

RULES versus VALUES

In 1997 and again in 2000, Solomon Marcus and I drafted some epistemological documents on geography while we were attending symposiums in Sion, in the Swiss canton of Valais. This was a truly interdisciplinary activity which we managed to accomplish at a brisk and efficient pace, either very early in the morning before the Symposium started or in the evening, after the plenary sessions.

Solomon Marcus, who consumed quantities of coffee, while I was addicted to tea, behaved in a way which surprised me. For one thing, he was ready to accept that what I had to say, perhaps not always formulated as precisely as he would have wished, was coherent and worth listening to. Unlike almost all the mathematicians I have ever worked with, although confirmed in his international recognition and competence, Solomon Marcus did not consider that the problems we were working on together were simply poorly postulated and that he would immediately be able to solve them by the sheer virtue of his authority. We were therefore able to work together in a spirit of mutual trust and on an equal footing, thanks also to his prodigious command of all the languages we had in common. But what I found most astonishing was that whenever we strayed into an impasse, his perception of it was immediate. He never persisted; instead, he immediately suggested another avenue that we could explore together.

This capacity for individual and relational evaluation inspired me to consider the dissent that we can still observe in this 21st century between geographers seeking to impose their *rules* of work and those who proclaim that their *values* are superior, with both sides still intent on a unification of geographies so as to limit their proliferation, even if that is left unsaid.¹

Values masking rules in contradiction with those values

To uphold that, "[...] dans le plus grand respect face au mystère de l'Être, au mystère de notre présence sur Terre, de notre Être au monde [...]", as geographers, we are capable of making the world meaningful and of generating, by the study of the heterogeneity of the Earth's surface, the *values* of sustainable development: "[...] en particulier [par l'observation des] lieux de l'inter-culturalité, lieux de l'entre-deux où se définissent l'accueil, l'hospitalité, la solidarité, l'intégration mais aussi le respect des différences [...]"² does indeed appear as a generous and appealing project. But how is this project: "*Être humains sur la Terre*"³ to be scientifically achieved? In other words, how is the "différence", the essential *value* of this approach, respected by the "géographe humaniste" who is advocating it?

To do this, Jean-Bernard Racine places himself at the "centre" of an arrangement constructed around the mystery of the "Être du géographe" in the world and strays ("erre") from one point of view to the other. First, he distinguishes within the "pluralité des géographies" the authors who accept the duality of geographic space produced by both the "seules réalités matérielles" and also by the reality of "tout ce qui [n'est] pas matériel" from those who accept its unicity but refuse the existence of ideas, images and behaviours removed from the context of any material basis and content⁴. Then, after having accepted in the 1980s that geographers' identities are to be found in "un sens aigu de l'hétérogénéité de l'espace", the author restricts its formal operating expression by interpolating, early in the 21st century, a statement that radically changes its content. Unsupported by explanation or justification, the sentence: "peut être géographique tout objet (matériel ou immatériel) qui différencie l'espace terrestre"⁵ proposed in 1984 as an "axiome", is replaced in 2006 by: "est géographique, tout objet, *au sens statistique du terme, c'est-à-dire observable et mesurable*, qui différencie l'espace terrestre", this being presented as an "axiome-moteur [sic]⁶".

Not only is the 1984 sentence disregarded, but its formulation in 2006 ceases to be just a possibility (*peut être*) and becomes a normative affirmation (*est*). With the addition of a restriction: an object can only be "*matériel et mesurable*" so that geographers who use this "moteur" cannot access this "Être" of the world since they are not allowed to deal with "l'immatériel". All the research carried out between 1984 and 2005 is ignored. In particular the distinction between the (Tout-Parties/All-Parts) rationale used in all geographic statements⁷ and the axiomisation formalising them on the basis of that rationale; whether those statements refer to the "espaces donnés", the "espaces produits" or the

"espaces vécus" whose domains are "matériels ou immatériels"⁸. The interpolated modification therefore restricts the scope of geographies unless they are "humanistes" and it denies the possibility that abstraction can overcome the spurious opposition between "matériel" and "immatériel".

