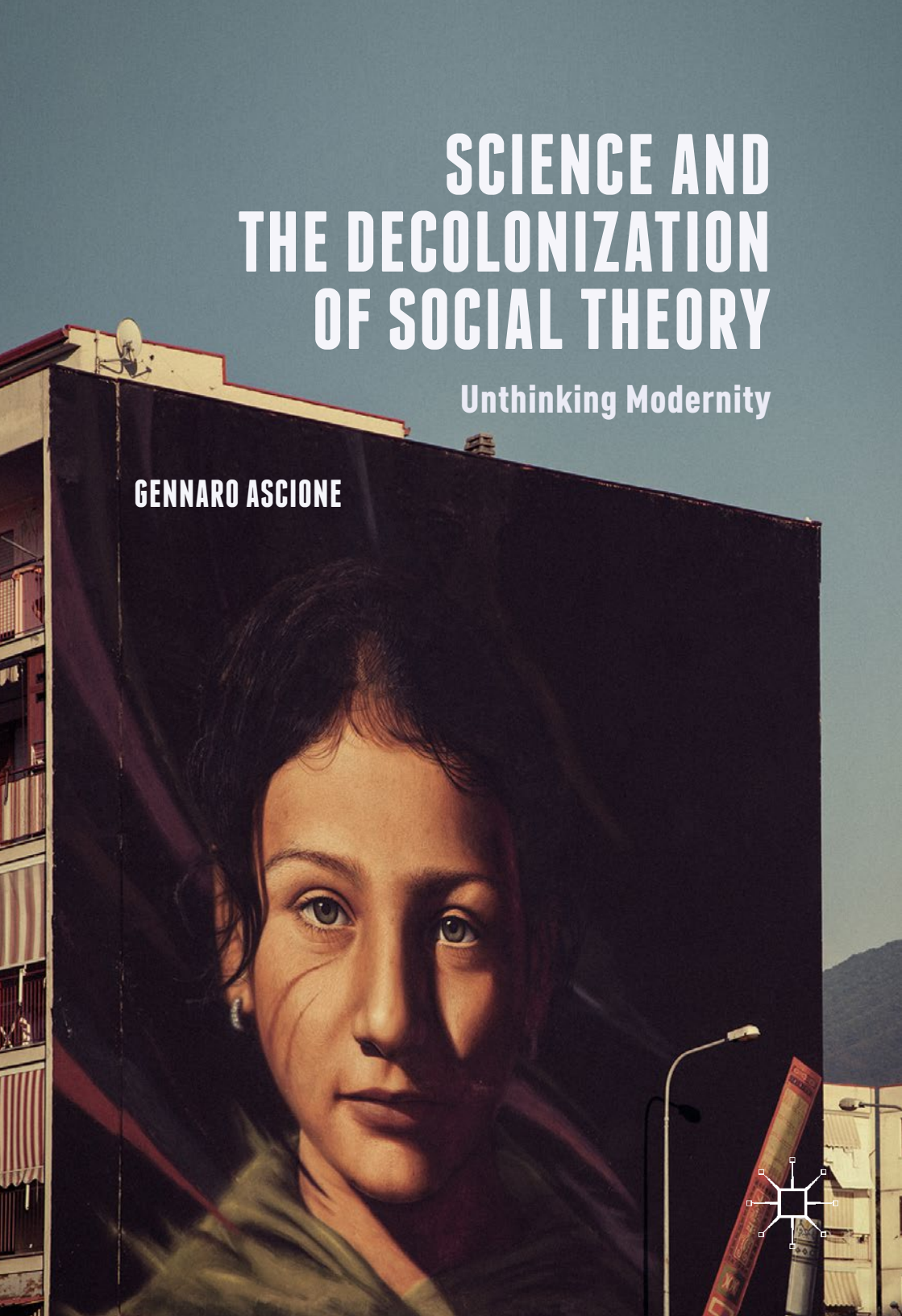
SCIENCE AND THE DECOLONIZATION OF SOCIAL THEORY

Unthinking Modernity

GENNARO ASCIONE



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For Lucia

Preface and Acknowledgments

On the night of 2 November 1975, Pier Paolo Pasolini was murdered on a deserted beach near Rome. Pasolini devoted the final months of his life to drafting some pedagogical writings.[1] His pedagogy aimed at unveiling the false promises of modernity that had fed the aspirations of the post-World War II Western European generations and the cultural conformism that the faith in the salvific potential of modernization was producing. As a rhetorical device, these writings were addressed to an imaginary interlocutor: a boy from Naples, Gennariello. From this imaginary boy, Pasolini wrote, he would have learned the secrets of questioning modernity, which the life-world of Neapolitans treasured. For Pasolini Naples represented, in Western Europe, what the urban ghettos of New York meant for the United States and what other places he had filmed in Yemen, Uganda, Tanzania and India were able to express for non-Western worlds. They were sites of passive poetical resistance to modernization, where the inability of modernity to come to terms with the progressive, universal, and emancipatory power it claimed to possess was exposed. 'Neapolitans are like a great tribe that, instead of living in the desert or in the savanna, as the Tuareg or the Beja, lives in the womb of a big sea city. And this tribe has decided to resist what we use to call modernity … It is a refusal raised from the heart of the collectivity (it is

[1] A recent edition of these collected writings is Pasolini 2008

known about collective suicide of herds of animals) … It is a profound melancholy, as all the tragedies that take place slowly; but it is also a profound consolation; because this refusal, this negation of history, is just, it is sacrosanct.'[2]

Pasolini romanticized what Gramsci had identified as the position of subalternity that Southern Italy came to incarnate in the imagery of the Italian post-Unitarian nation-state. An imagery whose hyper-masculine grammar combines uneven historiographical simulacra: the nationalist epopee of political unification (Risorgimento); the mythology of the pristine Italian origins of cultural modernity (Rinascimento), and the perennializing glorification of the Roman Empire (Fascismo), with the silenced ominous histories of the colonial expansion in Africa (Italiani brava gente), the caricatural official narrative of the brutal repression of the peasant revolts that followed the Savoy colonization of the South of the peninsula (Brigantaggio), and the epic of the struggle for liberation from Nazi-Fascism that led to the constitution of the post-World War II Republic (Resistenza). A monstrous, fragile imagery, whose rhapsodic sense of belonging, for many people nationwide, still remains anchored to the alterity represented by the stigmatized migrant 'southerner' (terrone) from the 'failed' regions of the South (Mezzogiorno), of which Naples is the epitome. Pasolini meant to oppose what he described as his own modern bourgeois, northern, erudite, clerical education, with the vitalism, the spontaneity and the intuitive intelligence that his ideal-typical plebeian Naples dweller naturally bore. Yet, in so doing, he wrapped Gennariello in a reversed version of that traditional narrative, thereby not fully challenging the nationalist post-colonial construction of polarizing identities he aimed at countering. On the contrary, (un)fortunately, the Naples as a passionate fresco of 'heretic orientalism' that Pasolini loved to paint, if ever existed, was already dissolving rapidly into the diegetic peri-rural, trans-urban habitat of oblique, scattered, elided social in-betweenness, filmed by Salvatore Piscicelli in those same years.

Notwithstanding the grating dissonance between the anthropological exceptionalism with which Pasolini invested me and what I experienced growing up in an urban neighborhood on the eastern periphery

[2] A more recent edition of the same interview is retrievable in Siti and De Laude 1999: 230.

of Naples, Ponticelli, his words remained in my mind. For a long time, I have been unable to detect that an enigma hides deep beneath that dissonance. *Ex definitione*, an enigma provides its own solution in the way it is formulated but, at the same time, it conceals the solution beneath its contradictory, ambivalent, incongruous formulation. Only enigmas wrongly formulated are unsolvable. Today, I understand that it was a different formulation of Naipaul's *Enigma of the Arrival*; the same uncanny arrival from the sea that Giorgio De Chirico had prefigured in an hypnagogic hallucination, decades before.[3] Whereas Naipaul was confronted with his arrival from Africa to England, Pasolini knew that Gennariello could find his own pathway to decrypt the enigma of the arrival of modernity in Naples, that is, the enigma of the arrival of Naples into modernity. Rather than a mere existential encounter in space and time, the arrival is the epiphany of forces that run along intangible ties, revealing existing connections. Connections resuscitate visions of shared forgotten remembrances: the colonial, imperial, capitalist formation of the imagery of modernity. Remembrances speak the intimate idiom of silenced histories that animate alternative politics of theory. Contemporary social theory no longer has to contend with the arrival of thoughts and thinkers *from* Africa *to* Europe; rather with the presence *of* Africa *in* Europe. That is the synecdoche for the planetary transformative embodiment of the colonial difference into the conceptual archive of the West.

Working and thinking far from my home town in the years that followed that early pedagogical reading, I have found a certain relief in appreciating that the exceptionalism that had forged my cultural identity and shaped my political intemperance was not endowed *in se* with any essential, intrinsic trait (except for Naples as a football team). For the vast majority of places, and people too, the dissonances within modernity are the existential as well as the historical norm. For the awareness of this planetary condition is a viable heterodox strategy of escaping what Dipesh Chakrabarty defined as 'the waiting room of History'. The modernity we have all been obliged to join as temperate guests is a habitation managed by hosts who compete among themselves to establish who has

[3] Naipaul, Vidiadhar Surajprasad. 1988. *The enigma of arrival. A novel in five sections*. New York: Vintage.

the authority to define what modernity is and impose this definition on all the others, when they are unable to persuade the others to accept that definition and what comes along with it. A competition governed by rules that are presented as barely debatable, because simultaneously distinctive and self-generated within modernity's own distinctiveness. Anyone who is 'not yet modern' or 'not modern enough' should adhere to those rules. Under the sign of those rules, the social hierarchies among humans that centuries of capitalism and colonialism produced come to be naturalized. *Unthinking Modernity* concerns the rationalized foundations of the reiterate mental representations that render these illegitimate asymmetries of power coherent, reasonable, defensible and extensible: true.

Many people have contributed to this book, intentionally or not, both within and outside the professional structures of knowledge production. People who solicit critical thinking, something that remains the main antidote to vulgar display of power, complacent conformism and intellectualistic pedantry. Thank you: Gurminder Bhambra, Iain Chambers, Marco Meriggi, Sandro Mezzadra, Robbie Shilliam, Kapil Raj, Mara De Chiara, David Inglis, Meera Sabaratnam, Wong Yoke-Sum, Sanjay Seth, Fa-ti Fan, Arturo Escobar, Deepshikha Shahi, Clara Ciccioni, Giuliano Martiniello, Giuseppe Guerriero, Sergio Albano, Manuel Marzullo, Giuliano Falcone, Claudia Riccardo, Antonio Della Volpe, Michele Pesce, my family and my students.

