Objectivities and Subjectivities in Geographical Research: A Philosophical Inquiry into Methods

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Abstract

Epistemological and ontological issues are intertwined in the broad philosophical inquiry into research methods. First, different theoretical perspectives concerning objectivity and subjectivity in research methods are shown to be part and partial to three grand national traditions in Western philosophy. Then, a sequence of debates in the social sciences is presented tying epistemology and methods to competing scientific paradigms and syntagms from the late 19th Century onward. After this, specific criticism of ethnographical and rural research is discussed as extreme cases of cultural dissonance existing between researcher and researched. Finally, a general model of characterizing the researcher self is offered which makes possible biases explicit so that one can adopt strategies for controlling them. This model is then illustrated in issues of subjectivity which arose in the author's own research in coastal areas of Rio de Janeiro state since the mid-1980s, during a period of considerable epistemological metamorphosis in the political ecology perspective which guided investigations there.

Key words: objectivity, subjectivity, epistemology, ontology, geographical research methods.

Resum: *Objectivitats i subjectivitats en la recerca geogràfica: una investigació filosòfica sobre mètodes*

Les qüestions epistemològiques i ontològiques estan interrelacionades en l'àmplia investigació filosòfica sobre mètodes d'investigació. En primer lloc, es mostra que les diferents perspectives teòriques sobre l'objectivitat i la subjectivitat en els mètodes de recerca són part de (i són parcials a) tres grans tradicions nacionals en la filosofia occidental. Tot seguit, es presenta una seqüència de debats en les ciències socials lligant l'epistemologia i els mètodes amb paradigmes i sintagmes científics en discòrdia d'ençà finals del segle XIX. Posteriorment, es debat la crítica específicament dirigida a la recerca etnogràfica i rural com a cas extrem de la dissonància existent entre l'investigador i la recerca. Finalment, s'ofereix un model general de caracterització del jo investigador que explicita possibles biaixos perquè es puguin adoptar estratègies per gestionar-los. En darrer lloc, aquest model

és debatut en relació amb aspectes de subjectivitat que han sorgit en la mateixa recerca de l'autor en zones costaneres de l'estat de Rio de Janeiro d'ençà mitjan de la dècada de 1980, durant un període de considerable metamorfosi epistemològica en la perspectiva de l'ecologia política que ha guiat les seves recerques en aquesta zona.

Paraules clau: objectivitat, subjectivitat, epistemologia, ontologia, mètodes de recerca geogràfica.

Resumen: *Objetividades y subjetividades en la investigación geográfica: una investigación filosófica sobre métodos*

Las cuestiones epistemológicas y ontológicas están entrelazadas en la amplia indagación filosófica sobre métodos de investigación. En primer lugar, se muestra que las diferentes perspectivas teóricas sobre la objetividad y la subjetividad en los métodos de investigación son parte de (y son parciales en) tres grandes tradiciones nacionales de la filosofía occidental. A continuación, se presenta una secuencia de debates en las ciencias sociales vinculando la epistemología y los métodos con paradigmas y sintagmas científicos en discordia desde finales del siglo XIX en adelante. Posteriormente, se debate la crítica específicamente dirigida a la investigación etnográfica y rural como caso extremo de la desavenencia existente entre investigador e investigado. Finalmente, se ofrece un modelo general de caracterización del yo investigador que explicita posibles sesgos con la finalidad de adoptar estrategias para gestionarlos. En último lugar, este modelo es debatido en relación con aspectos de subjetividad que han surgido en la propia investigación del autor desarrollada en áreas costeras del estado de Río de Janeiro desde mediados de la década de 1980, durante un período de considerable metamorfosis epistemológica en la perspectiva de la ecología política que ha guiado sus investigaciones en esa zona.

Palabras clave: objetividad, subjetividad, epistemología, ontología, métodos de investigación geográfica.

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> "[T]he *more* eyes, different eyes, we can use to observe one thing,
> the more complete will our 'concept' of this thing, our 'objectivity', be."

> (Nietzsche, 1968,[1] p. 555; original emphasis).

1. Introduction

The motives for the philosophical discussion of methods used in the social sciences stem from both research and didactic concerns. Issues of subjectivity arose in long-term field work undertaken in a part of coastal Brazil where I was both the political ecologist subject doing the research and a veteran tourist who

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1. In the text, the dates of publication are those of the edition cited, not necessarily those of the first edition. When differing, the dates of the original publication are provided in the references list.

was one of the social-actor objects of this research. We will see that the latter status permitted "being there" for a period of decades and so afforded numerous opportunities for observing interesting situations which otherwise would not have been witnessed in the two formal periods of anthropological-geographical research undertaken respectively in 1985-1987 and 2011. However, as the area in question became increasingly incorporated into the outer metropolitan area of Rio de Janeiro my personal biases held against mass tourism progressively raised issues concerning researcher "subjectivity".

With regard to teaching, discussing methods is a constant problem that postgraduate students face in their theses. The way that methods are treated is often woefully inadequate in terms of theoretical density as well as naïve with regard to epistemological issues. Particularly worrying are certain critical stances in which engaged research borders on being empirically blind and politically gullible, a point emphasized by Latour in *Reassemblying the Social* (2005) and *An Inquiry into Modes of Existence* (2013).

One point needs to be made clear from the beginning of this inquiry into methods: even if I often speak in the first person, many of the issues raised are also encountered by fellow academics who have similar class backgrounds and outlooks on the world as my own so that this narrative strategy in the first person does not mean that existential subjectivity is endorsed here. By criticizing my own research using the concepts of "dialectical practice" and "participant objectivation" of Bourdieu (1977, 2003) and "quasi-subjects" and "quasi-objects" of Latour (2013), methods that steer a middle course between objectivity and subjectivity are concretely illustrated in such a way that researcher hypocrisy and self-righteous, empirically-blind political advocacy can be avoided.

With the aim of placing discussions of methods used in geographical research on a philosophical footing the following text is organized in four parts. First, a review of key debates concerning objectivity and subjectivity in the human sciences including Geography is presented. Then, a general model of researcher sensitivity and subjectivity based on these theories is offered. After that, the general model is illustrated in a concrete case. Finally, the concluding remarks move from the particular case back to issues concerning contemporary political ecology and relational perspectives.

2. Theoretical Perspectives on Objectivity and Subjectivity in the Human Sciences

First, the emphasis on objectivity, subjectivity or something in between is traced to classic philosophical debates defined by different European national epistemological traditions. These are illustrated in a late-19th Century triangular debate between Tylor, Ratzel and Durkheim. Then, the debate between Sauer

and Hartshorne over science, objectivity and subjectivity with regard to the epistemological legacy of late-19th Century and early-20th Century German geography is treated. After that, the debate between Sartre and Lévi-Strauss is shown to be partially mediated by Bourdieu. Finally, Latour's 21st Century relational field of quasi-objects and quasi-subjects is used to philosophically enrich Bourdieu's concepts of dialectical practice and participant objectivation.

2.1. Rival European National Philosophies

Three basic epistemologies are recognized in modern Philosophy: Anglo-American Empiricism, Continental Rationalism and German Phenomenology (Russell, 1945; Kant, 1952; Copleston, 1960-1967). In an ambitious history of world philosophy using actor-network theory, Collins (1998) traces vertical generational networks through time for these European traditions (as well as for most other great philosophical traditions in the world).

With regard to epistemology (scientific objective; phenomenal, spatial and temporal scope; scientific method and analytical procedure) and ontology (perceptive model of reality and perceptive agent) Empiricism and Rationalism often occupy opposite poles but in fact are interdependent because the former usually prepares the way for a Rationalist turn. Rationalist generalization is well done when it has a solid empirical base provided by prior empiricist research. Phenomenology in turn appears as a holistic alternative to Empiricism and Rationalism when world events contradict their explanations and policy prescriptions because overarching social conditions have radically changed (table 1).

Issues related to perception affecting objectivity and subjectivity in research is a rare area of agreement between Phenomenology and Rationalism. For different reasons both criticize the simplistic treatment of scientific objectivity in Empiricism, whereby human subjects supposedly perceive worldly objects as they actually are, unfiltered by our mental and sensory pre-dispositions. In empiricist realism the object researched is thought to impress itself unproblematically on the researcher subject (table 2). Ontology is thus the overriding concern for most empiricists in contrast to phenomenologists and rationalists who give great attention to how epistemology affects subjectivity, evident in Sartre's ironic comment about "ontological proof" at the beginning of *Being and Nothingness* (1971, p. lx).