In practice, therefore, the fact of proclaiming the pre-eminence of *values* as the expression of the actual "l'Être" of the geographer, in particular the primacy of the "respect des différences" which would be found in the formulation and formulisation of the geographic "identité" (the object of geography is "différencié" and not "différentié") does not prevent the "humanistic geographer", in his central position, from using what we can only describe as *rules* (falsification and interpolation⁹) which do not respect these *values*, that he relates to himself and to the statements of other geographers. Apparently, "auto-centrée" evaluation on specific values does not preclude the use of *rules* which are in contradiction with these *values*.

Rules compatible with contradictory values

Unlike Jean-Bernard Racine who prefers *values* to justify his "errance", Roger Brunet defines "règles de rigueur et de bon usage" for models which conform to his "idée de la géographie". To construct them, he invents "chorèmes" which represent "arrangements fondamentaux des choses dans l'espace" and the "structures élémentaires" or "formes fortes" of these spatial arrangements. He then combines these "modèles" into a "modèle général" which is supposed to unveil the meaning of the geographic discourse on the structure and dynamics of space on the surface of the Earth.

Roger Brunet's¹⁰ 28 "chorèmes" are drawings whose "forme du contour": "ellipse, cercle ou rectangle" do not matter very much¹¹. A "chorème" is neither a simplified base map and even less a generalisation of this simplification, nor is it regular geometric shape such as a square, a triangle or a hexagon, etc.¹². What matters is the contents of the drawing used as a graphic modelling tool¹³. Working with a "chorème de base" therefore, generally starts with drawing some unspecified figure. In the case of Spain, for example, it is a square divided horizontally into two rectangles to signify the existence of an "aire de contact" between northern and southern Spain. Northern Spain is considered to be "utile", because there are industrial centres and European affinities: its rectangle is left blank and graced with a large (+). On the contrary, southern Spain is "profonde" because it is far away from Europe, both in actual distance and in economic development: its rectangle is hachured and sports a no less impressive (-). Six other "chorèmes de base" enrich the interpretation and are used to construct a model for the description and regional interpretation of Spain¹⁴.

But these interpretations are doubly reversible. First of all, keeping the same drawing, the interpretation can be reversed. As Spain joined the Common Market in 1985, "utile" Spain in the throes of a deep-rooted industrial crisis in the latter half of the 20th century, can be considered as economically remote from Europe despite being close in terms of distance. On the contrary, southern Spain is in the process of catching up with Europe as regards its economic, industrial, tourist and even agricultural situation, although it is physically far away. Secondly, if the drawing is inverted (the top rectangle: northern Spain hachured, and the bottom rectangle: southern Spain left blank), the initial interpretation can be retained. In other words, "un chorème ou son inverse peuvent signifier la même chose ou [...] deux significations opposées peuvent être représentées par le même chorème"¹⁵. As a result of using "chorèmes", you can validate opposite or even contradictory *value* judgments. A "chorémiste's" role is therefore just as central as that of the a "géographe humaniste": the former uses *rules* to give meaning to contradictory *values*, the latter uses these *values* to manipulate the *rules*.

That being said, the "chorémiste" may also take some liberties with *rules*. Following the tardy discovery of the role played by the German geographer Walter Christaller during the Nazi reign to control the eastern territories conquered by the third Reich¹⁶, and disturbed by the light thrown by this role on the "travail 'appliqué' avec architectes, aménageurs et directeurs de ministères"¹⁷, Roger Brunet tries to ridicule those who seek to understand how the inconsistencies and scientific errors of the Central Places Theory came to be so largely acceptable to geographers in search of more scientific methods of work. He writes: "Il semble avéré que Christaller a cherché à proposer à Hitler de «rectifier» le réseau des villes polonaises pour le rendre plus conforme à son modèle. Outre que l'anecdote demande plus de vérification, observons qu'il n'y a nullement réussi [sic]."¹⁸

In other words, helping to plan the deportation of *non-Aryans* and the *resettlement* of German Aryans, as is proven by the maps Walter Christaller¹⁹ drew in 1941, under the orders of SS-Oberführer Konrad