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Contents

1

Introduction: The Epistemological Ritual of Modernity

A seductive idea animates the work presented in the following pages: limit. Limits are intrinsic to thought; *a fortiori*, they are inherent to the historically determined, ethnocentric configuration of methodical and narrative thinking about the forms of human collective existence called social theory. It is not unusual that when a suspicion of the existence of limits abandons the meanders of marginality to acquire the status of a redundant intellectual awareness, the theoretical territories those limits used to etch call for a different designation of their reciprocal definitional borders. The different designation I propose consists in the disentanglement of the sociological imagination from the ubiquity of modernity. What I contest is the unquestioned reliance on the idea of modernity in social theory. What I investigate is the revocability of modernity as a historical-sociological, epistemological and logical frame. The core argument of this book is that the idea of modernity constrains social theory within the very boundaries that should be problematized. These boundaries are either the limits that the notion of modernity draws around the comprehension and interpretation of long-term and large-scale processes of social and historical change, or the limits that modernity as a frame

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of thinking sets about the possibilities of elaborating post-Eurocentric categories for thinking the world.

The invocation of modernity remains the fundamental epistemological ritual at the heart of identity-and-difference for the community of social scientists, even where this invocation conveys disagreement and contestation. Bhambra correctly argues that 'sociology arises alongside a self-understanding of a world-historically significant modernity' and that 'the institutions and practices of that modernity are neither self-contained nor adequately expressed within the self-understanding of modernity' (2014: 142). *Unthinking Modernity* explores the border between the self-understanding of modernity and what exceeds it. For the way this border is imagined, traced and transgressed marks the fault line between global social theory and its *mise en scène*. What exceeds modernity firmly demands the possibility of unthinking and decolonizing the existing conceptual and terminological apparatus of social theory, in order to move towards different protocols of concept formation whose logic is not entirely inferable from the conceptual archive of the West and its epistemological architecture.

Modernity is both a structure of power, and a mode of power. As a structure of power, it is an ideology bounded to Western domination and white supremacy. As Dussel (2000: 497) puts it, it is a way 'to manage centrality'. As a mode of power, as Wang Hui (2011) clarifies, it is implemented by multiple actors and subjectivities that are hierarchically distributed, moved by specific needs, put under determined pressures, yet transversally positioned in front of meta-geographical dualisms such as Europe/Others, West/East, North/South, metropolis/colonies.[1] In the latter conception, the idea of modernity can be mobilized to preserve, to manage or even to contest hierarchies, although contestation is relegated to an inability to break the tacit agreement about what it is possible to change and what has to be left untouched.

Wallerstein affirms that 'it is quite normal for scholars and scientists to rethink issues. … In that sense, much of nineteenth century social science, in the form of specific hypotheses, is constantly being rethought.

[1] I extend the theoretical scope of the concept of 'modes of power', as a complexification of the notion of social power, introduced in Chatterjee 1982.

But, in addition to rethinking, which is "normal", I believe we need to "unthink" nineteenth century social science, because many of its presumptions—which, in my view, are misleading and constrictive—still have far too strong a hold on our mentalities. These presumptions, once considered liberating of the spirit, serve today as the central intellectual barrier to useful analysis of the world' (Wallerstein 2001: 1). *Unthinking Modernity* starts from the conclusion that there are enough reasons to place the idea of modernity at the top of the list of these misleading and constrictive presumptions. This task cannot be accomplished in the short run: the adequacy of our available categories relies heavily on the aforementioned barriers. Barriers protect the legitimacy of categories, and categories reciprocate by diverting existing epistemological strategies from pointing to the underlying foundations of those barriers towards tactical heuristic, often evanescent, targets. Reconstructing a global social theory as far away as possible from the myopias of ethnocentricity, class, sexual orientation, age, gender, race, ethnicity biases, and all the dualisms that compose the colonial matrix of power in modernity, will depend on how accurate the contemporary collective effort to free our mentalities from erroneous theoretical prejudices has been. The response might, or might not, come from within human and social sciences. However, no doubt human and social sciences are well positioned to take part in this struggle. And the struggle is not going to be a *Blitzkrieg*.

Why Science

The erudite Neapolitan humanist Gian Battista della Porta was notorious for mastering the marvels of polyalphabetic cryptography, that is, a system for encoding and decoding secret messages across more than ten different alphabets. The key-code of polyalphabetic cryptography was called *verme letterale* (literary worm). Science is my *verme letterale* to unthink modernity and decolonize social theory. Science is intended in a specific way in the context of this book: either as a narrative structure upon which Western thinking relies in order to endow modernity with its own myth of the origin (euhemerism), or as a protocol of legitimization

for the epistemological status upon which social sciences, in their historical construction, entrust their nomothetic aspirations (*nomotechnique*).

While the fetishes of the French and American Revolutions are functional to the narratives of political modernity (Bhambra 2015; Shilliam 2015), and the fetish of the Industrial Revolution is functional to the narratives of socio-economic modernity (Parthasarathi 2011), the historiographical fetish of the Scientific Revolution is essential for the narratives of scientific modernity.

In this book it is argued that a different social theory can emerge from active efforts to bring to the surface non-Eurocentric historical narratives and explanations, as a step forward from what Kapil Raj (2007) refers to as the 'relocation' of modernity in the global space, through the reconstruction of the connected histories of science. In recent decades, the relationship between Eurocentrism, science and the colonial formation of the notion of modernity has been explored, contested and partly reversed. Three basic assumptions about scientific modernity have been destabilized: the idea of the transition to modernity thought in terms of the passage from medieval *scientia* to modern science; the predominantly European character of modern science; and the global dimension of the diffusion of modern science to the rest of the world. The idea of the transition to modernity thought in terms of the passage from medieval *scientia* to modern science has been challenged by continuist approaches in historiography of science, which have shown the conjectural nature of many of the space-time boundaries imagined between Europe and the Rest, and between the modern age and the global Middle Ages (Elman 2005; Saliba 2007). The predominantly European character of modern science has been strongly contested by thick inquiries into the enormous contribution of other non-Western scientific traditions to the emergence of what nineteenth- and twentieth-century Western historiography has attributed to the 'European genius' (Bala 2006, 2012; Joseph 2011). The global dimension of the diffusion of modern science to the rest of the world has been deeply undermined by the contextual analysis of the intricate ways in which science is produced by continuous and connected interactions. The notion of the 'colonial penetration' of science into the non-Western world needs to be reframed and rethought in a relational theoretical scenario: colonial subjects co-produced science, albeit within

asymmetrical structures of power and resources distribution (Fan 2004; Harding 2011; Raj 2013).

The significance of science is not limited to the role it plays in the multiple narratives of global modernity. The Western dream of producing a science of society is still attached to modern science (Keat and Urry 2011). Yet, this cognitive tie has undergone relevant changes. Natural science, as every practitioner knows, is hardly conceivable in unitary terms.[2] Even the connotation of 'natural' is currently challenged by the pervasiveness of simulation and modeling in the living tissue of scientific enterprises.[3] Nonetheless, the science to which the social sciences refer is not the exploded, and often collapsed, irreducible multiplicity of knowledges, protocols, idioms, aspirations and failures ranging from applied experimental microscopy to pure mathematical speculation over dark matter, the origins of the universe or supersymmetry.[4] The epistemological and methodological foundations of modern science have been undermined in the twentieth century (Feyerabend and Lakatos 1999; Prigogine 1997; Smolin 2006). Science does not hold fast to its seat on one side of the 'two-cultures split' (Wallerstein 1999).[5] Decisive ambiguities in the epistemological status of the social sciences resonate with the ambiguous epistemological status of science, also because post-World War II sociology and historiography of science have been effective in dismantling the ideological nature of the presumed neutrality of the former (Ashman and Baringer 2001; Latour 1993; Poovey 1998; Shapin 1994). In social theory, "science" incarnates less a nomothetic aspiration and

[2] The idea of 'epistemic communities' expresses the disunity of science when seen from the perspective of its differentiated expertise. See Knorr-Cetina (1999).

[3] The frontiers of scientific methods seem approaching when considered from three main borderlands nowadays: theoretical particle physics, synthetic biology, neurosciences. See David (2013); Bechtel et al. (2001), and Giese et al. (2015).

[4] Ilya Prigogine, since the early 1960s worked on complex systems, often *ante-litteram* Among his first works, his co-authored with Herman about kinetic equation to describe traffic streams stands out as a first attempt to predictions out of probabilistic environment in social action. Together with Isabelle Stenger, he has extensively written about the science of complex systems in physics and biology. See Prigogine (1984); Prigogine and Stengers (1996).

[5] Fox-Keller (1985, 1992, 2002), as a prominent physicist, has been among the first scientists to radically question modern science from a gender perspective. Donna Haraway (1988, 1991, 1997) shares analogous premises, but her research has moved toward the theorization of hybridity).

more a *nomotechnique* of legitimization. Patrick Jackson reaffirms that 'to invoke "science" is to call to mind a panoply of notions connected with truth, progress, reason, and the like—and, perhaps more importantly, to implicitly reference a record of demonstrated empirical success' (Jackson 2011: 3). This invocation remains the main pillar of the epistemological ritual of modernity because, more than other connotations Western thinking attributed to its exceptional historical path, science holds a stronger universalistic appeal to a presumed superior and reliable form of rationality. Thus the decolonization of social theory cannot prescind by a deep critical engagement with science.

The Coloniality of Method

The route taken by this book leads toward a global social theory. This route consists in questioning and rewriting either the words, or the protocols, or the rituals that the colonial and imperial history of social sciences have elaborated, taught and reproduced through the idea of modernity. Modernity is not merely an extensible set of properties or processes that social theory needs to adequately address. Modernity is also a generative grammar. Its resilience is a measure of its ability to subsume and neutralize the uncanny presence of the colonial difference. Conversely, this uncanny presence is a major resource for a different sociological imagination.