In Phenomenology since Kant the best human knowledge can do is construct a synthesis between the subject (the thesis) and the object (the antithesis) but we can never know actually what are things-in-themselves (Kant, 1952, pp. 132-151). More sophisticated Neo-Marxist views like that of Harvey (1973, pp. 288-298) used what later became Post-structuralist and Postmodernist constructivist models of reality when he stated that ontology (what exists) cannot be separated from epistemology (theories of knowledge) because the subject (humans) structures the object (the world) at the same time that the world

Table 1. Cyclical epistemologies through time

Philosophy of Science	*Empiricism* (Bacon, Berkeley, Hume)	*Rationalism* (Descartes, Leibniz, Spinoza)	*Phenomenology* (Kant, Nietzsche, Heidegger)
Epistemological Spheres			
Scientific Objective	probabilistic associations	determinist & reductionist laws	particularist juxtapositions
Phenomenal-Cultural Scope	selective integration	systematic specialization	inter-relational holism
Spatial Scope	case studies region → world	universe, world	contextualized localities
Temporal Scope	synchronism	universal evolution	historicism
Scientific Method	experimental inductive observation	demonstrative deductive introspection	existential narrative, participant observation
Analytical Procedure	quantitative description	logical mathematical explanation	intuitive qualitative interpretation
Ontological Spheres			
Perceptive Model	naturalism realism	idealism structuralism	transcendentalism constructivism
Agent	object → subject	subject → object	subject ↔ object

Source: Hoefle (1999, 2006)

structures human knowledge. In Rationalism, the human subject searches for the stable essence (termed structure in 20th Century philosophy) in the flux of worldly objects presented by undependable human senses which can cause shadows to be confused for reality –as in Plato's example of a person who grows up in a cave and has never seen the outside world (Copleston, 1960-1967; Feibleman, 1960; Hookway, 1992; Pettit, 1992; Scruton, 1995; Wood, 1960).

Table 2. Variation in ontological perceptive model and agency

Naturalist realism	Critical realism	Perspectivism	Transcendental idealism	Idealism
object-driven	quasi-objects	quasi-objects & quasi-subjects	quasi-subjects	subject-driven

Source: Author's elaboration

The three great epistemologies alternate over time in a cyclical way. If Kuhn's (1970) model of scientific paradigms, Hassan's (1985) counter-model of postmodernist syntagms and Simmon and Cox's (1985) theoretical contrast between reductionist-determinist positions versus holistic-interrelationalist positions are combined with the cyclical long wave approach of Hobsbawm (1967, 1975, 1988, 1994), Stöhr (1981) and Taylor (1985), change in scientific thought over time can be seen to pass through repetitive sequences in which an inductive-empiricist paradigm is followed by a deductive-determinist paradigm, which in turn is contested by a number of critical-phenomenological syntagms.

Hobsbawm (1994) contrasts English and French evolutionary models emphasizing universal evolution and modernist scientific objectivity during periods of capitalist development to German *Naturphilosophie* historicist models emphasizing cultural particularism and perceptional subjectivity during periodic crises. The first view reflects the heady progress of periods of expansion and the second the prevailing mood of gloom during times of economic depression and global conflict. German holistic Phenomenology represents a long line of alternative philosophies stretching from Kant to Fichte, Hegel and Goethe, to Nietzsche, to Husserl, Heidegger and Spengler and finally up to Feyerabend and Habermas (see Collins, 1998, pp. 624, 740). French Existentialist, Post-Structuralist and Postmodernist philosophers of the mid- to late-20th Century, as exemplified respectively by Merleau-Ponty, Sartre, Foucault, Baudrillard, Derrida and Lyotard, can be added to this list of alternative philosophy because, in the words of Bourdieu and Passeron (1967), after World War II France ceased "making history" so that French intellectuals turned away from determinist evolutionary thought. This notwithstanding, despite the loss of French geopolitical importance, Parisian intellectuals such as Descola, Lévi-Strauss, Latour and Sperber were quite important for empiricist and rationalist scientific thought which predominated during more prosperous times (1945-1973, 1992-2019) so that the general philosophical approach to scientific thought emanating from France is still quite influential.

With regard to Geography, Cosgrove (1989, pp. 29-31) and Gregory (1978, p. 113) have observed that geographers, like most other social scientists, usually have a strong empiricist bent to their work. This is true even for rationalist-leaning geographers like Bunge who admitted that his mathematical analyses had an empirical referent and were not exercises in pure Cartesian Mathematics. Much the same can be said of the anthropologist Lévi-Strauss. Geographers and anthropologists like Sauer, Boas, Kroeber and Lowie of the early 20th Century or Postmodernist and Post-structuralist social scientists of the late 20th Century for all of their phenomenal particularism still advocated mediating centered-universalist science and decentered-historicist humanism. Consequently, few social scientists are purely Cartesian or purely Nietzschean but rather at any given moment fall between rationalist-inclined and phenomenological-inclined Empiricism. Descola (2013, p. 91) sums this up

as an eternal swinging back and forth from structural factors hypothesized as essences executed by automata lacking initiative or affects to the creative agency of social actors, historical contingency, resistance to hegemonies and spontaneity of practice.

2.2. Tylor, Ratzel and Durkheim

Rationalist Anglo-American evolutionary thought of the latter 19th Century was better documented empirically in the case of Darwin's theory biological evolution but poorly documented in the case of social evolution. This is directly related to methodological and ideological problems with reports on native peoples present in the colonies provided by missionaries, colonial officials and upper-class explorers and big-game hunters. This information was then interpreted according imperial and social prejudices of the emergent social scientists of the period. Amateur armchair ethnologists, such as Bachofen, Maine, McLennan, Morgan and Tylor, tore curious customs out of their local context and allotted them along an evolutionary sequence from savage to barbarian to civilized European (Harris, 1968; Stocking, 1968, 1996).

Tylor's (1970) *Primitive Culture* was the most influential work of British social evolutionism and he later assumed the first chair of Anthropology at Oxford. He also produced one of the first statistical studies in the human sciences (Tylor, 1889) in which he correlated different kinship and marriage practices in the world independently of the rest of the culture in which they were imbedded. Morgan's (1971) *Ancient Society* was the most important evolutionist work in the United States and his sequence of technical evolution inspired Marx and Engels (Marx, 1972; Engels, 1972).

The alternative views of Ratzel represented a distinctive German imperial outlook on the world. In this view, cultural diffusion across geographically continuous climatic regions such as Eurasia was thought to be the principal mechanism for social change and not racial evolution. With the publication of *Volkenkunden* in various volumes between 1885 to 1888 Ratzel founded Ethnology in Germany just like he had founded Geography there with his *Anthropogeographie I* and *II*. In *Volkenkunden* Ratzel descriptively catalogued and beautifully illustrated non-Western European cultures throughout the world. In the first part of Volume I Ratzel criticized evolutionists for making premature assumptions whereby they (deductively) knew beforehand what they were going to find and so made hasty conclusions concerning race and civilization which were not thoroughly tested. Using the standard of their own civilization, savages were judged by what they lacked and "behind" was converted into "below". Heterogenous uncivilized races were lumped together by evolutionists and placed at the foot of the human family tree, considered to be survivors of a distant past which represented the childhood of humanity (Ratzel, 1896, pp. 15-20).

Ratzel had his own imperial biases especially with regard to German expansionism but he had the merit of pointing out rationalist evolutionary subjectivity on a colossal scale. Posterior anthropological counter currents stressed the need for long, direct fieldwork with native peoples through which participant observation would (hopefully) generate more reliable accounts (Harris, 1968; Stocking, 1968, 1996). Curiously, Tylor was asked to forward the English translation of *Volkenkunden*, which had the title of *The History of Mankind*. Tylor praised the empirical content of Ratzel's work but politely disagreed with Ratzel concerning his criticism of evolutionary theory and the role of diffusion in cultural development.

The late 1890s debate between Ratzel and Durkheim in the pages of the *Année sociologique* was more acrimonious. By this time Durkheim had already produced classic foundational texts in Sociology such as the *Division of Labor in Society*, *The Rules of Sociological Method* and *Suicide.* In these Durkheim staked out the intellectual terrain of Sociology and presented the empirically-informed rationalist methods to be used for studying social phenomena. Laws were not to be instituted only after having reviewed all of the facts but rather at the onset when the most essential characteristics of a social type are established on the principle of species. It is not necessary to observe all societies of a species just a few well-done studies for each so that generalization would not be postponed to some distant future (Durkheim, 1964a, pp. 78-80). Extensive statistical data are presented in *Suicide* (Durkheim, 1966), which is considered to be the first quantitative study in Sociology.