Meyer-Hetling for the Reich Commissariat for the Reinforcement of the German People ("Das Reichskommisariat für die Festigung deutschen Volkstums", which reported directly to *Reichsleiter* Himmler, was merely an unsuccessful attempt on the part of Walter Christaller to get Hitler to adopt and apply his ideas. "Cela n'a rien à voir avec l'idée de modèle, sauf au sens vulgaire et normatif du mot. L'argument [« *Les modélisateurs sont dangereux*.— Car ils ont des ambitions de prédiction et d'application et veulent forcer la réalité à obéir à leur modèle. [...] relève du simple procès d'intention, et a son aspect comique en ce qu'il prête aux géographes des pouvoirs qu'ils n'ont jamais eus.²⁰"]. In fact, Walter Christaller had no direct contact with either Hitler or Himmler. Roger Brunet is therefore referring to an anecdote, unverifiable because he invented it: he is therefore adding fiction to falsification and interpolation in the art of manipulating *rules*. Furthermore, "l'idée de modèle" is not at issue; we are dealing here with the "schémas explicatifs" later re-interpreted as "modèles". Historically, the *Christallerian model* is an anachronism and scientifically speaking, it is geometrically erroneous²¹. Finally, one might well ask what *value* supports the finding that Walter Christaller failed in the implementation of his ideas: retrospective solidarity between "géographes appliqués"?

Auto-evaluation and alter-evaluation

The only advantage to opposing *values* and *rules* is that you can manipulate *rules* when you are focusing on *values* and manipulate *values* when you are focusing on *rules*.

That being so, *values* and *rules* may be criticised by evaluating the results in respect to the problem raised by the authors, the objective they had set for themselves and the ideas they refer to in order to justify their approach. In this manner, Walter Christaller's "principe d'ordre": "Une forme élémentaire de l'ordre d'appartenance commune est dans la nature inorganique et organique l'ordonnance d'une masse autour d'un noyau, d'un centre : un ordre central (« *eine zentralistische Anordnung* »). Cet ordre n'est pas seulement une forme de pensée humaine qui n'existerait que dans le monde de la représentation humaine et qui serait seulement né du besoin d'ordre de l'homme mais il existe réellement à partir de lois internes à la matière²²" can be confronted with its racial consequences: "Des communautés spatiales du peuple (« *Volk* ») se forment aussi à côté de ou malgré le découpage administratif. Ces communautés sont partiellement déterminées de manière historique, « populaire » (« *völkisch* ») ou « raciale » (« *rassisch* »). C'est par exemple, le cas des « communautés de lignées » (« *Stammesgemeinschaften* ») dans le peuple allemand comme la Bavière, la Souabe ou la Saxe etc. » [...] « Mais ces « communautés de vie » (« *Lebensgemeinschaften* ») se forment aussi dans de plus petits espaces en liaison avec des rapports agraires déterminés par l'agriculture [...] ou l'exercice de l'industrie [...] ou encore l'environnement rural qui forme une communauté de vie (« *Lebensgemeinschaft* ») avec son « centre (« *Mittelpunkt* ») urbain²³. The link established between the idea of a *centre* and that of a *race* and its consequences on territorial planning, in particular on a hierarchy based on a *centre*, seems questionable.

This *external critique* can be levelled on the basis of an independent justification of the theory: condemnation of scientifically unfounded biological racism. But it is also possible to replace the link "centre" — "matière" — "race" by another one, "Centre" — "Esprit" — "Être": this again is an *external critique*. However, progressing from one justification to another, confrontation can regress ad infinitum. The only way of putting a stop to this regression is to move to an "internal critique"²⁴. As regards Walter Christaller, for example, an analysis of his so-called *geometric model* of the operating principles of a network of *central places* shows that it is mathematically unsound. This critique of the substance of scientific practices and results obtained by accepting the terms in which the authors postulate the problems and formulate their objectives leads not only to a rejection of Walter Christaller's theory globally, but also to calling into question the validity of the actual concept of *centres* on which it is based. That being so, again in the case of Walter Christaller, if *external* critique and *internal* critique are dissociated, simply because the latter is easier than the former²⁵, then the essential problem can no longer be identified, i.e. to what extent did fascination with the efficiency that prevailed in the implementation of a totalitarian ideology play a role in the blindness to the errors in his formulation and its pretensions to universal scientific validity? Was it not the common starting point, that is the very concept of a *centre* coupled with a hierarchy organised according to the direction summit → base, that was the origin of these *supposedly scientific errancies*?