The presence of the colonial difference is uncanny because it was on the expulsion of that presence that modernity and sociology based their alliance. It is uncanny to read Weber's *Protestant Ethics*, or to think of Karl Japers's *Axial Age*, against the grain of Du Bois' contention that a distinct Negro civilization has emerged in the Black Atlantic after centuries of enslavement, deportation and exodus (Boy 2015). It is disturbing for classical social theory to take into consideration the hypothesis that, given its diasporic genesis, the Negro civilization is ethically superior to, more future-oriented and more specifically modern than those that predate it. It is even perturbing for modern rationality to figure, with the Du Bois-inspired Detroit Afro-futurist electronic music ensemble Drexcyia, a civilization that thrives in the abysses of the Atlantic. Not the *New Atlantis*, the underwater metropolis that Francis Bacon dreamt of

in his last years, where the House of Science would harmoniously host the brightest fruits of human scientific genius from cultures all around the world. Rather, the underwater colony populated by the hyper-technological amphibious humanoid civilization made of the progeny that descended from the first generation of children of enslaved black women who died in the Middle Passage to the Americas. Fetuses matured in the ocean, who first learned to breath in deep water by surviving encapsulated in the bloody wombs of their agonizing mothers. The dystopia of the futuristic subaqueous Black Atlantic remains in the realms of science fiction, while Bacon's equally fictional dream continues to suggest the plausibility of the Western horizon of ecumenical progress that modern science incarnates.

The assumption that modernity is coextensive with coloniality is the fundamental theoretical assumption that drives this book. Coloniality conceptualizes the totalizing colonial nature of power within modernity. The coloniality of power takes the form of a complex dynamic matrix that operates regardless of the end of formal colonialism. It is made up of intertwined hierarchies of culture, class, race, sexual orientation, age, ethnicity, gender and cosmologies (Quijano 2000). The elaboration of post-Eurocentric categories for the analysis of long-term and large-scale processes of historical and social change is limited by what I name the *coloniality of method*. The coloniality of method conceptualizes and systematizes a wide range of criticisms that have, in recent times, denounced the complicity of modernization and globalization theories with the Eurocentric construction of the social sciences. The coloniality of method consists in the ability to mortify the transformative potential of the colonial difference both historically and epistemologically. It incorporates asymmetries of power into categories of analysis whose colonial construction is made invisible by dissolving into apparent conceptual and terminological transparency. The appeal to the possibility of approaching this transparency is the main methodological hybris in sociology.

The coloniality of method operates through three devices: *negation*, that is, the assertion of the irrelevance of colonial relations in causal explanations and historical narratives; *neutralization*, that is, the acknowledgment of colonialism as a global relation of asymmetric power distribution, together with the simultaneous presumption of the irrelevance

of non-dominant agencies within the colonial relation; and *sterilization*, that is, the exoticization of non-dominant epistemologies and their displacement from the realm of theoretical production to that of particularistic cultures, standpoints and space-times, as such unable to express transformative universalisms. The coloniality of method materializes into shifting combinations of these three devices, and probably through others which I am ignoring. It informs the epistemologies of social theory and thus forces the sociological imagination within Eurocentric horizons of understanding.

Unthinking/Decolonizing

Any attempt to unthink corresponds to a complementary effort to decolonize. Unthinking and decolonizing are intimately connected; they constitute a twofold methodological strategy (Ascione and Chambers 2016). A way to imagine their entanglement and their non-coincidence is to figure that the color line Du Bois theorized to understand the schismatic condition of black consciousness, and by extension the boundary marking the colonial difference, cuts across every concept and simultaneously binds the binarism that lies at the foundation of the dominant epistemologies of modern knowledge (Mignolo 2000).
Unthinking/decolonizing mirrors modernity/coloniality. At the same time, unthinking and decolonizing are distinguishable for analytic purposes.

In this book, unthinking is a strategy that points to disarticulating the assumptions that connote modernity. These assumptions are reducible to two basic axioms. The first, as Bhambra (2007) asserts, is that modernity is a rupture in time (a new era in human history) and produces a difference in space (the rise of the West). The second, Wagner (2012) synthesizes, is that modernity designates a path of progressive historical and social development, propelled by an emancipatory distinctive ethos that enables the conscious individual subject to act on the present in a transformative way. Both these assumptions have been consistently questioned within the intellectual history of European and North American thought, as well as radically attacked from non-Western and Southern

perspectives (Sousa Santos 2014). Nonetheless, the reiterate acceptance of modernity as a frame limits the range of critical possibilities to the questioning one or other of these two axioms. It is possible, for instance, to question scientific progress because its achievements are not universally 'positive', and to maintain that traditional, non-Western, indigenous knowledges are more respectful of life on earth. Yet, this implies that the space-time divide that separates tradition from modernity is not historically meaningless within specific local/indigenous/non-Western social contexts. It follows that modernity is reaffirmed as a difference in space and a rupture in time. Or, for instance, it is possible to question the assumption that modernity implies a difference in space between Europe and the rest of the world, by affirming the relational nature of processes of political exchange and interactions connecting Europe with the non-European world, and at the same time to take for granted that modernity is progressive because it enables, within its epistemic and historical boundaries, emancipative/liberation theories and practices. In so doing, the Eurocentric myth of the French and American Revolutions corresponding to the birth of the politically *modern* can be dismantled through the worldly significance of the anti-racist struggle for freedom during the Haiti Revolution. Nonetheless, this implies that the Haitian Revolution needs to be translated into a struggle for the definition of what modernity is, and a claim to the right to be legitimately *modern*, even though non-European, colonial subjects' horizon largely exceeded the problem of being modern. This dilemma conceals the anachronism of attributing a specific social logic to a historical process that occurred independently of the inevitability of modernity as a historical and conceptual frame, beyond political modernity, which has been established *ex post* as a signifier.

The cognitive outcomes of Kurt Gödel's revolutionary theorems of incompleteness, outside their strict applicability to formal logic, as well as the notion of axiomatic as developed by Deleuze and Guattari, outside the philosophy of language, are essential heuristic devices in this regard, as I shall argue. According to the way Deleuze and Guattari characterize axiomatic as a logic device, 'it is not enough to say that axiomatic does not take invention and creation into account: it possesses a deliberate will to halt or stabilize the diagram, to take its place by lodging itself on

a level of coagulated abstraction too large for the concrete but too small for the real' (see Deleuze and Guattari 1983: 240–62). An axiomatic does not possess a cogent propositional logic of its own that over-determines the content of thought; rather it means that despite the fact that the idea of modernity offers an infinite number of theoretical possibilities, these possibilities are not qualitatively indefinite.[6]

When, in his cell at the prison of Fort du Taureau, he elaborated his visionary cosmography out of frustration at the capitulation of the 1871 Paris Commune, Louis-Auguste Blanqui envisioned that the only possible way of conceiving the infinite was through an analogical extension of the inner experience of the intuition of the indefinite. Conversely, thinking modernity in terms of an axiomatic corresponds to a profound cognitive disconnection between the infinite and the indefinite. Even though an infinite array of criticisms are conceivable, these criticisms remain within the epistemic territory defined by the idea of modernity.[7] As a result, modernity subsumes these criticisms and sterilizes their transformative potential. Unthinking means shifting from the probability of the infinite to the possibility of the indefinite: toward what is not or not yet, definite.

Unthinking does not imply an exercise in thinking *without*. Unthinking, I formalize, means thinking of axioms in terms of *non-logical* axioms. It means downgrading the axioms from the status of self-evident true assertions to that of postulates, that is, acceptable but not verifiable. When their status changes from truths to postulates, they manifest their nature of plausible conjectures; as conjectures, they can be conceived in their heuristic implications and not in their cogent truthfulness. By shifting from axioms to non-logical axioms, and from non-logical axioms (postulates) to conjectures, I do not refer to the decision to declare the assumptions I criticize false or to counter their otherwise determined acceptance. Rather I mean to examine the consequences of either their acceptance or refusal, in order to project sociological imagination toward the conscious subversion of the combined operational logic of these

[6] On the recent debate over the relation between social epistemology and analytic social epistemology, see Reider (2012). In particular, see Vahamaa (2013a) and Fuller (2012).

[7] Wittrock (2000) understanding of modernity epitomizes this ability to stretch the definitional borders of the notion of modernity in order to include also the pre-modern and the non-modern Within the same analytical frame of reference.

non-logical axioms. It is a matter of uncovering, rather than qualifying, the power relations that are condensed into these assumptions and that are complementary to multiple qualifications and the truth effects their acceptance produces.

Assuming the conjectural nature of modernity exposes its non-automatic automatisms and its reiterative relations. Modernity's internal coherence rather than its explanatory adequacy is a measure of how modernity effectively works as a generative matrix of hierarchies. Modernity as axiomatic perpetually rearticulates the relations between its assumptions, and it is able to modify the ways its assumptions work according to the need for structural heterogeneity determined by internal pressures. And this can generate heterogeneous instances.

The epistemological interpretation of Gödel's incompleteness theorems implies that the logical coherence of any axiomatic does not derive its completeness from within the axiomatic itself.[7] Within a given set of axioms, the possibility of internal coherence is always possible as long as one assumes that one of the axioms is unquestionably true and takes its validity for granted. Or, vice versa, whereas complete coherence cannot be founded internally, it needs to be founded on another, different set of axioms: by an external axiomatic. This 'other' axiomatic relates in multiple possible ways externally to the former, and constitutes the external possibility of the latter's internal relational coherence (Nagel and Newman 2001 [1958]).

Imagine the ever-changing self-transformative potential of modernity as axiomatic, like a metaphorical Rubik's cube: you need to keep one surface firm in order to attempt to give coherence to the whole. But, with invention and creativity excluded from what an axiomatic can produce, it is not possible within modernity to reproduce anything but modernity itself; consequently a different logical strategy needs to be elaborated if one is opting to assume modernity's incoherence and free sociological imagination from its Eurocentric *vincula*. The historian of Chinese science Nathan Sivin (2005: 53), for instance, maintains that in Europe 'early science did not threaten the authority of established religion'. At the same time, modernity as a whole is constructed as a secular age, with secularism as its defining cultural and epistemological feature (Taylor 2009). In logical terms, one can conceptualize modernity as an axiomatic,

whose the overall coherence is externally constructed by a specific relation with a non-secular, religious set (or sets) of axioms: reciprocal interaction between the two axiomatics establishes their epistemological space derivatively.

