARZI, A.C.

– 2016, *On drawing lines across the board*, in Zaibert, L. (ed.), *The Theory and Practice of Ontology*, London, Palgrave Macmillan: 45-78.

ZAIBERT, L., SMITH, B.

– 1999, *Legal Ontology and the Problem of Normativity*, Conference, “The Analytic-Continental Divide”, University of Tel Aviv.

– 2007, *The Varieties of Normativity: An Essay on Social Ontology*, in Tsohatzidis, S.L. (ed.) *Intentional Acts and Institutional Facts. Essays on John Searle’s Social Ontology*, Dordrecht, Springer: 157-173.

Note

1 See for example Febvre (1925); Jones (1945); Prescott (1965); Mark and Csillag (1989); Smith (1995); Burrough and Frank (1996); Smith and Varzi (1997; 2000); Casati, Smith and Varzi (1998); Smith and Mark (1998); Casati and Varzi (1999); Varzi (2016).

2 Galton (2003: 151).

3 Galton (2003: 163).

4 Such a taxonomy has been developed in Smith and Mark (1998) and Smith and Varzi (2000).

5 See for example Kolossov (2005), Newman (2006), Agnew (2008), Newman (2010), Paasi (2013a, 2013b).

6 In this sense, according to Smith, cross-cutting this distinction are further oppositions in the realm of boundaries (in particular, of fiat boundaries), for example between: inner and outer, crisp and

indeterminate (imprecise, fuzzy, or vague), shifting and fixed, complete and incomplete, bi-dimensional and tri-dimensional, enduring and transient, symmetrical and asymmetrical, probable or actual.

7 Smith and Varzi (2000: 402).

8 Cfr. Zaibert and Smith (1999: 17-18).

9 Smith and Mark (1998: 314).

10 Ivi: 317-318.

11 According to Horton (1982) primary theory is that part of common sense which we find in all cultures and in all human beings at all stages of development. Otherwise, secondary theories, in contrast, are those collections of folk beliefs which are characteristic of different economic and social settings. Primary theory consists of basic (naïve) physics, basic psychology, the total stock of basic theoretical beliefs which all humans need in order to perceive and act in ordinary everyday situations. Secondary theory consists of folk beliefs which relate to gods and evil spirits, heaven and hell, molecules and microbes. See also Smith and Mark (2001).

12 Smith and Mark (1998: 315).

13 Cfr. <http://www.spiegel.de/international/europe/street-fighter-artist-and-patriot-tennis-star-djokovic-is-the-pride-of-new-serbia-a-790484-2.html>.

Indice delle illustrazioni



URI

<http://journals.openedition.org.ezproxy.cul.columbia.edu/estetica/docannexe/image/2752/img-1.jpg>

File

image/jpeg, 187k

Per citare questo articolo

Notizia bibliografica

Timothy Tambassi, «From Geographical Lines to Cultural Boundaries», *Rivista di estetica*, 67 | 2018, 150-164.

Notizia bibliografica digitale

Timothy Tambassi, «From Geographical Lines to Cultural Boundaries», *Rivista di estetica* [Online], 67 | 2018, online dal 01 avril 2018, consultato il 20 avril 2021. URL: <http://journals.openedition.org.ezproxy.cul.columbia.edu/estetica/2752>; DOI: <https://doi-org.ezproxy.cul.columbia.edu/10.4000/estetica.2752>

Questo articolo è citato da

- Tambassi, Timothy. (2019) *Springer Geography The Philosophy of GIS*. DOI: 10.1007/978-3-030-16829-2_9

Autore

Timothy Tambassi

ICUB, University of Bucharest, 1 Dimitrie Brandza St., RO-060102, Bucharest, Romania – timothy.tambassi@gmail.com

Articoli dello stesso autore

Ontologie informatiche della geografia. Una sistematizzazione del dibattito contemporaneo
[Testo integrale]

Apparso in *Rivista di estetica*, 58 | 2015

Diritti d'autore



Rivista di Estetica è distribuita con Licenza Creative Commons Attribuzione - Non commerciale - Non opere derivate 4.0 Internazionale.