Working with Solomon Marcus did, however, show me that this counter alter-evaluation which combines *external* and *internal critiques* is still insufficient to serve as the foundation for scientific theory. *Auto-evaluation* is also required, that is detecting errors, identifying blind alleys, exploring

other avenues. And I would add: publicly rectifying errors if they were published, so that failure does not turn into fault. auto-evaluation and auto-critique are not one and the same!²⁶

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¹ These first three paragraphs were published in form of extract in: Lavinia Spandonide Gheorghe Paun: *Meetings with Solomon Marcus*, Editurii Spandugino, Bucuresti, 2011; vol. 2, p. 156-158. Original work is available at following address: "Spandonide publications", <http://www.edituraspandugino.ro/>

² RACINE, Jean-Bernard, « Entre pluralisme et complexité : le rôle des valeurs dans la pratique l'apport de la géographie humaine. Chronique d'une écriture errante », *Revue européenne des sciences sociales*, 2006, 44, 134, p. 231-245 ; p. 236 et 242.

³ BERQUE, Augustin, *Etre humains sur la terre : principes d'éthique de l'écoumène*, Paris, 1996 ; cité par RACINE, Jean-Bernard, *op. cit.*, p. 236.

⁴ RACINE, Jean-Bernard, *op. cit.*, pp. 232, 233 et 240.

⁵ NICOLAS, Georges, *L'espace originel : axiomatisation de la géographie*, Berne, 1984; « l'axiome de différenciation (chorologique) », p. 260.

⁶ RACINE, Jean-Bernard, *op. cit.*, p. 235.

⁷ MARCUS, Solomon et NICOLAS, Georges, « Logique Tout-Partie », dans *Géographie(s) et Langage(s)*, NICOLAS, Georges, éditeur, Sion, 1999 ; p 335-344. <http://cyberato.pu-pm.univ-fcomte.fr/eratosthene/lire.php?ID=35>

⁸ FERRIER, Jean-Paul, HUBERT, Jean-Paul, NICOLAS, Georges, *Alter-Géographies, Fiches disputables de géographie*, Aix en Provence, 2005 ; NICOLAS, Georges : « Logique Tout-Partie : Fiche problématique », p. 138. Il n'y a donc plus un axiome de la géographie mais une logique permettant d'identifier les axiomes de chaque géographie.

⁹ L'interpolation est une des plus vieilles techniques de manipulation des textes employée par les copistes chrétiens. Une des plus connue concerne « le juif aristocrate, politicien, soldat, renégat et historien, Joseph ben Mattias (37-38 apr. J.C.- après 100) [...] connu sous le nom de Flavius Josèphe ... » (MEIER, John P., *Un certain juif Jésus. Les données de l'histoire. I : Les sources, les origines, les dates*, Paris, 2005 ; p. 47). Ainsi, un ou plusieurs copistes chrétiens du IIIe siècle attribuent à Flavius Josèphe l'affirmation qu'un personnage nommé Jésus était le messie en ajoutant les mots en italique dans le texte original : « Vers le même temps survient Jésus, homme sage, si toutefois il faut le dire homme. Il était en effet faiseur de prodiges, le maître de ceux qui reçoivent avec plaisir des vérités. Il gagna beaucoup de Juifs et aussi beaucoup du monde hellénistique. C'était le messie (le Christ). » (MEIER, John P., *op. cit.*, p. 51).