Later in his career Durkheim in collaboration with his nephew Marcel Mauss produced ambitious cross-cultural studies of "simple/elementary/archaic societies" and so founded Ethnology in France (Durkheim, 1965; Durkheim and Mauss, 1963; Mauss, 1967). Mauss in turn was highly influential on Lévi-Strauss so creating what would become the intellectual lineage from French Functionalism to Structuralism treated below.

In the first issues of the *Année sociologique* Durkheim negatively reviewed a number of books published by Ratzel (Durkheim, 1896-1897, 1897-1898, 1898-1899, 1900). The books on the different branches of Geography were criticized for lacking methodological precision and for only presenting description without any explanation and for treating too many subjects together for any one science to handle by itself. In particular Durkheim was skeptical of Ratzel's concept of the *Boden* of a State, which included a spiritual dimension involving the attachment of a people to its land. Durkheim did not consider the latter to be scientific so that *Boden* could never constitute the necessary geographical fact for building a separate scientific discipline (1896-1897, p. 533). Durkheim also did not consider the soil or territory on which a society undertakes its activities to be important for explaining development but rather the work and the force of its collective social life (1896-1897, p. 538; 1898-1899, p. 14). It is interesting to note that he used the word *sol* (soil) in French and not *terroir* which actually

has a spiritual dimension akin to *Boden.* Consequently, as Durkheim held the view that the determining cause of one social fact objectively explained another social fact (1964b, pp. 111, 113), he could never accept the relevance of a subjective psychological factor like a sentimental relationship with the land.

Ratzel responded by accusing sociologists of building theories in the air without any regard to the complex relationship between the soil, society and the State. He argued that the relations of society with the soil affect the nature of the State at any level of development and then described these relations for different kinds of society with regard to demography, economic activity, political system, military capacity, territorial integration and degree of social equality present (1898-1899, pp. 10-14). The difference in scientific objective and scope could not be starker: rationalist disciplinary specialization for Durkheim and phenomenological holism for Ratzel.

It should be remembered that this debate between a German geographer and a French sociologist of German descent took place in the context of French-Germany geopolitical rivalry after the humiliating defeat of France in 1870 by an ascendant unified Germany and the violent repression of the Paris Commune in 1871. This date coincided with the beginning of prolonged economic depression, social strife and of course flourishing Marxist thought, which are barely mentioned by Durkheim and Ratzel. Durkheim in *The Division* hardly treated the division of labor in society in the economic sense and he considered conflict to be an abnormal state of society (1964a, pp. 65-66, 353-354) even if industrial society spends half of its time in different degrees of depression (cf. Taylor, 1985, pp. 19-21). The great social inequality of the times is swept under the rug by Durkheim when he justifies the phenomenon in organic terms, i.e. the central coordinating organ gets its fill first as well as the choosiest morsels (1964a, p. 185). At least Ratzel treated the issue directly in his rejoinder to Durkheim (1898-1899).

Unfortunately for Geography, Semple (1911) and Huntington (1915) later turned Ratzel's complex ideas into a simplistic rationalist kind of environmental determinism which explained the superiority of Western Europeans and their descendants in the world. Livingston called this approach a "moral economy of climate" whereby the energy of the latter explained European superiority in medicine, intellectual production and technical advance, a position against which most later geographers reacted to (Livingston, 1992, 1994). However, this view of the relationship between climate, race and colonialism of course was not limited to US geography and was a pervasive worldview in all major powers at the turn of the 20th Century (cf. Godlewska and Smith, 1994). One extreme case of this is a map, entitled "Colonizability of Africa", of the perspective of colonization of Africa according to climatic suitability and healthiness for Europeans produced by the British geographer Johnston (1905, p. vii).

2.3. Sauer Versus Hartshorne

The debate between Sauer and Harthshorne over the legacy of German Geography expressed two kinds of reaction against environmental determinism. Sauer took a more phenomenological interpretation of the legacy of German Geography while his rival Hartshorne adopted an empiricist stance with nascent rationalist inclinations which would later give rise to Spatial Science.

In the opening pages of the essay *Morphology of Landscape* Sauer describes his view of science and cites the work *Prolongemena zur Naturphilosophie* published by the German phenomenologist Keyserling. Science is held to be an organized process of acquiring knowledge (and not so much a unified body of physical laws applied deductively to the world) in which predetermined modes of inquiry and a preconceived system of interrelationships between phenomena direct research (which is hardly an inductive-empiricist epistemology). In the latter part of the paper (and in papers published in the 1950s) Sauer returned to this theme when he declares that geographical research must go beyond Science and capture the colorful reality of life. Citing the work of holistic German geographers like Humboldt, Banse, Gradmann and Volz this means including aesthetic and subjective qualities which lie beyond scientific regimentation. By going beyond objective science and *a priori* Rationalism (but not to the other extreme of subjectivism), a quality of understanding is reached at a higher plane (Sauer, 1963a, pp. 344-345, 349-350, 1963b, pp. 380-381, 1963c, p. 403).

In fact, the positivist-empiricist picture of Sauer and the Berkeley School painted by later postmodern cultural theorists like Cosgrove and Duncan (1993) and Jackson (1993) fits Hartshorne (1939) better. Hartshorne's epistemology was squarely within an empiricist mold just like that of other contemporary Structural Functionalists, such as Parsons in Sociology and Radcliffe-Brown in Anthropology. The *Nature of Geography* is a long, sustained critique of Sauerian landscape subjectivity. Indeed, for Hartshorne (1939, pp. 132-133, 452-453), unlike the "subjective-promiscuous" impressions of a landscape or region registered by an artist or traveler, geographical description must be photographically objective and personal reactions of the observer must be reduced to a minimum, as if how the picture is framed is unproblematic.

Like Sauer, Hartshorne (1939, pp. 432-437) also criticized environmental determinism but in terms of probabilistic associations instead of anti-rationalist particularism. Both saw the need for an inductive approach which moved from areal differentiation detected in case studies to regional generalizations but Sauer had long-term, in-depth case studies in mind which never could be extended to a continental scale (Hartshorne, 1939, pp. 66-67, 395; Sauer 1963a, pp. 326-327, 1963d, p. 362).

While it is true that Hartshorne emphasized phenomenal holism at the areal and regional level (see Figure 1, 1939, p. 147), he also thought that it was not practical to include all the physical and cultural elements imaginable so that in

the end he engaged in the selective integration of phenomena as conditioned by economic forces and locational factors (1939, pp. xii, 335), the analysis of which he was a pioneer in Anglo-American Geography (Martin, 1994, p. 483). Hartshorne thus undertook fundamental epistemological groundwork which prepared the way for the deductive-economic determinist turn in the 1950s and 1960s (cf. Berry, 1964; Haggett, 1965; Abler, Adams and Gould, 1971). In fact, it was Hartshorne (1959) who coined the term *Spatial Science* even if he was later victimized by that which he helped create (Gregory, 1978, p. 105).

In 1941 Sauer (1963d, p. 352) complained that physical-human relations were progressively reduced from control (environmental determinism) to influence (of the physical landscape) to adaptations to adjustment to responses and finally to only treating the human content of areas as chorography. For example, by 1970 Gregor in *Geography of Agriculture* sustains a Durkheimian and agronomist view of the soil as a passive medium which can be manipulated by greater or lesser capital inputs.

2.4. The Sartre-Lévi-Strauss Debate Mediated by Bourdieu

In the late 1950s and early 1960s a classically French academic debate arose between Lévi-Strauss representing Structuralism and Sartre Humanist Marxism. The debate culminated in the streets of Paris during the 1968 student-worker revolts with Sartre marching with the protestors while Lévi-Strauss remained cloistered in his office at the Sorbonne. Sartre's approach was full of active subjects, including himself, while Lévi-Strauss' approach involved a sociology without subjects (cf. Bourdieu and Passeron, 1967).