By heuristically constructing a circumscriptive context for a logical regression of this kind, the risks associated with *regressio ad infinitum* are contained, just as those of radical relativism are contained when shifting from the realm of possibility to the sphere of permissibility. Isabelle Stengers writes 'it can be a matter of betting on the "possible" as against the "probable"' (Stengers 2005: 147). To the extent that we intend to move from modernity's provisional adequacy to *unthink* its inevitability as a frame, we need to reveal the logical, epistemological and historical-social relations between the assumptions of modernity and other sets of assumptions that overlap and intersect it, and to imagine exploring the theoretical territories such a research trajectory potentially unfolds in terms of contributing to globalize and decolonize social theory despite the ubiquity of the *modern*.

Unthinking implies a set of decolonizing interventions in social theory. It corresponds to an effort to expose the geopolitical and geocultural situatedness of the assumptions questioned. Decolonizing means a deep investigation into the narratives that support Eurocentric assumptions, in the search for sites of dissonance and standpoints of irreconcilability with modernity as a narrative and epistemological frame.

The first strategy of conceptual decolonization is thus genealogical. Walter Mignolo (2000) complexifies Foucault's notion of genealogy, and attempts to transform it in the heuristic device of cross-genealogy. By cross-genealogy, Mignolo means the entanglement of multiple sites of enunciation of theories that incorporates asymmetries of power determined by the geopolitics of knowledge production. The strategy of decolonizing genealogy which this books undertakes consists in investigating the cross-cultural historical formation of concepts through different and intersecting geocultural and political contexts. It draws on revisionist historiographical moves that assume the colonial difference as privileged lens of observation, in order to show the parochialism of ideas and concepts whose alleged universalism derives its legitimacy from colonial configurations of power. 'Decolonizing genealogy' exploits its own semantic

ambiguity too. It means both that the genealogy of existing concepts needs to be decolonized from its Eurocentric assumptions and that the different genealogy that emerges enacts an alternative elaboration of the historical and social space to be grasped through the considered concept. Decolonizing genealogy is a strategy driven by the awareness that method itself is an articulation of the historically determined relations between power and culture. It asserts that thinking the world is coterminous with the political and theoretical problem of how to think the colonial.

The second strategy pointing to decolonizing social theory draws on a long tradition of methodological critique of the comparative method culminating in Bhambra's (2016) *Connected Sociologies* research program (McMichael 1990, 2000). This strategy emphasizes the connected nature of the social and historical spaces that a specific concept aims to grasp and represent. Sociology tends to exclude and minimize the generative role of connections in producing historical-social realities, so it constructs concepts like phenomena to be considered as inner by-products of pristine European history, while conversely no process of social change, in fact, can be entirely limited to Europe, or to a part of Europe, alone. Narratives and epistemologies of connectedness are mobilized to give new meanings to old concepts where possible, while disruptive effects are produced where whereas Eurocentrism sets invariable limits to the possibility of re-configuring the semantics of a given concept. In both cases, reformulation and disruption, the concept we were dealing with cannot claim the adequacy it used to boast of.

Teratological Concept Formation

William Outhwaite (1983:1) invited social scientists to be very self-critical towards the terminological apparatus they deploy: 'social scientists are inevitably pushed to take serious notice of semantic aspects of their own practice, they are also compelled to adopt positions in the philosophy of meaning and science'. Outhwaite outlines three main paths towards concept formation that interpellate different philosophical research traditions, and partly replicate the idiosyncrasies of these traditions: positivism, rationalism and hermeneutics. Yet, his entire analysis is developed

within a Eurocentric tradition, which assumes that these perspectives represent an adequate array of alternatives. In this book, instead, I argue for the introduction and development of a teratological methodology of concept formation. Teratology here works as an analogy rather than as a metaphor.

To posit 'questions of method', 'a way to think through', or 'a way to form concepts and operationalize them' imply thinking in terms of conformation of differences and terminological normalization over historical particularities and social specificities. However, to the extent that concepts are assumed in their heuristic and transitional adequacy, they can be constructed as networks of meanings historically determined and constantly in a state of tension: always unstable. As such, every concept can be laid out against what it excludes by means of the generalizations it implies; every concept can be constantly rethought against the deformity whose marginalization is the foundational act for that particular historically and/or contextually bound process of concept formation. Teratological methodology places a particular emphasis on the generative dimension of concept formation. It consists in the methodical effort to think, unthink and rethink notions by bringing the 'colonial' and the 'non-Western' into the morphogenesis—the genesis of the form—of concepts.

Teratology is the science of the abnormal development of living beings. It is the study of physiological monstrosity and deformations that have their origin in embryonic life. During antiquity, at all latitudes, teratology was a form of knowledge that served anthropological, scientific, theological, and geographical purposes (Taruffi 1881). Teratology was mobilized as an explanation for human difference; a way of locating unknown peoples in space and time, and constructing alterity against presumed antipodal difference; teratology also helped human groups to produce their own understanding of the non-human (Mitmann and Dendle 2012). As Daston and Park (1998) have eloquently shown, the transformation of teratology into a more rational enterprise during the fifteenth and sixteenth centuries marked the shift towards a rationalist imagery: from the acceptance of monstrosity as something located at the limits of rational understanding to the refusal of monstrosity based on the process of rationalization of the contingent causes for the genesis of

monstrosity. In other words, monstrosity lost its etymological sense of epiphanic marvel, and came to signify and delimit the ultimate frontier of the pathological. Teratology exemplifies the way social science established the boundary between the human and the non-human, the East and the West, the North and the South. By marking the separation between what was normal and acceptable, rational and human, on the one hand, and what was deviant, abnormal, residual, on the other hand, the vocabulary of Eurocentric modernity created an intimate colonial line within humanity. This fault line is epitomized by so-called Siamese twins: at the same time monstrous and exotic. Yet, this evocative strategy of tracing the boundary, whether cultural, geo-historical or anthropological, is not exclusive to Europe. Pre-modern Chinese culture worked in a similar way as regards the construction of alterity, along the fault line that separates civilization from barbarism (Smith 2013; Yue 2010). Thus, teratological methodology tries to move in the opposite direction from the process of production of otherness, that is, to include what European social theory excluded to elaborate its conceptual apparatus, into the heart of the process of concept formation.

To decolonize the conceptual archive of Western social sciences has profound implications for the vocabulary of social theory. Achille Mbembe (2015) argues that the archive of the West is in ruins. Based on this acknowledgment, three paths appear viable; paths that are not necessarily mutually exclusive, rather they designate distinguishable strategies. Some may still contemplate these ruins and interrogate, reshape or squeeze modernity's conceptual archive and protocols of concept formation, moved by the intellectual mood inspired by Simmel's nostalgia or Gilroy's postcolonial melancholia. Others may work to legitimately establish different cornerstones and build upon alternative foundations, on larger and more egalitarian bases and pillars, the theoretical edifice of modernity. Others again may be unable to avoid coming to terms with the transitional adequacy of the entire architecture of modernity with all its post-, successive, multiple, alternative, contested or pluralized attributive forms, and abandon the plastic metaphor of the *destruens/construens* cycle of reconstructing or assembling foundations, to embrace the living analogy with an ecology of thought whose biodiversity could eventually

allow for unthinkable imaginations to grow out of germinating epistemologies and practices, among, beneath and above those familiar ruins.

Structure of the Book

Chapter 2 introduces a theoretical dilemma. On the one hand, the adequacy of the notion of modernity articulated through tradition/modernity comes to be profoundly destabilized by non-Eurocentric anti-essentialistic narratives of science; on the other hand, in spite of this instability, the idea of modernity remains the epistemological frame to provide an explanation of this same instability, by reformulating, extending and eluding it. This chapter considers recent radical, revisionist and innovative standpoints about the relationship between science and modernity in global, dialogical, postcolonial, civilizational and connected histories of science. The conceptual and terminological dimension of the critique to Eurocentrism is drawn by exploring issues of epistemology and methodology related to the historiographical inquiries in modern science that are under consideration. These counter-narratives of scientific modernity are crucial to reconstructing the notion of science in a broader context that relocates the global and colonial character of science at the center of a possible, renewed and potentially more adequate historical and sociological understanding of worldly processes of social change. Nonetheless the dilemma introduced remains inextricable within the epistemic territory of modernity itself; there follows the need for sociological imagination to point towards the possibility of *unthinking* modernity.

Chapter 3 tackles the relation between modernity and Eurocentrism. It explores some historical-sociological, epistemological and logical contradictions inherent in the effort to produce non-Eurocentric categories of social and historical analysis, and explains why this effort is doomed to failure if modernity keeps on being accepted as the epistemic territory within which such an effort is located. Eurocentrism is defined as autopoietic, to the extent it constantly shifts its contextual meaning while reformulating European centrality in different and ever-changing modalities. Eurocentrism is connoted by its ability to operate by means of consequential isomorphism. Sinocentric re-interpretations of modernity are by-products of this isomorphism. Two basic assumptions connote modernity from

a historical and sociological perspective: secularism and emancipation. The former is analyzed in Chap. 4, the latter in Chap. 5.

Chapter 4 questions the axiomatic nature of the assumption according to which modernity is a rupture in time and a difference in space conceivable as the coming of a secular age. Modern Western thinking takes for granted the association of secularism with underlying narratives of secularization (Taylor 2009). Few relevant contributions have questioned this automatic correspondence (Asad 2003; Nanda 2007). In the wake of this theoretical disentanglement, the chapter focuses on the theoretical analysis of secularization in historical sociology, from a global perspective, and argues against the Habermasian notion of 'post-secular'. The objective is threefold: Habermas' conception of the transition to a post-secular age; Blumenberg's idea of secularization as 'reoccupation' of a space of legitimacy left by questions the Middle Ages were not able to answer; Wang Hui's analysis of the relationship between Western science and China's role within global modernity.

Chapter 5 engages with the notion of emancipation and the historical narratives that buttress its legitimacy. It does so from a particular angle, that is, the dissonance produced by decolonial studies, on the one hand, and queers standpoint methodologies, on the other hand. Two lines of reasoning converge towards this legitimization. The first is Wallerstein's thesis that there exist two aspects of modernity: modernity as open-ended emancipative process and modernity as perpetual remaking of the frontier of technological advancement at a given historical moment on the global scale. The second is Foucault's acknowledgment that modernity should not be considered as an epoch, but as a particular emancipatory ethos, enabling the modern subject to reflexively act upon the present. Both lines, I contend, produce problematic results from two vantage points: coloniality and queer/transgender/intersexual epistemologies.