En revanche, la possibilité d'une falsification est beaucoup plus controversée. Elle concerne l'attribution du passage débarrassé de ses interpolations au texte original de Flavius Josèphe (MEIER, John P., *op. cit.*, p. 53). Il est permis de continuer à douter qu'il soit de la main de Flavius Josèphe, même si, en dernière analyse, certains auteurs tranchent en faveur de son authenticité (MEIER, John P., *op. cit.*, pp. 53 et 59).

¹⁰ BRUNET, Roger, *La carte mode d'emploi*, Paris, 1987 ; p. 191.

¹¹ BRUNET, Roger, « D'une erreur commune à propos de cartes et de modèles », *Mappemonde*, 2004, 74, 2, non paginé (n. p.).

¹² BRUNET, Roger, « Des modèles en géographie ? Sens d'une recherche », *Bulletin de la société de géographie de Liège*, 2000, 2, p. 21-30.; « Modéliser n'est pas simplifier.— C'est une profonde erreur que de confondre simplification et modélisation, surtout en géographie où l'on confond non moins souvent la simplification avec la « généralisation » des contours au sens des cartographes. », p. 28. BRUNET, Roger, « Models in geography ? A sense to research », *Cybergeo*, September 7-11, 2001, article 204 ; modifié le 26 février 2007. URL : <http://cybergeo.revues.org/index4288.html>. Consulté le 17 mars 2010.

¹³ BRUNET, Roger, 2000, *op. cit.* ; p. 28.

¹⁴ FERRAS, Robert, « Écrire de la géographie régionale sur l'Espagne », *L'espace géographique*, 1986, 4, p. 283-288.

¹⁵ JOLIVET, Rémi et NICOLAS, Georges, « Signe géographique : chorèmes et tégéos », *Cahiers de géographie du Québec*, 1991, 35, 96, p. 535-564 ; p. 545. <http://www.erudit.org/revue/cgq/1991/v35/n96/022213ar.pdf>

¹⁶ RÖSSLER, Mechtild, « *Wissenschaft und Lebensraum*Geographische Ostforschung im Nationalsozialismus. Ein Beitrag zur Disziplingeschichte der Geographie, Berlin/Hamburg ,1990.

¹⁷ BRUNET, Roger, 2000, *op. cit.* ; p. 25.

¹⁸ BRUNET, Roger, 2000, *op. cit.* ; p. 24.

¹⁹ CHRISTALLER, Walter, « Die zentralen Orte in den Ostgebieten und ihre Kultur- und Marktbereiche », Band 1 des Gemeinschaftswerkes der Reichsarbeitsgemeinschaft für Raumforschung: Struktur und Gestalt der zentralen Orte des deutschen Ostens, Leipzig, 1941, p. 2-22.

²⁰ BRUNET, Roger, 2000, *op. cit.* ; p. 24.

²¹ NICOLAS, Georges, « Walter Christaller : du "cadavre exquis" au "cadavre ressuscité" », http://cyberato.pu-pm.univ-fcomte.fr/eratosthene/lire_tvx.php?ID=36.

NICOLAS, Georges, "Walter Christaller From "exquisite corpse" to "corpse resuscitated", S.A.P.I.EN.S, 2.2, Online since 2009, <http://sapiens.revues.org/index843.html>.

²² CHRISTALLER, Walter, *Die zentralen Orte in Süddeutschland*, Jena (1933) puis Darmstadt (1980) ; p. 21.

²³ CHRISTALLER, Walter, « Die Kultur- und Marktbereiche der zentralen Orte im deutschen Osten und die Gliederung der Verwaltung », *Raumforschung und Raumordnung*, 1940, 4, 11-12, p. 498-503 ; p. 498.

²⁴ BARNES, Trevor J., *Logics of dislocation*, New York, 1996 ; p. 88-89.

²⁵ BARNES, Trevor J., *op. cit.* ; p. 115-117.

²⁶ This last paragraph was published in form of extract in : Lavinia Spandonide Gheorghe Paun: *Meetings with Solomon Marcus*, Editurii Spandugino, Bucuresti, on 2011; vol. 2, p. 158.

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