Sartre is best known for his prolific literary productions and contributions to phenomenological philosophy which focused on existential and psychological issues facing individuals. His pioneer existential novel *Nausea* treated how one's feelings toward other people and sense of self can give rise to a growing sensation of repulsion (Sartre, 1964). The plays *No Exit* and *Kean*, respectively showed that Hell is other people and that stage actors may never know where their professional identity ends and private selves begins (Sartre, 1955).

In his major philosophical work expounding on existentialism *Being and Nothingness* Sartre (1971) explored being-in-self as the ultimate subjectivity with regard to the possibility of knowing how others existed and concrete relations with them. "Ontological proof" for this was derived from the *pre-reflective* being of the *percipions* and not Descartes's reflective *cogito*. Human consciousness is a real subjectivity as are our impressions of the world so that this subjectivity cannot go out of itself to posit a transcendental object that can be objectified into qualities of a thing-in-itself like in Husserl's "scientific phenomenology". Consciousness may be the revealed revelation of existents which appear before us on the foundation of their being, but these never reveal themselves completely to our consciousness (Sartre, 1971, pp. lx-lxii).

Sartre (1968) did focus specifically on methods in the little book *Search for a Method* in which he tried to conciliate Existentialism with Marxism through the use of a progressive-regressive and analytic-synthetic method. This method involves continuous cross-referencing the progressive examination of a personal biography according to the historical period in which the person lived with the regressive examination of a historical period by studying the biographies of people who lived it (Sartre, 1968, p. 135). The object of study contains the whole period as hierarchized significations and the period contains the object in its totalization. When the object is rediscovered in its profundity and in its particularity, it no longer remains external to the totalization but in proper Marxist manner is integrated into history and becomes living conflict (Sartre, 1968, pp. 148-149). The method is illustrated in two fascinating cases of de Sade's consciousness of his role in the French Revolution and whether biographical material on Flaubert was projected into *Madame Bovary.*

In *Search for a Method* Sartre had two epistemological and ontological axes to grind concerning: 1) contemporary rationalist Marxists who merely parroted the party-line and 2) allegedly objective structuralist anthropologists and sociologists in the Durkheimian tradition. Sartre criticized fellow Marxists for employing a priori idealism whereby the facts are forced to conform to ideas, usually in the form of inhuman factors totally controlling history (Sartre, 1968, pp. 37, 87), whereby an event merely symbolizes an *a priori* Platonic Idea and concrete persons are dissolved into synthetic objects, Stalinist statistical fetishes and social collectives (Sartre, 1968, pp. 125, 161-62). Sartre criticized this kind of Marxism for eliminating the questioner-subject from the investigation and for making the questioned the object of an idealized absolute Knowledge (Sartre, 1968, p. 175), in other words, for practicing a mindless form of rationalism without subjects.

Structuralist Anthropology (and by extension Structuralism in the other human sciences) is philosophically criticized by Sartre for turning the questioner, the questions and the questioned into timeless objects and things (social facts). However, Anthropology is an ambiguous discipline in which the questioner, the questions and the questioned are the same, i.e. human subjects and their concerns. Instead of ignoring itself, an existentialist Marxist Anthropology would understand itself, the other, existence and action through the study of the various processes of becoming-an-object. Anthropology would make itself the questioned and make the questions the questioner, so that the questioner and the questioned become one and the same (human subjects). However, this does not involve setting the irrational singularity of the individual against universal Knowledge like Hegel and Kierkegaard did but rather reintroduces the unsurpassable singularity of the human adventure into the latter (Sartre, 1968, pp. 174-77).

Lévi-Strauss was one of the most important proponents of Structuralism in the human sciences. In 1958 he published *Structural Anthropology* which was

the object of Sartre's criticism above. In this work Lévi-Strauss thought that the human sciences were inherently subjective because at the societal level our intervention to observe results in distorting modifications unlike what happens to an astrophysicist whose object of study is so vast that he has no impact on it or to an atomic physicist whose object is so small that he is only interested in average mass effects (fig. 1). The solution is to apply a linguistic model of unconscious laws of social groups which reaches a level deep enough to cross over from one to the other and so express the specific structure of each in terms of a general language (Lévi-Strauss, 1967, pp. 54-61).

In *The Savage Mind* Lévi-Strauss (1969) returns to these issues and further develops his scalar reductionism. Scientific objectivity is defended and Sartre criticized for particularist historicism. Chapter 1 is riddled with rationalist concepts which are the antithesis of phenomenological thinking. Here Lévi-Strauss defends the rationality of the "savage mind" (usually involving hunters and gatherers and low-intensity agriculturalists who possess "elementary structures" of social organization) as a pre-scientific mode of thinking about nature and society which possesses the same classificatory and logical rigor of science. Scientific explanation is based on the discovery of true-existing empirical connections and structural arrangements which reflect concealed properties (the essence) of objective reality and this is what makes Western Science more successful in practical and theoretical terms than savage non-science. However, the latter also involves the same exhaustive observation, systematic cataloguing of relations and connections and theories involving determinism and causation as well as the pursuit of knowledge for its own sake. This too introduces order into chaos which is a step toward rational ordering and can also hit upon true

Figure 1. Objective natural sciences and subjective human sciences?
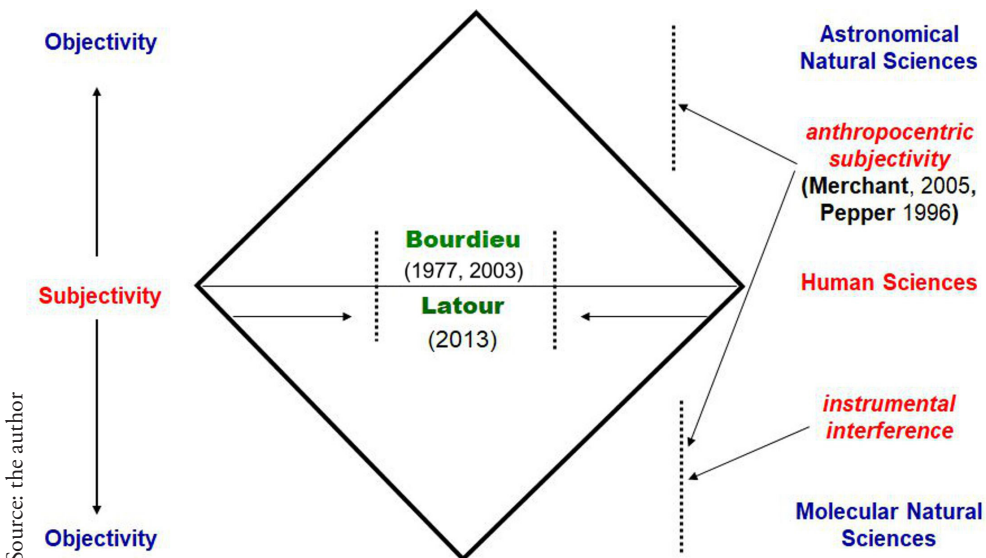
Source: the author

arrangements of reality so that it involves similar mental capacities which are just historically prior, not primitive in an evolutionary sense. An engineer addresses an objective universe using concepts that separate nature from culture while a savage thinker interposes human culture into reality through subjective signs that address people rather than structures thought to exist in Nature (Lévi-Strauss, 1969, pp. 9-15, 20).

Chapter 9 on History and Dialectic deals with reductionism and objectivity. Here Lévi-Strauss takes Sartre's method to task for being hopelessly mired in the subjectivity of individuals and incapable of generalizing to what humanity has in common. Unlike Structural Anthropology, History deals with contingency not continuity. Historians choose events, individuals and periods abstractly carved out of a possible infinite regress downward from psychic movements and unconscious developments to cerebral, hormonal or nervous phenomena and finally to the physical or chemical order. Consequently, Lévi-Strauss considered Sartre's biographical and anecdotal histories to be unintelligible by themselves. If one moves to a higher power phenomenal scale comprehension is gained but information is lost. Consequently, getting outside of History *by below* ends up in Psychology and Physiology, while constructing a general evolution of organized beings *by the top* ends up in Biology, Geology and Cosmology (Lévi-Strauss, 1969, pp. 257-262).