Chapter 6 tackles the possibilities and inherent limitations that the frame of modernity imposes upon the effort to rethink the global outside some of its Eurocentric constraints. A plausible path to reconstruct the 'global' beyond its Eurocentric foundations is to investigate the limits that these Eurocentric foundations impose upon the aspiration to affirm the centrality of the colonial question in the global turn. The chapter focuses on three aspects of the construction of 'the global' that are systematically neglected. The first is the emergence of modernization theories as a response

to the embryonic forms of the decolonization of theory in the immediate aftermath of World War II, rather than the latter being a reaction to the hegemony of the former. The second is the assessment of world-systems analysis in the tradition of American sociology and its attempt to turn global since the 1960s. The third is the disentanglement of relationalism from holism that the irruption of the colonial difference into the realm of theory production has produced since the 1980s. The chapter explores the methodological upshots of the connected histories of science related to the possibility of reconstructing the global.

Chapter 7 is a critique of the notion of endless accumulation of capital that focuses on the epistemological nexus between historicism, colonialism and the mathematical underpinnings of accumulation. The argument consists in the disarticulation of the notion of the endless accumulation of capita. Starting from Chakrabarty's dialectics between 'History 1' and 'History 2', and the critical stances raised by Vivek Chibber, I tackle the issue of the globalist dimension of Marx's notion of Capital discussed by Arrighi and Harvey, inter alia. I investigate the ambiguous space of abstraction where the concept of accumulation is located. Then I show the conflation of historicism and the mathematical notion of limit, confirmed by Marx's acquaintance with differential calculus in his late *Mathematical Manuscripts*. I introduce and outline the concept of the discrete destruction of use values by reinterpreting some of Marx's basic tenets, , and suggest this concept as a path to conceive the most detrimental and irreversible aspects of capitalism.

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2

The Scientific Revolution and the Dilemmas of Ethnocentrism

In a letter to his friend Carl Friedrich Zelter, Wolfgang Goethe commented: 'The greatest art in theoretical and practical life consists in changing a problem into a postulate' (Cassirer 1952 [1923]: 371). The nexus between Eurocentrism and the master narrative of scientific modernity seems to have suffered a similar fate nowadays (Seth 2011). Anyone who attempts to produce non-Eurocentric narratives of modernity, or who restates European centrality as historical evidence, acknowledges that the formation of modern knowledge is inextricable from the rise of Europe to the position of world dominance through colonialism.[1] In social theory, Europe has partly lost its presumed objective historical presence as a coherent cultural entity integral to a determined geographical

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[1] David Landes (1999: 21), for instance, identifies its perspective with a conscious and historiographically motivated Eurocentrism. Several and heterogeneous reappraisals of Eurocentric narratives of modernity have animated the debate in recent years. See Duchesne 2013; Huff 2010; Wagner 2012; Ibn Warraq 2011; Al Zaidi 2011.

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space (Bhambra 2007a); Escobar and Mignolo 2013; Seth 2007). Nonetheless, its hyperreal existence deeply informs available categories of historical and social thinking.[2]

Narratives of modern science are constitutive of the relation between sociology and the concept of modernity as its by-product.[3] Thus, the disarticulation of this genetic relation can potentially contribute to paving the way for an understanding of large-scale and long-term processes of historical and social change immune to the inevitability of modernity as a logical, historical and epistemological frame.

The attempt to transmute the theoretical limits of European ethnocentrism into heuristic devices dedicated to making the human and social sciences a more inclusive and globally oriented endeavor, raises new questions and sets new agendas for inquiry. To what extent is it possible to think within the boundaries (however contested) of scientific modernity without remaining imbricated in the constraints of Eurocentrism?[4] Is modernity the definitive horizon of sense for history? Let us assume, as a hypothesis, that however long term, the idea of modernity is inevitably contingent. Contingency does not necessarily imply any logic of overcoming. It does not translate automatically into narratives of transition. Rather, contingency refers to the transitional adequacy of any master narrative, theoretical frame or epistemological strategy. Moreover, beyond transitional adequacy defined in terms of temporality, a further premise consists in assuming the relevance of the spatial articulation of this inadequacy on a planetary level. In other words, the search for conceptual adequacy turns out to be an investigation into the insights and limits of the scenarios that emerge by coupling alternative historical narratives with the polycentric cartography of the multiplex geohistorical locations of modernity. This heuristic rationale looks legitimate when applied to political modernity and forms of powers that vary widely according to path-dependent institutional configurations experienced in different parts of

[2] With 'hyperreal' I refer to Chakrabarty's reformulation of Baudrillard's concept. '"Europe" and "India" are treated here as hyperreal terms in that they refer to certain figures of imagination whose geographical referents remain somewhat indeterminate' (Chakrabarty 2000: 27).

[3] For a critical wide bibliographical essay, see Seth 2009b.

[4] On the relation between science and social theory see Adam 1994; Adams et al. 2005; Keat and Urry 2011 [1975]; Lee 2011; Luhmann 1994; Steinmetz 2005.

the world. The same rationale looks plausible when applied to economic modernity and the forms of production and distribution of wealth that proliferate into the multiple worlds of social formations. Yet, the rationale of pluralization is less self-evident when mobilized to understand science. Scientific modernity retains a more solid appeal to universality.

The alleged superiority of Western knowledge is automatically associated with the paternity of modern science, as the presumed pragmatic 'European' approach to the understanding and control of Nature through mathematization that is considered the core intellectual mechanism lying at the foundations of modern rationality. This mainstream Eurocentric understanding of science buttresses the notion of a pristine Western scientific modernity and allows narratives of exceptionalism and triumphalism which, historically, legitimized the denigration of other scientific traditions. Even non-specialists have a shared mental representation of the boundaries that separate science from pseudo-science, magic, exoticism or folklore. These boundaries, however shifting, contested and inherently ambiguous whether in practice or in theory, are grounded in an accepted way to structure the organization of knowledge in the modern world that has been relatively stable for three centuries. As Sanjay Seth (2013) reaffirms, the process of configuration of modern knowledge begins with the act of dropping these fault lines in sixteenth-century Europe.

The cogency of these boundaries is an unavoidable condition for thinking about the relation between modern knowledge and the colonial formation of modern science. Nonetheless, many philosophical, sociological and historical perspectives on science show that this cogency pertains more to the power to impose those boundaries as true, than to the actual ability of those presumed boundaries to circumscribe the realms of existing forms of knowledge.

Yet, as Suman Seth (2009a, b) reconstructs, a wide revisionist move within Western academia in the 1990s has raised doubts about the objectivity and neutrality of the scientific enterprise and questioned the space-time and content of the 'Scientific Revolution' (Cohen 1994; Haraway 1991b; Harding 1987; Poovey 1998; Shapin 1994). More recently, historians of colonialism and non-Western sciences have raised doubts about the pristine European character of the set of changes that the notion of the Scientific Revolution brings together. One argument is that science as we

know it emerged through colonialism and thus the Scientific Revolution cannot be reduced to the concurrency of European discoveries and inventions (Cook 2007; Elshakry 2010; Headrick 2012). Another argument is that modern science would be not such a rupture in time against late-medieval *scientia* in Europe, nor would it make such a difference in space before other non-Western traditions. There would be more continuities than fractures in the global transmission of scientific ideas across civilizational, colonial and imperial boundaries (Bayly 2004; Darwin 2008). A related thesis is that scientific rationality was not the exclusive prerogative of the Western European geniuses of the Renaissance (Saliba 2007); several groundbreaking ideas that furnish those geniuses' iconographies were already part of Eastern resource portfolios, as Needham had extensively documented in the case of China (Joseph 1987, 2011).

The assumption that has been confuted is the European character of modern science as a whole. Differently authoritative voices with different emphases have been raised in defense of this assumption (Gaukroger 2006, 2010; Huff 2010; O'Brien 2013;). The controversies that these diverse approaches have raised lead to the hypothesis that modern science has been a global phenomenon since its emergence: its roots are to be found not in a single civilization or region, but rather in the transmission and/or circulation of ideas occurring largely before the sixteenth century (Hopkins 2002; Heng 2009; Tignor et al. 2002; Bentley 1990; Manning 2003; Gills and Thompson 2006; Armitage 2004).

These historiographical debates produce heuristic conundrums that describe a norm–explanation tension, as per Burawoy's formulation (2005b). These are conundrums for a sociological conceptualization. Both civilizational and conjunctural explanations of why modern science emerged as it did in the global scenario imply the normative problem of what epistemological alternatives exist to the presumed universality of modern science as we know it (see Harding 2011). What science, and for whom? How is it possible to pluralize science towards the proliferation of multiple sciences that would account for alternative historical paths in the past and would respond to the social needs of different groups, according to diverse standpoints in the present?

It is neither far from true nor close to exhaustive to approximate that there are four main trends in the debate over science today that aspire

to answer these questions, by producing non-Eurocentric narratives of modernity: dialogical, postcolonial, Sinocentric and connected histories of science. A multiplicity of historiographical and sociological debates anticipate substantive themes and often critical insights that each of these four perspectives consider as qualifiers for its distinctiveness.[5] What makes these four trends distinctive in the context of present knowledge, is that the critique of Eurocentrism is a premise. Rather than considering these perspectives in terms of cohesive research programs, I prefer a deflective definition: heuristic strategies. As strategies, each of these perspectives has some shared epistemological assumptions, share a set of research objectives, and use certain methodological devices to conduct its inquiry. Nonetheless, I maintain, a *contradictio in terminis* emerges. On the one hand, these perspectives destabilize modernity because they blur the constitutive divide between tradition and modernity. On the other hand, the idea of modernity remains the epistemological frame providing an explanation of this same instability.

Dialogical History and the Scientific Revolution

Anyone who considers the Scientific Revolution a by-product of the transformations internal to medieval *scientia*, or who gives priority to external factors, or who argues against the relevance of the notion of Scientific Revolution *tout court*, is driven by a common Eurocentric bias. This is Arun Bala's main critical stance. To this bias, he counters that modern science is the product of long-term and large-scale dialogues among global civilizations. Affirming the civilizational character of the birth of modern science, Bala maintains, does not mean registering episodically the contribution that ideas, theories and practices born or developed within Indian, Chinese, or Arab-Islamic civilization had

[5] Osler's, nowadays classical, anthological volume (2000) offers a historiographical perspective of the problem that is an important entry point to the main issues in the debate. A different perspective on the material construction of modern science in the colonial context of Dutch world hegemony in the sixteenth and seventeenth centuries is the fascinating historical inquiry by Cook (2007).

on European thinkers. It means, rather, rewriting the entire history of modernity from the perspective of its scientific foundations. The overall political aim of this endeavor would be to confute the myth of European inner superiority in scientific discovery. Against Eurocentric triumphalism in modern science, Bala mobilizes a multicultural narrative of scientific modernity. Acknowledging the constituent contributions to the Scientific Revolution made by non-European civilizations and cultures, whether schools of thought, thinkers, or single ideas, would pave the way for re-establishing the historical and epistemological dignity of non-Western civilizations. Modern science, Bala continues, is the product of intense and uninterrupted dialogue between civilizations. This dialogue nourished natural knowledge across the globe, inscribing cultural hybridity into the genetic code of modern science.

Despite the complex articulation of these global exchanges and negotiations, Western historiography of the Scientific Revolution is guilty of a parochial narrative whose protagonists are only Europeans.

Bala makes it clear that his view is prompted by the will to drain the vast basin of thought and assumptions on which European ethnocentrism and its universalistic pretensions necessarily draws, that is, the possibility of attributing the character of essentiality to historical specificity. Any ethnocentric construction presumes that something inherently different grew out of a specific geohistorical location at a certain moment in time, rather than being the result of connections and interactions. The critique of this Eurocentric premise translates into a series of argumentative knots, whose political impact is immediately understandable. The way Eurocentric historians have read, interpreted, written and told the history of scientific modernity conditions and influences not only our view of the global past, but inevitably and erroneously, our perception of the encounter between cultures and civilizations in our own time.

Bala engages in heated conversation with Floris Cohen. Cohen's work is based on two fundamental presumptions: an epistemological one and a methodological one. The first consists in the unquestioned superiority of Europe in natural knowledge; the second consists in the historiographical criterion of attribution of discoveries, ideas and theories to one civilization (or scientific culture) or another.

Cohen (1994: 404) states the first presumption explicitly: 'a history that takes the fact of Western superiority in this particular domain of human achievement as a fact, not one to be unduly proud (or envious) of, but just as a remarkable fact that cries out for scholarly explanation through finding out how it is that the Scientific Revolution eluded other civilizations'. Cohen relies on the Weberian axiom according to which the West is unique because it is a secular civilization. As such, only in the modern West has rationality emancipated itself from the chains of tradition. It follows that the explanatory issue of constructing a plausible narrative to explain Weber's classic question: 'Why in the West and in the West alone?' is translated into the reaffirmation of Needham's equally classic negative question: 'Why did modern science not develop in civilization X?' Kevin O'Brien has recently reaffirmed the necessity of this heuristic strategy that he generalizes as the 'Needham mega-question'. For him, the contribution of other cultures and civilizations to the emergence of 'a Western European regime for the discovery, development, and diffusion of useful and reliable knowledge' has to be acknowledged, yet this concession does not change the fact that the transition to modern science is a European phenomenon.

Against this solid presumption, Bala notes that 'in religion and the arts we don't expect culture-neutral constructions. But since the same science is taught everywhere, and scientific knowledge is perceived as universal and cosmopolitan, it seems to make sense to ask why it failed to develop in a particular civilization. … Behind the question, therefore, lies the assumption that modern science is the only science possible and could only have developed the way it did' (2006: 7). In compliance with the Weberian approach to the comparative study of world civilizations, Eurocentrism in history and sociology makes it plausible for science to be conceptualized through a tautological space of realization of human potentialities that would only have found its paradigmatic and progressive expression in the West. Not only inasmuch as it is unproblematic to mechanically associate modernity and the West with a particular idea of science according to which the essence that drives scientific knowledge is the rational investigation of the secrets of Nature; rather because, among the different types of rationality that Weber constructed as ideal-types, the one that would connote modernity is instrumental reason. It

is instrumental reason that drives the form of rationality that modern science makes universal and manifest. The pragmatic approach to Nature that designs a relationship of control and power by Man over Nature, in other words, the Baconian program, epitomizes the peculiar rationality of scientific modernity as it emerged in Europe alone.

This epistemological architecture has its methodological corollary. Weberian ideal-types and the comparative method support a kind of explanatory structure where each of the 'civilizations' would be endowed with intrinsic properties, discoverable and discernible within the territorial space of a geohistorical entity to which culture would be integral. The space-time and cultural boundaries of these geohistorical entities are, admittedly, elusive. Nonetheless, the evocation of their existence would suffice to create an objective historical presence. As a result, the relational nature of the emergence of modern scientific knowledge appears occluded. Relations become ancillary explanatory devices in the narrative of the success story of the West and the corresponding failure of the Rest to achieve scientific modernity.

A New Agenda

The presumption of the relative irrelevance of transmission and exchange across civilizational borders has long prevented the history of science from redesigning its Eurocentric agenda. When these premises have come under attack, new methodological insights have gained momentum.

Bala, and Joseph *inter alia*, ask whether it is plausible, without any direct evidence, to maintain that exchange of scientific ideas across cultural and civilizational boundaries occurred. To what extent, they ask, does the circumstance that a discovery took place chronologically first in one culture and then in another culture, support the thesis that there existed an influence of this culture over the culture where that discovery appears later in time? Does the mere existence of a known corridor of communication between the two cultures suffice? Bala suggests calling this option the weak criterion. To this criterion he opposes a strong criterion that answers the following heuristic interrogative: should the researcher adhere to the rule that influence is verified if, and only if, the

evidence of the transmission, not just the evidence of the existence of the corridor, is verified?

This methodological conundrum, and the intrinsic ambiguities it involves, is inseparable from the normative dimension that affects the kind of histories or counter-histories of modernity to be written. Inasmuch as the strong criterion is implemented, it would be very difficult to produce histories of scientific modernity that do not end up reproducing the Eurocentric tenets of Western historiography. First, because of the particularly elusive status of the notion of historiographical proof in the history of ideas, as Carlo Ginzburg has eloquently argued (1999). Second, because the strategies of validation of historiographical knowledge, modeled upon the Western archive, prove inadequate to cope with the dilemmas and the specificities of the endeavor to reconstruct the colonial past, within and outside the colonial archive, as Guha and the Indian Subaltern Studies Group have registered (Guha 1963, 1983a, b).

Conversely, inasmuch as the weak criterion is implemented, the transmission of ideas and knowledge becomes acceptable wherever a corridor of communication exists. If one couples this methodological directive with the fact that the new historiographical interest in non-Western regions and knowledge has enabled the emergence of a growing number of narratives that witness the existence of relevant scientific traditions endowed with ideas and knowledge that constantly question the motto 'first in Europe!', it follows that the content of modern science loses its distinctive character in space and time (Irschick 1994; Trautmann 1999). The spatial complexification of the worldly cartography of scientific modernity and the epistemological as well as methodological outcomes it has brought to the fore, end up harking back to the temporal articulation of the relationship between humanism and science in early modern Europe (Bod et al. 2015). New questions call for new agendas.

Gian Battista Della Porta, besides his extensive knowledge of nature, alchemy, music, agriculture, astrology, astronomy and medicine, was the protagonist in two accusations of plagiarism that racked the brains of both his contemporaries and historians. The most notorious was the quarrel with Galileo Galilei around the paternity of the telescope, started in 1603, and motivated by Della Porta on the basis of his *Magia Naturalis*

(1589) and *De refraction optices parte* (1593).[6] The other, less well known, was with his homonymous pen pusher at the papal court, Gian Battista Bellaso from Brescia. In front of Galileo, Della Porta claimed he was the victim; in front of Della Porta, Bellaso claimed to be the victim. For Bellaso, Della Porta was guilty, because he had not mentioned him as the father of a cryptographic method that Della Porta described in his autographical book entitled *De Furtivis Literarum Notis vulgo de ziferis libri IV* (1563).[7] Whose idea? The diatribe between the two Gian Battistas exemplifies the fundamental historiographical problem of the attribution of ideas to thinkers or inventors, which is at the core of the discipline of history of science. A problem in which many excellent cases reside; the most canonical, even for its philosophical and political implications, was born around the question: 'Who did 'invent' the differential calculus? Newton or Leibniz?'.[8]

The coordinates of this classic problem, in recent decades, have dramatically transcended the boundaries of ascertaining the paternity of ideas and discoveries of single European thinkers. In the diatribe between Newton and Leibniz, Madhava of Sangamagrama from the fourteenth-century Indian Kerala school of mathematics makes his irruption, claiming recognition for the principles of both trigonometry and differential calculus: accurate historical evidences have been adduced to demonstrate that he and his disciples were forerunners of the two Western European duelists.[9] When Marx, during the very last years of his life, devoted his

[6] After the foundation of the Academia dei Lincei by Federico Cesi in 1603, Della Porta was the head of the only open and working *collegium* of the Academia, the one in Naples. The proceedings of the Academia dei Lincei assign to Della Porta the first project of a telescope obtained by coupling two lenses, more than twenty years before the first Dutch telescope was produced, and then refined by Galileo in 1611. The quarrel with Galileo became less relevant for both when the Roman Inquisition accused both Della Porta and Galileo of heresy. See Odescalchi (1806). A recent compilation of the documents regarding Galileo and Della Porta can be found in (eds) U. Baldini, L. Spruit, *Catholic Church and Modern Science. Documents from the Archives of the Roman Congregations of the Holy Office and the Index*, Vol 1., Sixteenth-century documents, t. 2, Roma 2009, pp. 1507–64. See also Geoff Andersen, *The Telescope*: *Its History*, *Technology*, *and Future* (Princeton: Princeton University Press, 2007).

[7] The code was actually introduced for the first time by Giovan Battista Bellaso in 1553, with the book *La cifra del Sig. Giovan Battista Bellaso*, *gentil' huomo bresciano*, *nuovamente da lui medesimo ridotta à grandissima brevità et perfettione*.

[8] See Hall (1980); Bertolini (1993); Coyne (1988); Feingold (1993).

[9] Almelda and Joseph (2004).

attention to the cognitive and historical dimension of the development of differential calculus, he began with a critique of the 'mystical' notion of derivative that both Leibniz and Newton espoused. Marx was also oblivious to the way the Kerala school had conceived the problem of the passage to infinity. Had he been aware of the mathematics of the Kerala school, Marx would have probably raised more uncanny questions about his own social theory than the epistemological support he searched, as we shall see in Chap. 7.