Against Sartre's project, Lévi-Strauss proposes a Science of the Concrete in which Structuralism permits overcoming the inherent subjectivity of the social sciences and humanities which involves human beings studying other human beings (subject = object). His solution for this problem is even murkier: with Structuralist methods an anthropologist or sociologist is able to detect the social structures which regulate specific social phenomena observed at the empirical level. Social structures in turn reflect a third level of neurological structures further down which constitute a basic grammar of all humans (see Figure 6 in Gregory, 1978, p. 100). Objectivity is obtained by going below to lower phenomenal scales much in the way that an astronomer achieves objectivity by going above to macro scales or a molecular biologist by going below to micro genetic scales. Lévi-Strauss held these views until the end of his career. In the conclusion of one of his last works *L'homme nu* he stated that the conscious mind is deceiving so one must go to structural objects situated at the subconscious level below the interfering forces of society. Existentialism by contrast was sterile because it reintroduced the subject (Lévi-Strauss, 1971, pp. 563, 571).

In *Outline of a Theory of Practice* Bourdieu (1977) offers a third way out of this quarry through dialectical practice in social research which mediates Structuralist objectivity and Phenomenological subjective particularism. For Bourdieu, *phenomenological knowledge* merely seeks to make explicit the truth of primary experience of the social world and Mauss is erroneously cited as an example of this kind of approach when he probably had Sartre in mind (Bourdieu, 1977, pp. 2, 4-5).

The *objectivist structural hermeneutics* of Lévi-Strauss in turn breaks with primary knowledge of native experience and representations of that experience because it gives great importance to social and linguistic object relations which allegedly structure practice and representations of practice. In other words, the observer often introduces the principles of his relation to the object of study and obtains a mere static repertoire of idealized rules determining how the people in a specific society ought to behave. Structuralist knowledge is thus synchronic, produces culture as a map for outsiders and makes a virtue of a foreign anthropologist's lack of practical mastery in the subtilties of another culture (Bourdieu, 1977, pp. 2-3).

Dialectical knowledge in turn deals with practice involving social strategies and spontaneous semiology in which the observer gains a mastery of the symbolism of social interaction (tact, dexterity, know how) in everyday games of sociability. This kind of knowledge relates objective structures to the structured dispositions which update and reproduce the rules over time. The result is a second break with primary experience, which Bourdieu considers to be a third-order of knowledge, a theory of theory, an inquiry into the limits of structuralist objectifying which only grasps practices from the outside instead of being situated within the movement of their accomplishment. Bourdieu is emphatic that this approach in no way validates a return to the subjectivism of naïve humanism and does not cancel the gains of objectivist knowledge but rather conserves and transcends them (Bourdieu, 1977, pp. 2-4, 10)

Cultural virtuosity is only gained through long-term ethnographic research, which goes beyond merely learning the rules. By observing day-to-day life over at least one annual cycle of seasons and focusing on how individuals bend and break rules in their pursuit of material and symbolic capital, a researcher witnesses practice, including the influence of his or her presence on this. As my old thesis supervisor used to say: "after a month in the field you think that you know everything but after six months you realize that you know nothing" (Peter Rivière, personal communication).

At the same time that Bourdieu published the French version of the *Outline*, the post-structuralist anthropologist Geertz offered a similar model of degrees of remove from what is observed. The social constructions/generalizations of a participant ethnographer in the form of field notes are one degree removed from the day-to-day behavior observed as are the ideals/rules offered by the people studied. The text produced in the ethnographer's own language for consumption in academic production are twice removed. Ethnological comparison between cultures is thrice removed and those made by Lévi-Strauss are four times removed and are so general as to be useless. Indeed, Geertz was dubious about the possibility of cross-cultural comparison at all. In his view ethnography is like clinical inference: it does not generalize across cases through description and explanation but delves ever deeper into cases in order

to produce inscription (thick description) and specification (diagnosis) (Geertz, 2000, pp. 11, 24-27).

Ironically, the *Outline* itself suffers from many of these problems. The book was written twenty years after Bourdieu's original "fieldwork" and the theoretical chapters are the result of the reflections of an experienced academic. Bourdieu went to Algeria in 1955 as a young French conscript during the war for independence and as such worked there as an ethnologist whose job was to describe Berber society for use by the French military, i.e. cultural maps for imperial outsiders. The ethnography produced describes Berber culture as it was supposed to have existed before Algeria became a French colony more than a century before. This was an impossible and questionable task, much like that of Boasian anthropologists in the United States who in the early 20th Century tried to preserve Amerindian culture for posterity by interviewing elderly informants who had lived in reservations for decades if not their whole lives. The Algerian experience was so disagreeable that Bourdieu stayed on as a critical lecturer of Philosophy at the University of Algiers until death threats made by conservative French occupiers forced him to leave the country (Grémion, 2005). Because of this, his translator Nice (1977, p. vii) thought that the contradictions faced by a French ethnologist during the Algerian war of independence helped induce a move of Bourdieu to (critical) Sociology.

Of interest for this inquiry into methods is how Bourdieu summed up his career in the Huxley Memorial Lecture given at the Royal Anthropological Institute in 2002 which was published post humorously in its flagship journal. In the lecture great importance was given to how personal and professional biases deeply influence the kind of investigation undertaken, which varies according to gender, age, religion, national educational system, theoretical lineage and specific institution of the researcher. Bourdieu felt that if human scientists mobilized their past experience through self socio-analysis they could compensate for bias and steer a middle course of "transcendent participant objectivation" between naïve objectivity and partisan subjectivity (Bourdieu, 2003, pp. 181-185). In other words, know thyself in order to better understand others.

2.5. Relational Quasi-Subjects and Quasi-Objects

Bourdieu's ideas concerning research interests and biases as influenced by the career lifepath of specific researchers can now be more systemically envisioned philosophically by relating them to Latour's relational fields of intertangled quasi-subjects and quasi-objects. Much like what Latour does with other dubious dualistic relationships present in Western thought, such as nature-society, matter-supernatural and individual-society, he rearranges subject-object relations with four groups of modes of existence which locate

researchers ontologically within their investigations and not objectively outside them. Due to an erroneous mode of existence present in Western science which Latour (2013) calls "double click" [DC], researchers are forever tempted to jump directly from subject to object or from the beginning of a process to the final outcome, without exploring the intermediate paths/ passes/interactions in a relational chain. He holds that this is not only a problem for rationalism but also for phenomenology when for example critical sociologists do "targeted research" that focuses on one specific social group and not the entire social network/assemblage. This kind of research generates only partial results that are often premature and conclusions that are biased (Latour, 2005), which echoes a point that Ratzel made against 19th Century evolutionary theory.

To avoid this, Latour proposes a radical empiricist research agenda which starts with exploring networks of association between heterogenous animate and inanimate elements [NET] guided by interpretative keys of preposition [PRE] which qualify the type of connections to look for. Then, a first group of three associated modes of existence deals with *neither objects nor subjects*. Reproduction [REP] explores continuities in the form of lines of force, lineages and societies. Metamorphosis [MET] explores mutation and transformation expressing difference. Habits [HAB] involve uninterrupted courses of action expressing essence which can turn into [DC] if one is inattentive to occulted passes and loses sight of the research preposition defined by the interpretative keys. A second triad of *quasi-objects* are composed of inventive technology [TEC], artistic works of fiction [FIC] and reference works [REF] which through inscription access remote entities. A third triad of modes deals with *quasi-subjects* which embrace familiar phenomena studied by the human sciences. Assemblies are circumscribed and regrouped by politics [POL]. Specific cases are linked and extended by law [LAW] in order to ensure the continuity of actors and actions. Persons are saved through final alternity provided by religion [REL] and so gain access to one's neighbors here on this world and not in the other world. Finally, the fourth triad of modes *unites quasi-objects and quasi-subjects*. Passionate interests and value judgements are created through attachment [ATT], the scope of framings is extended with organization [ORG] and scruples linking ends and means are defined by morality [MOR] (Latour, 2013, pp. 30, 61, 275, 283-284, 289-296, 312-313, 323, 488-489).

This is obviously a tall and perhaps impossibly abstract order for research but a number of correspondences with Bourdieu's personal experience approach to objectivity and subjectivity permit making this research agenda more concrete and are discussed below in the section on how to avoid bias in research.

3. Anticipating and Controlling Bias through Relational Research

3.1. Cultural Dissonance in Ethnography and "Rural" Research

The potential for cognitive dissonance between researcher and researched is greatest in non-urban settings, particularly in foreign countries and in remote areas where lifestyles can be significantly different from those practiced in the global metropoles where most scientific knowledge is produced. Anthropologists have long encountered this problem in ethnological research. During my postgraduate studies at the Institute of Social Anthropology of the University of Oxford, the ideas of Evans-Pritchard were still quite influential ("E-P had said this and E-P had said that and his recommendation of three years doing research was taken seriously"). Ideally, after one year in the field, another year would be spent back at Oxford consulting relevant literature and reflecting on what was encountered in the first fieldwork. Then the D.Phil. student would spend another year in the field doing research that was empirically and theoretically better informed. Granted, part of the long time in the field reflected the necessity to learn a foreign language, which can take years to achieve.