Two hypotheses emerge: either differential calculus was borrowed from India, or Europeans and Indians reached analogous results along parallel, however syncopate, paths. In the first case, Indian science would have anticipated European science along the path of scientific modernity. In the second case, scientific modernity would be such a global, overall human phenomenon that similar discoveries would mushroom independently in different geohistorical locations. In the first case, as Wallerstein (1997) foresaw, European ethnocentrism would be replaced by an Indocentric version of the master narrative of scientific modernity. A strategy that Saliba (2007) adopts in reconstructing the complex developments of Islamic science since the Abassid revolution (750–751 AD). In the second case, modern science as a singular universal path would be deterministically established as the only possible horizon for the production of knowledge about nature. In both cases, nonetheless, a new historiographical research agenda is needed. An agenda where the priority becomes the investigation into the material and cultural corridors and human cartographies of circulation of knowledge and practices that could have been responsible for the transmission of ideas from India to Europe, through known or still unknown networks; networks that the Eurocentrism in the history of science had simply ignored, in other words occluded. When these potential corridors are drawn on a world map, a new cartography of connections appears that does not overlap with the *mappa mundi* with Europe at its center. When seen from a global perspective, the problem of attribution becomes the historiographical controversy around the existence and the relevance of exchanges between diverse civilizational systems, within hybrid zones of contact and exchange, among actors negotiating and transforming scientific knowledge.

If something that can be conceived as 'Scientific Revolution' did occur in Europe in the seventeenth century, probably thanks to the dialogue of civilizations, the question of the theoretical and conceptual significance of this 'something' is no longer exclusively dependent on the problem of connoting its content in terms of knowledge and discoveries. It forces us to rethink the structures of 'why', implemented to analyze scientific modernity from a global perspective. The explanatory ambiguity of this historiographical conundrum translates into the normative sociological issue of agreeing around an understanding of science that could be operationalized and mobilized to rethink modernity from a non-Eurocentric perspective. In other words, the question becomes, as John Hobson formulates it: 'What did Europeans do right in order to breakthrough to modernity?' This interrogative calls into question the sociological problem of asking what characterizes science, beyond its content of notions, ideas, theories and discoveries. In other words, how should 'science' be thought of in order to produce a global social theory able to include contributions from other civilizations in the creation of a new theoretical and historiographical canon? The answer dialogical history gives is rather paradoxical: the Baconian program

The Baconian program becomes a formidable candidate to fill the vacuum of global dialogism in the history of science and to perform the role of organizational myth providing the answer to the interrogative posed by Hobson. Bala (2012) and Goonatilake (1999, 2011) reproach that criticisms against Bacon are grounded in reductive or incomplete interpretations of his thought. Bala orients the question toward a reinterpretation of Bacon's conception of science from the *Novum Organum*, by means of the (*ante litteram*) multicultural conception of science imagined by Bacon in *New Atlantis*. The *Novum Organum* is a manifesto for experimentalist and inductive pragmatism, while *New Atlantis* is a plea for civilizational knowledges: the *humus* for the 'new' science.

> One significant element in his work is the crucial contribution that the collection of knowledge from diverse parts of the world can make to the advancement of science. The history of modern science often creates the impression that science developed within Europe with little input from the outside. Yet in this influential study it is evident that Bacon did not

> underestimate the contributions that other cultures could make to the growth of the sciences. (Bala 2006: 4)

'Contributions' to what? Goonatilake maintains that a global science for the twenty-first century needs to 'mine civilizational knowledges'. He explains that 'current problems about tinkering with environment have laid to rest some of the simplistic readings of Bacon's writings on science as the torturer of Nature', while what remains of Bacon's anti-Aristotelian ideal of 'useful' science is that 'science whatever its social, political psychological, philosophical roots is ultimately "that which works"' (Goonatilake 2011: 380, 382). He continues that even though not 'all the systems of knowledge are equivalent' and 'different sciences uses different methods', the Baconian anti-contemplative approach to natural knowledge is inherently progressive. The way Bacon establishes the predominance of *natura vexata* over *natura libera* is the exceptional quintessence of Western science's capacity to become 'the most advanced scientific culture in history' (Goonatilake 2011: 385). Science is 'what works'. This conception answers the question posed by Hobson when he asks what is 'right to do' in order to 'breakthrough to modernity'. Pragmatism against Nature in order to improve Man's living conditions on earth would be what allowed Europeans to create a new and more desirable form of knowledge. Global dialogical histories of science affirm that modern science with its groundbreaking discoveries and theoretical innovations has been multicultural and inter-civilizational, since its origins are not purely European; but at the same time, they also reaffirm that the anti-contemplative, practical, empiricist attitude toward nature explains 'why Europeans breakthrough to modernity'. A breakthrough that, ultimately, happened in Europe and Europe alone'.

Thus, to the extent the Baconian program offers a response to the epistemological fragility of the global dialogical explanatory construction of modernity, since it actually provides its historiographical architecture with a cornerstone to understand what Europeans 'did right', it restates a European exceptionalism of a different kind. Dialogical histories of science transpose European exceptionalism from modern science as a whole to its more nuanced but equally uniquely modern attitude towards nature.

Postcolonial Science and Technology Studies

The genealogies of postcolonial studies on science and technology instead, share deep criticisms of the Baconian program and the role it played as underlying ideational structure in the imperial and colonial histories of subjugation that had Europeans as main protagonists (Merchant 1980; Haraway 1990, 1991a, 1997). In the wake of feminist studies of science, postcolonial science and technology studies depart from this heritage and further elaborate two main paths where the convergence of gender studies and postcolonialism moves in the direction of a radical critique of Western sciences. The first is the role that Western sciences and technologies played in colonial histories. The second is the role that colonialism has played in the emergence of Western science and technologies. Here the presumed universalism of science is suspended and rethought as a form of natural knowledge that pertains to a particular ethno-story of domination and control, rather than the co-production of forms of knowledge the West obtained by mining other civilizational sources of knowledge. Ashis Nandy is clear about the political nature of the Baconian program:

> Bacon does not want knowledge to be pursued for its own sake, or that it be freed from all values. Having freed knowledge from all constraints of good and evil, he subjects it to a new overriding constraint—it should generate power. Power and utility are in fact the keywords of Bacon's thought. These words appear as the principal values in everything that Bacon has written. For him the value of power and utility is so great that often truth, power and utility become identical concepts in his perception. (Nandy 1990: 44)

The dimension of power involved in the presumed neutrality of modern science is crucial in postcolonial studies. Sandra Harding has long engaged with science and technology from a feminist, gender, and postcolonial perspective (Harding 1991, 2008; Kellert et al. 2006). In order to counter the hegemony of Western science, Harding rehabilitates the contextual validity and performativity of different cultures to produce multiple notions of science. Each science that does not respond to the

particularistic and detrimental idea of Western science implies a struggle for recognition within modernity. A struggle that sees non-Western indigenous knowledge mobilized against the alleged universalism of Western science to exhaust *in se* all the possible meanings and spaces of modernity. From this pluriversal world, a multiplicity of methodologies emerges. For Harding, the acquaintance with standpoint methodologies is the most fertile theoretical praxis to simultaneously dismantle modern science as Western, masculine ethno-science, and produce alternative forms of natural knowledge from disadvantaged groups. Standpoint methodologies, it is worth recalling, were born within the twentieth-century Marxist historical materialist plea to demolish bourgeois knowledge, from the standpoint of the proletariat. Since then, standpoints have been thus invoked by gender studies as strategic *loci* where disadvantaged subjects, cultures and social groups can produce their own understanding of nature (Harding 2011: 19). For Harding, this move results in a normative tension that makes science a more egalitarian global space, replacing 'a single united science for the world with the proliferation of a world of sciences' (2011: 9).

Multiple vantage points express interests and needs of social groups and communities, with their historically determined and place-based interested needs and practices, which are often irreconcilable. As Arturo Escobar (2008) expresses it, diverse groups produce alternative political ecologies, whose reciprocal relations are not always conceivable in dialectical terms, as if the overcoming of divergences would always fall under the political recomposition of interests and the theoretical transformation through synthesis (Escobar 2008). When standpoint methodologies are seen in their concrete articulation, it is clear that different social groups, with their path-dependent histories, internal distribution of power, and changing definition of the boundaries defining the community itself, insist on the same space-time. Escobar remarks that different standpoints produce distinct ecologies, grounded in alternative constructions of their respective territories. Within the same space, for instance, the territory produced by the operation of capitalists engaged in extractive or productive activities is different from the territory constructed by migrant workers in industries or plantations, and both are different again from the territory constructed by the indigenous population.

What is the idea of 'modernity' that standpoint methodologies suggest, project or legitimate? Harding addresses this question when she underlines that the normative tension towards the proliferation of sciences is coterminous with the paradigms of multiple and alternative modernities (2011: 1).

> Modernity is not only disseminated from West to 'rest'. It is also independently produced within each and every society. Whether arriving from outside or inside a society or, more likely, through negotiations between inside and outside it must be 'sutured' into existing economic, political, cultural, psychic, and material worlds. Thus modernity will always take on distinctive local features in its multiple regional appearances. And it always tends to appropriate and reshape to its own ends the social hierarchies that exist. (Harding 2011: 9)

The explicit association between standpoint methodologies and the paradigm of multiple modernities gives the idea of the multiplication of the sites where modernity takes place and develops, diverging and recombining its alleged European origins. Yet, as we shall see in Chap. 3, the paradigm of multiple modernities reformulates some of the basic tenets of Eurocentrism; it follows that to the extent postcolonialism is not able to imagine the proliferation of sciences outside this paradigm, it reproduces Eurocentrism involved with multiple modernities. If one takes Harding's view seriously, then postcolonial science and technology studies are coherent with the multiple and alternative modernities, regardless of the accusations of Eurocentrism that have been consistently leveled at them during the last ten years of debate. Harding's position clearly is not representative of the entire constellation of postcolonial studies. Within this constellation, Itty Abraham expresses a shareable skepticism about the ability of postcolonial studies of science to be coherent with their proclaimed anti-essentialist stance—what Spivak framed in terms of strategic essentialism. For the coherence between being anti-essentialistic and contributing to shape the epistemological space for the emergence of different, as well as more egalitarian, modernities is a reasonable path towards rethinking both premises and objectives (Abraham 2006). As Warwick Anderson recalls:

> [Abraham] expressed serious misgivings when the postcolonial was identified, in his words, as a 'site for understanding the clash of knowledge and the formation of alternative modernities'. He worried that 'when the postcolonial … is linked to a fixed site of irreducible knowledge claims, it articulates an ontology that ties knowledge to a location as a singular and essential quality of place'. (Anderson 2009: 394)