Few anthropologists actually accomplished this ideal, especially from the 1970s onward when they started studying social realities in their own countries where they thought that they knew the language. However, at the same time that anthropologists started studying "home", socio-linguists were showing that considerable class and regional variation existed within countries which could make communication difficult between different social groups which had different varieties of spoken and body language (Hall, 1969; Fishmann, 1972; Gumperz and Hymes, 1972).

Outside of Anthropology, the rural sociologist Robert Chambers made one of the first systematic critiques of rural research. He is based at the Institute of Development Studies (University of Sussex) which advocates alternative forms of development less centered on industry concentrated in large urban areas, hence the title of his 1983 book *Rural Development: Putting the Last First*. Chambers was a contemporary of Michael Lipton at the IDS whose 1979 book *Why Poor People Stay Poor* attributing rural poverty to urban bias in development policy generated a lively debate with Neo-Marxists of the time (see Moore, 1984, for this debate).

Chambers (1983) specifically criticized a number of biases of urban-based academics: 1) *spatial* (studying people located along asphalt and roadside), 2) use of quick *surveys* (due to lag of time for research because they were stuck at an urban desk, had domestic obligations and hence did not have the time for prolonged ethnography which only students do but do not well due to their inexperience), 3) involvement in *projects* (which are atypical, show-piece

experiments), 4) *personal* (research of elites who are male, active, present and living, i.e. have a social background similar to their own), 5) research is done during the *dry season* (in order to avoid travel difficulty, when the harvest is in and when celebrations take place), 6) *diplomatic* (due to issues of politeness and timidity of the poor, researchers are not shown shameful and polluting poverty) and 7) *professional* (research emphasis on innovators and academic specialization precludes seeing the whole picture researched) (Chambers, 1983, pp. 13-23). The cumulative effect of all of these biases was glorified *academic tourism* so that findings only reflected preconceived ideas about what to look for. Against this, Chambers (1983) suggested that researchers pass a whole annual cycle in the field in order to experience local reality in good times and bad, i.e. something akin to what anthropologists used to do (Chambers, 1983, pp. 10-12).

In the specific case of rural geographers, the post-structuralist Chris Philo once complained about the distorted research done by older generations of rural geographers who were predominately white, male, middle-aged, married, middle-class individuals who were sound of mind and body and lived in cities. So, for many of the same reasons cited by Chambers (1983), rural geographers often studied successful farmers with the same social background as theirs (Philo cited in Philips, 1998, p. 43).
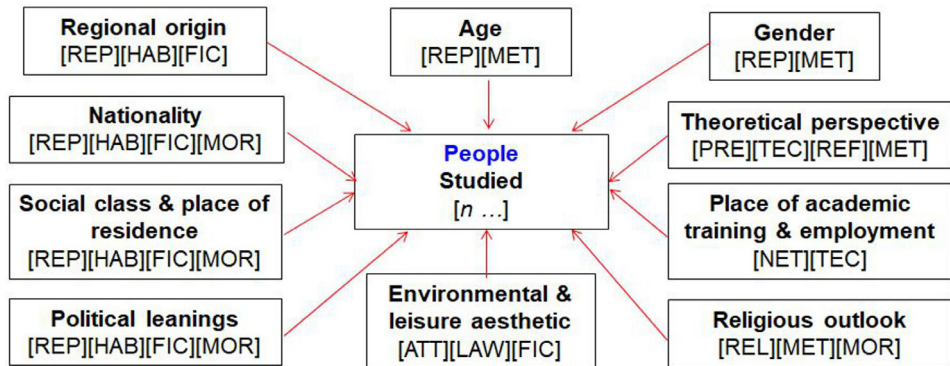
This was corrected during the 1990s with new lines of cultural research on gender relations, unsuccessful farmers who could become homeless and relationships with animals and other non-human actors (Cloke and Little, 1997; Philips, 1998; Whatmore 1998, 2002). However, certain urban biases persisted with regard to personal environmental and recreational tastes present in subsequent counter-urbanization, multi-functional and relational actor-network research which emphasized ex-urbanites who migrated into the countryside or pursued leisure activities there and quite literally took it over politically (Boyle and Halfacree, 1998; Murdoch, 2006; Woods, 2011). Fielding (1990, pp. 234-238) was quite critical of this process and listed only eight opportunities for local rural people introduced by the new actors against 28 threats which could cancel out the few opportunities created for them.

3.2. A General Model of Objectivity and Subjectivity in Research

With these arguments in mind, if we combine Bourdieu's and Latour's philosophical prepositions and apply them to social research a general model of possible bias can be offered with which to anticipate and compensate researcher biases before, during and after undertaking research in the field or in the laboratory (fig. 2). In the reformed Western worldview involving fourteen modes of existence proposed by Latour (2013), a relational scientist tries to dialogue with modes of existence possessed by other peoples of the world and Descola (2013) shows ethnologically how this can be done. Overcoming the

crude nature-society amalgamation with more modes of existence obviously results in more sensitive research but the same fourteen modes of existence can also be sources of bias that a scientist brings to her research.

Figure 2. Avoiding bias before, during and after undertaking research

Regional origin [REP][HAB][FIC]	Age [REP][MET]	Gender [REP][MET]
Nationality [REP][HAB][FIC][MOR]	People Studied [n …]	Theoretical perspective [PRE][TEC][REF][MET]
Social class & place of residence [REP][HAB][FIC][MOR]		Place of academic training & employment [NET][TEC]
Political leanings [REP][HAB][FIC][MOR]	Environmental & leisure aesthetic [ATT][LAW][FIC]	Religious outlook [REL][MET][MOR]

Source: Author's elaboration, following Latour (2013)

A simple example demonstrates how complex biases may exist even when the researcher and the researched are from the same country and speak regional varieties of the same language. Imagine the difficulties that a young male Jewish researcher from an elite academic institution located in metro New York, Chicago or Los Angeles would have trying to understand what an elderly female poor black devout Baptist from rural Mississippi says let alone her livelihood. The dissonance involved would almost the same as those which vexed classical Anthropology.

These social biases apply to both biophysical and human scientific researchers. In fact, the diamond shape of fig. 1 exaggerates objectivity achieved in the biophysical sciences which operate above or below the human scale of phenomena. It has long been recognized that investigative instruments such as electron microscopes shine light on micro-phenomena and so distort their appearance. Radical environmentalists like Pepper (1996) and Merchant (2005) pointed out that the biophysical sciences have an anthropocentric worldview in which other beings are judged according to their likeness and usefulness to humans. Ever since religious topics were expelled from the purview of Science and spiritual beings such as gods, angels and saints removed from the top of the medieval Great Chain of Being, mankind was freed to rule supreme.

Latour's relational approach would correct these biases by not separating physical and metaphysical phenomena and would roll over phenomenal scales to create a level-playing field between other beings and humans and so overcome this dualism as well as that separating nature from human society. Western science would use fourteen modes of existence, four of them in common with other beings, with which to better dialog with non-scientific worldviews of other peoples of the world as well as with other beings and in the process overcome

Eurocentric and anthropocentric bias (Latour, 2013, pp. 291-292). Seemingly in agreement with Bourdieu, Latour (2013, p. 278) states that "readers and investigators along with the author are going to have to specify their pedigree while agreeing to speak in the first person". Unlike Lévi-Strauss who tried to protect rational Science by demonstrating that other peoples of the world were also rational, Latour and Descola seek to reform Science by making it more inclusive.

4. Illustrating the General Model in Coastal Rio de Janeiro

Now let's illustrate the general model in less abstract terms by exposing possible subjectivity in longitudinal research undertaken in coastal Rio de Janeiro since the mid-1980s. This is a tricky business because if I emphasize subjectivity too much my work can be questioned for lack of objectivity or this article criticized for being narcistic. If we fill in the possible sources of subjectivity from fig. 2 with my personal and professional experience a number of possible conflicts of interest become apparent (fig. 3). To help generalize from this specific example the reader might put yourself in my shoes and do the same, i.e. substitute my "I" with your "I".

Figure 3. Sources of sensitivity and subjectivity in long-term research undertaken by the author
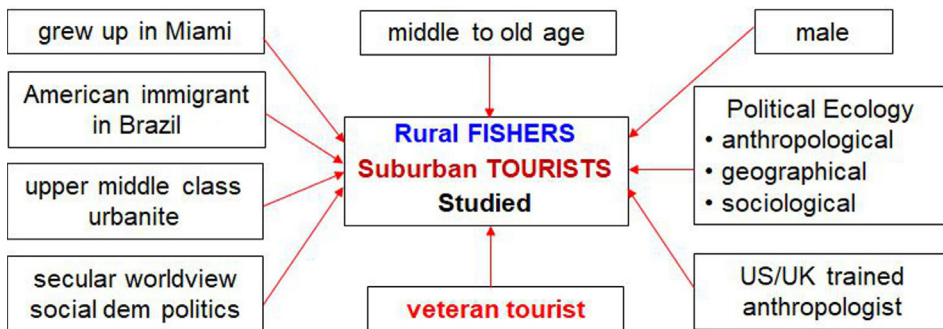
Source: Author's elaboration

A number of issues immediately pop up in my case. How did growing up in a multicultural city like Miami make me more curious about different kinds of behavior? The same could be asked about my original academic training as an anthropologist first in the United States then in the United Kingdom. Having immigrated to Brazil more than forty years ago and therefore being bilingual also could have made me more understanding and capable of translating the reality studied to Brazilian and foreign academics. Being married to a Brazilian who is a female rural geographer also helped me to better understand gender

relations and socio-spatial complexity in the country, particularly when we have done joint research together in different regions of Brazil.

However, on the negative side, being an American immigrant made my acceptance by Brazilians easier than if I had been a Bolivian and this could have made my general outlook on life less critical. Furthermore, I could still harbor hypocritical notions of cultural superiority, though socio-political conflict in 21st Century America throws cold water on any such notion. If I were British, French, German or Japanese it might have been easier to regard Brazil as a half-civilized country and I have on occasion heard such comments made by persons of these nationalities. What Brazilians and non-Brazilians alike to do not understand at all is my life decision of what anthropologists call "going bush", i.e. identifying and becoming part of the original object of study. Indeed, during the Cold War some work colleagues even suspected me of being an American spy.

In intellectual terms, academic training in the United States and the United Kingdom places me squarely within Anglo-American empiricism but with a phenomenological inclination due to the kind of Anthropology studied, particularly at the New School for Social Research. At that institution I was influenced by the renowned philosophical anthropologist, Bob Scholte, who introduced me to the Lévi-Strauss-Sartre debate as well as to the Althusser-Foucault debated (not treated here). The overall economic and political milieu promoting social protests at that time and the budding environmental movement made my scientific outlook highly critical, typical of what Lash (1990, p. 2) called "sixty-eighter" academics. This intellectual baggage added another layer of hostility toward mass tourism to that which already existed due having grown up in a world-class tourist city like Miami. I have hated tourists since childhood so we are talking about subjectivity of biblical proportions.

A long-time theoretical interest in anthropological, sociological and geographical variants of Political Ecology would explain studying the theme of socio-environmental conflict during most of my career in different regions of Brazil and how my research methods changed over time. However, the place of study has to do with having been a weekend tourist in Sepetiba Bay well before deciding to do research there and this caused a number of subjectivities typical of a "68er academic". This research was taken up opportunistically. I was unemployed after finishing my doctorate and had a meagre post-doctorate grant with which to do research somewhere and the cheapest place to do it was based in my father-in-law's weekend house on Jaguanum Island located in the middle of Sepetiba Bay at a distance of only sixty kilometers west of Rio de Janeiro. With house, board, transport and a prior acquaintance of the fishers and tourists, ethnographic research was viable given the limited funding. All of this sounds too good if we keep in mind the biases pointed out by Chambers (1983) above.

If on one hand, the ethnography no doubt gained from "being there" as a tourist since 1976, on the other, as Smith (1977) long ago pointed out: veteran

tourists with environmental inclinations can be quite resentful of the changes in the landscape and behavior caused by the rise of mass tourism (table 3). Indeed, this is perhaps the greatest source of subjectivity in my research over time as bay fishing progressively succumbed to urban-industrial pollution and there was an influx of elite and then mass tourists. This is evident in a number of slides used in a presentation in an International Geographical Union commission meeting held in Ireland in 2011 which are taken apart below in figs. 4, 5, 6 and 7.

Table 3. Type of tourist, volume and expectations

Tourist Type	Volume of Tourists	Adaptation to Local Norms
Explorer	Very limited	Accepts fully local conditions
Off-beat and Veteran	Uncommon but seen	Adapts well to local conditions
Elite	Rarely seen or ostentatiously seen	Creates enclave of urban amenities
Incipient mass	Steady flow	Seeks provision of urban amenities
Mass	Continuous flow	Expects provision of urban amenities
Charter	Massive arrivals	Demands provision of urban amenities

After: Smith (1977, p. 12)

Fig. 4 presents the shift from pioneer-veteran weekend tourists like myself to new elite weekend tourists in the 1980s. The latter wanted greater comfort in their houses which provoked keeping-up-with-the Jones renovating and construction of more buildings. Manicured landscaping domesticated the landscape and involved removing native vegetation. One channeling of a little river involved dynamiting a waterfall for rock and gravel resulting in the river drying up and the loss of the main source of fresh water on this part of Jaguanum Island. The new tourists closed off their properties with seawalls and fences and displayed keep-out signs in multiple languages. Subjectivity in this slide was indirect by showing changes in the land away from a "wilder" landscape to a domesticated one. Up to here most academics would probably agree with the "critical" arguments presented because we share a common intellectual worldview hostile to mass tourism.

The slide treating changes after 1990 was more blatantly class-biased (fig. 5). Only someone with the same Brazilian social background would consider the derogatory class terms for mass tourists used by older tourists and fishers to be amusing. Great rivalry has existed between Brazil and Argentina over time. In response to the racist slur that Argentinians use to demean Brazilians by calling them little monkeys, i.e. having less European ancestry, Brazilians called them *cucarachas* (the Spanish word for coach roaches). Similarly, *farofa* is a Brazilian derogatory term for lower class tourists who have very different

Figure 4. Tourism bias slide 1

Source: Hoefle (2011)

aesthetics concerning food, drink, trash, noise and musical taste than the re-searcher or even some of the fishers. *Farofa* refers to a manioc-meal side dish to a roasted chicken taken to the beach by poor people in the past. The word is thus used as shorthand for poor people who come from distant suburbs to pass the day on beaches located in rich neighborhoods of Rio de Janeiro.

Day trippers may not be *chic* like the wealthy European tourists of the past but more respect should have been given to their visual, sonorous and aromatic aesthetics. Today these tourists arrive in their own motor boats, jet-skies or in taxi boats and pass the day on the beach. They are only considered to be visual pollution for older people and not necessary for younger people. The latter can consider the beach to be dead during the week when no one is around. For them, silence is not golden, it is boring. Each boat may blast out a different kind of music but that is part of the social agitation of the weekend. Day trippers may slowly barbeque fatty meat and drink enormous amounts of cheap beer over a period of up to eight hours spent on the beach which can indeed represent a risk to their health. However, increasing obesity is also sign that prior to the COVID crisis Brazilians were eating more than in the past, which is a problem best dealt with by doctors and nutritionists and not by a cranky old anthropologist.

Much the same can be said of the weekend tourists who have built up the beaches, particularly after mains electricity became available in 2010. Houses

Figure 5. Tourism bias slide 2 (biases in red)
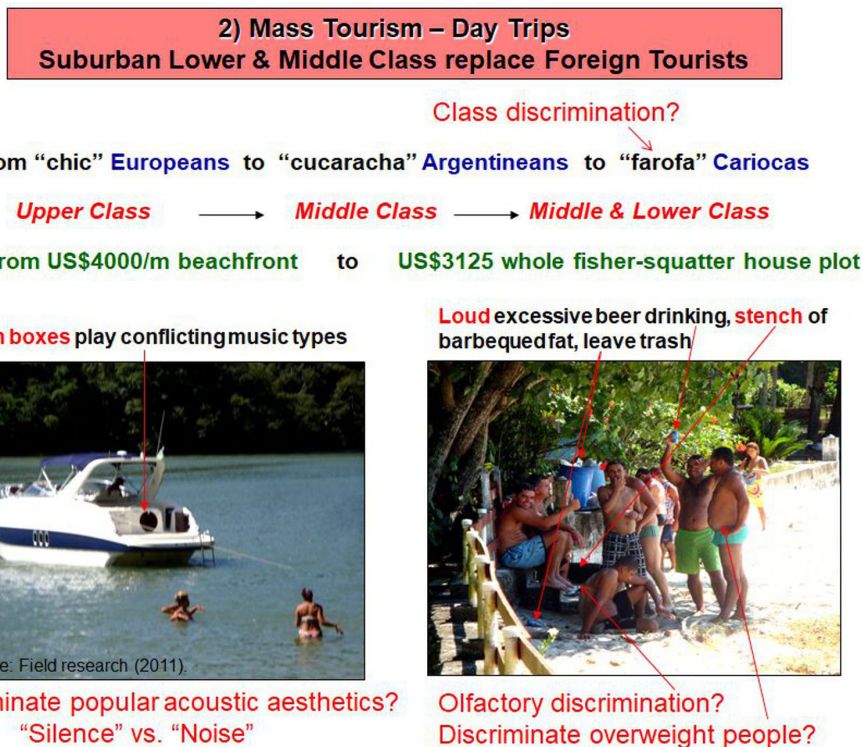
Source: Hoefle (2011)

may seem to be jumbled together for the older tourists who own houses on large rural-like lots. The new owners recreate their living space from the suburbs so that their second homes do not represent a respite from the city or involve some illusionary countryside ideal. Quite the contrary, music blasts out from the houses from early morning to late in the evening. Lights blare all night long for alleged security problems or just plain fear of darkness. In 2010 the environmental protection agencies only approved installing electricity on the islands of Sepetiba Bay if were the rural kind which forbids the use of street lights. The new house owners were undeterred and put up their own lighting in front and around their houses. Again, whose lighting aesthetics rule: lit up like the city or dark like the countryside? (fig. 6). No doubt the wildlife does not like the excessive lighting and it is harder to see the stars today but most city folk never see the stars anyway.

The last slide of the 2011 presentation neatly sums up the subjectivities of the researcher. It was originally meant to be an artistic photograph of the study area to end the presentation. The picture was taken just before sunset during the winter in the off season for tourism (fig. 7). The moment indeed existed but it only presents what Clifford (1986, pp. 6-7) called "half of the truth", i.e. there were only a couple of fisher boats and two distant ships in

Figure 6. Opposing lighting aesthetics for fishers and new tourists versus old tourists
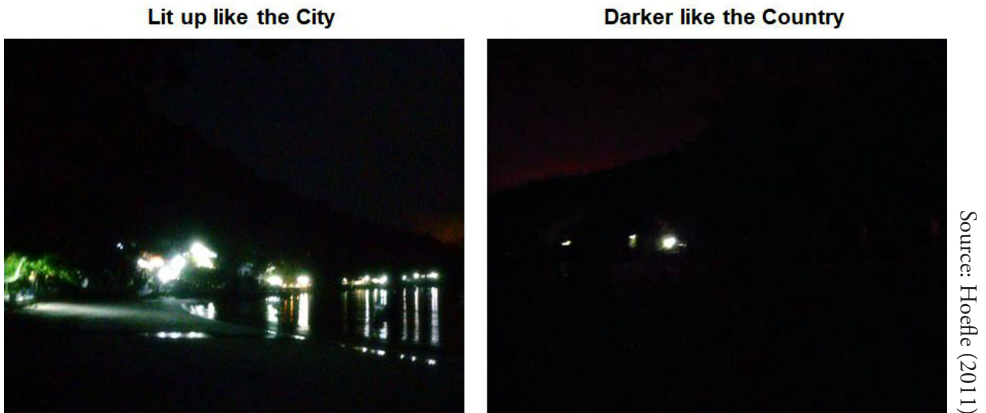
Source: Hoefle (2011)

the photograph. The other "half of the truth" would be the agitated days of summer, such as the long weekend of Carnival when the beach is full of different kinds of people. Why should a landscape with fewer people and human artifacts present be more aesthetically pleasing? Why cannot both situations be considered beautiful? In fact, a personal preference for more "pristine" tourist destinations expresses an unsatisfactory nature-society amalgamation in the same way that sublime nature landscape paintings and full conservation areas without the presence of (native and rural) people do (cf. Descola, 2013; Latour, 2013).

Figure 7. Artistic half-truths: winter and/or summer?

Source: Hoefle (2011, 2019)

5. Discussion and Conclusions

To paraphrase Nietzsche's quote cited at the beginning of this article: "the more 'Is' the better will our objectivity be". This involves Bourdieu's knowing thyself in order to better understand others as well as Relational Ontology's engaging the human and non-human quasi-subjects and quasi-objects in the

process of building knowledge. I have tried to show how plurality also extends to Epistemology, each of which represents a different "eye" on a study topic.

This is not a mere philosophical issue because epistemological differences between the biophysical and human sciences lie at the fracture of Geography into physical and human specialties in which never the twine shall meet. In Geographical Thought Cresswell (2013) characterizes this rift well in the first paragraph of the two chapters devoted to relational approaches in which he sums up the lack of mutual understanding between members of the same department when they encounter one another: they are reduced to exchanging social pleasantries concerning their respective families (Cresswell, 2013, p. 239). Simmons and Cox (1985) long ago showed how reductionism could be replaced by interdisciplinary scalar holism so that physical and human geographers could dialog again. Then, Latour (2013) and Descola (2013) completed the task by demolishing the intellectual separation between natural and human phenomena and replaced it with relational fields of entangled human and non-human phenomena so uniting all scientific endeavor.

After an admittedly long philosophical discussion of methods a concrete model for avoiding researcher bias was presented and in illustration I offered myself up as a scapegoat and by doing so have hopefully avoided hypocritically criticizing fellow academics. The model in turn can be generalized by readers if they put themselves in my place. For readers who have previous fieldwork experience, this exercise applied to research which has already been done permits reflecting on possible subjectivities that may have occurred and so compensate for them when writing texts for publication. For young academics who are about to do fieldwork for the first time, the exercise can proactively avoid subjectivity. The exercise can also be helpful for improving the general discussion of methods in a thesis which is often a weak point that is frequently criticized by examiners at the time of the defense/viva. In addition to the philosophical issues raised here, of course, excellent books on specific geographical methods, such as Cloke *et al.* (2004) and Gomez and Jones (2010), have to be included in the discussion.

Finally, the example cited here concerning fishing, tourism and urban-industrial development in what is now the outer metro area of Rio de Janeiro also shows how Political Ecology has changed over time. Political Ecology first developed at the UC-Berkeley as an heir to Cultural Ecology and Sauerian Cultural Geography. Cosgrove and Duncan (1993) once complained that the Berkeley school engaged in "hairy-chested fieldwork" in which mostly male researchers did first-hand field research in remote rural places.

By the turn of the century Political Ecology had changed considerably by incorporating methods that investigate power, knowledge, contexts and scale through discourse analysis of policy texts and legislation, archival research, sociological analysis of complex institutions and multi-scalar/locale analysis (Peet and Watts, 2004; Paulson, Gezon and Watts, 2003). Then in the 2010s political ecologist took part in critiques of neo-liberal climatic mitigation policy

which provoked nature enclosures against tribal peoples and poor peasants (Peet, Robbins and Watts, 2011; Büscher and Fletcher, 2014, 2018; Taylor, 2015). To do this, concepts from Urban Sociology such as "environmental and racial injustice" were added (Holifield, 2015) as well as relational research methods, though not always in a consistent way (cf. Lave, 2015). Finally, by the late 2010s there were calls for urbanizing and industrializing Political Ecology (Huber, 2017).

Over the years all of these issues have appeared in longitudinal research undertaken in coastal Rio de Janeiro (Hoefle, 1992, 2014) as well as in other regions of Brazil (Bicalho and Hoefle, 2015; Hoefle, 2013, 2016, 2019, 2020; Hoefle and Bicalho, 2016). The veteran tourist may have been sickened by "environmental degradation" and "sonorous, luminous and visual pollution" which grew worse over time in coastal Rio de Janeiro but the researcher subject was fascinated by how the transformations reflect larger global issues.

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