In my view, the friction that Abraham's and Anderson's thoughtful objections make intelligible can be formulated as follows. Social groups expressing alternative standpoints, whereas conceived according to fractures of race, ethnicity, religion, gender or sexual orientation, are transformed into coherent involucres of 'authentic' counter-hegemonic instances, from which pluralism would emanate and finally blow subjectivity with the *pneuma* of non-Eurocentrism. The problem is still that, within the frame of modernity as horizon of sense and a distinct era in human history, the individuation of these subaltern, marginal or indigenous groups cannot but be operated through a sociological definition that draws from the modern/colonial categories of classification. This circularity temporarily freezes constructed characteristics as well as the social needs multiple sciences would respond to. Thus, it becomes very difficult to avoid an essentialist construction both of subaltern subjects and of local knowledge in terms of traditional knowledge. As a result, the same tradition/modernity divide that postcolonial studies deeply questions is rehabilitated in terms of multiple modernities, albeit within a reversed normative and political endeavor that attributes transformative political power to subaltern epistemologies. This is the underside of Harding's 'traditions of modernity'. The overall consequences of this contradiction compose an image of modernity formed by the juxtaposition of multiple declinations of what to be modern means to different, or better, differently constructed social groups. Anderson has clearly outlined the risks connected to any conceptual and semantic slippage from the plea for alternative, heterogeneous, hybrid, multiple modernities to the rhetoric of globalization: to the extent techno-science is constructed as a rupture in time and space, long-term and large-scale processes of dominance, exclusion, and hierarchization, rooted in colonialism and addressed by postcolonialism, are occluded. Let me add that any chronosophy, that is, a particular way to imagine

the relation between present, past and future that implicitly or explicitly endows the idea of successive, multiple or alternative modernities with a plausible transition narrative, implies a surreptitious return to the allochronies typical of modernization theories. Postcolonial science and technology studies are effective in dismantling the fallacies and essentialism of civilizational accounts of modern science, yet the problem of their self-contradictory position in the face of the critique to modernity they contributed to inaugurate remains. These ambiguities are a by-product of underlying theoretical contradictions. These contradictions pertain not merely to the intrinsic limits of thinking science from a standpoint perspective; rather to a more solid epistemological theoretical structure that is common also to dialogical, global, and Sinocentric narratives of science, and that assumes the paradigm of alternative and multiple modernities as a valid correction of modernization and globalization theories.

China and Scientific Modernity

If postcolonial theory contests the authority of Western science and its supportive narratives from the perspective of those groups that are located in disadvantageous positions in the existing hierarchies established through the coloniality of power, scholars involved in the study of Chinese science from a global perspective are skeptical about the space-time coordinates, strength, and adequacy of those hierarchies. The formidable rise of East Asia during the last three decades imposes a broad reconsideration of the narratives and analytical categories that had served to account for the 'rise of the West'.

The rise of the West in the face of the resurgence of China has set the scene for rethinking the global transformations in the regimes of scientific knowledge production. The problem is not reducible to the dichotomy between the success of Europe and the failure of China to break through to modernity. It rather suggests the viability of analyzing the long-term and large-scale relations between European science and Chinese science in the Eurasian space (Elman 1984, 2005; Sivin 2005; Sivin and Lloyd 2004). Benjamin Elman affirms that China did not fail to develop science. Rather China did it on its own terms. In other words, while Europe

underwent its Scientific Revolution, Chinese science responded to historical, social, political and institutional needs that cannot be fully read and understood through the category of Scientific Revolution. Clearly, this does not exclude powerful processes of exchange, negotiation, adaptation and rejection between Chinese and European science in the Chinese context between the sixteenth and twentieth centuries. Nonetheless, for Elman, it is undeniable that, independently of Europe, Chinese civilization has been able to mobilize material and intellectual resources towards the production of reliable knowledge, useful for historically determined, locally bound needs. The idea that scientific modernity is produced in relative independence by every society is an interpretative option that is always practicable when adopting a global perspective conflating civilizational multilinear temporalities with societal coextensive processes of social change. As Bala notes, 'this sort of historical reconstructions are often made when cultures confront alien influences—especially cultures sufficiently rich in possessing a wide variety of conceptual resources. Dominant and elaborately articulated ideational themes in an alien tradition are absorbed but treated as internal articulations of previously undeveloped minor themes within the recipient culture' (2006: 45).

Chinese science and its relation with European science should thus be reconsidered with three historical circumstances in mind. The first is the coexistence of many different scientific traditions originating from all major scientific cultures that existed at the time, and which had a seat in the Chinese scientific bureau, or at the court of the Celestial Empire. When Jesuits joined other scientists at the court of the Celestial Emperor, they were not considered the outpost of scientific knowledge, nor were the achievements they introduced to China automatically regarded as valid and groundbreaking (Smith 2014). The second is the selective introduction, translation and rejection of ideas and practices from European science, by Chinese literati, according to a complex matrix of interests, conjunctures and idiosyncrasies. Issues of ecclesiastical dogmas, internal doctrinal struggles in the Catholic Church and personal biases deeply affected what and how the transmission of ideas actually took place in China. All these aspects, obviously, were present both on the European side of translation and accommodation, and on the Chinese side (Hart 2013). Third, the disconnection between the path that science underwent

in Europe, and the divergent paths of first Jesuit then Protestant science in China, due to doctrinal considerations of opportunity and adherence to theological constraints.

Elman argues that for Chinese *literati* the problem did not consist simply in importing, discussing and eventually absorbing Jesuits' *scientia*, but rather in enacting an epistemological strategy able to provide adequate collocation to each non-Chinese system of knowledge within a categorical meta-structure that proved flexible enough to assimilate not only theories and ideas but also overall gnoseological architectures providing a functional classification structure for the organization of those theories and ideas. A meta-structure for 'collecting the collectors' (Elman 2005: 34–38). Following this argument, it is possible to narrate Chinese modernity as a by-product of cultural hybridization with, and active mastering of, not only European, but also Indian or Arabic-Muslim scientific cultures. A circumstance that does not require any prohibitive dose of counterfactualism to appear more than plausible.

What can we infer for questioning modernity from these alternative readings of the encounter between Chinese and European science? According to Hobson's definition of neo-eurocentrism, the flexibility of Western scientific culture is the new keyword to re-establishing the exceptionalism of Europe against other civilizations. Nonetheless, this flexibility connotes Chinese civilization too. Adaptiveness and creativity can be considered hallmarks of Sinocentrism, analogously to neo-Eurocentrism. This permutational logic in historical thinking allows us to replace a center with another center. It describes a common feature of distinctive and competing exceptionalism in the Eurasian space of global modernity. It partakes of both the opposed narratives of centrality. These narratives, in fact, end up being complementary from an historical and sociological point of view: their reciprocal interpellation grounds the process of construction of otherness that is unavoidable in every identity construction, independently from the scale on which that identity is perceived.

As Jörn Rüsen puts it, 'a convincing concept of identity furnishes people with self-esteem. Since identity has always been grounded on difference from the otherness of the others, the positive evaluation of oneself logically leads to a negative view on the otherness of the other. And this is the problem of ethnocentrism' (Rüsen 2004: 64). In fact, this same

permutational logic is able to support non-European ethnocentrism(s). Nonetheless it is unable to produce decentered, relational understandings of the global, since 'it follows a traditional logic of identity-formation and related modes of historical thinking, in which separation is prior to integration' (Rüsen 2004: 65).

Wallerstein (1997) foresaw the pitfalls of this logic and labeled it eloquently 'the avatars of Eurocentrism'.

Yet, at the same time, the *a priori* prevalence accorded to integration over separation proves symmetrically misleading. As Rosenberg (2006: 326) remarks, in fact, 'if the "societal" dimension of reality cannot be regarded as analytically preceding the "inter-societal" one, any attempt to reverse the precedence only produces the nonsensical idea of an inter-societal reality prior to societies'. In other words, and in a counter-intuitive way, the societal and the civilizational are not only sets of essentialized properties, while, in contrast with them, the inter-societal and the inter-civilizational are not only relational constructions. The societal and the civilizational, as well as the inter-societal and the inter-civilizational, are both constructions that can be understood either in essentialized or in relational terms. None of them possesses any pre-narrative, ascribed ontological status. What makes the difference is the methodological priority accorded respectively to relations or entities, rather than the theoretical priority accorded to integration over separation. For this reason, the tension between competing essentialist or even relational exceptionalisms is not sufficient to glimpse the challenge of ethnocentrism. Abdel-Malek (1963, 1981) early on dismantled the parochialism that this way of framing difference conveyed through Western representations of 'the East'. The dispute, therefore, shifts to the level of relationally constructed ethnocentric narratives. Within this tension, the dilemmas involved in Sinocentric counter-narratives of scientific global modernity raise powerful challenges to the whole historical and theoretical architecture of modernity. These dilemmas gravitate around the evidence that the civilizational differences between Europe and China are articulated upon the question of 'why' Europeans did what they did 'the way' they did it, while the Chinese did not, or did it in a different way, a question that lies at the heart of any 'success–failure' explanatory dichotomy.

For Elman, this dichotomy has become a major intellectual limit nowadays: 'we have increasingly acknowledged that our focus on the "failure" of Chinese science to develop into modern science is heuristically interesting but historiographically misguided. We are now forced to reassess how the global history of science should be rewritten' (Elman 2007: 40). Yung Sik Kim has attempted to provide an axiomatic formalization for this problem. For him, 'why Scientific Revolution in Europe?' corresponds, symmetrically and bi-univocally, to 'why not Scientific Revolution in non-Europe' (Kim 2004: 100). We can infer from this that, within the frame of modernity, wherever such 'why/why not' logic resurfaces, a non-Eurocentric construction of modernity can hardly be elaborated, as we shall see, in civilizational terms, notwithstanding considerable normative efforts in this direction.

The epistemological dimension of this *impasse* is crucial to investigating the logical incoherence of the frame of modernity to produce a non-Eurocentric understanding of the Scientific Revolution. This impasse is intimately connected with the contradictions I envisage in the attempt to undertake the task of writing non-Eurocentric histories of science and, at the same time, coping with two main historical-sociological insights elaborated by Gurminder Bhambra and John Hobson. The former is the aforementioned critique of the paradigm of multiple modernities; the latter is the denounciation of the emergence of a new and sophisticated form of neo-Eurocentrism. I shall explore this *impasse* in Chap. 3. Before moving to the sociological dimension of this historiographical questions, let's take into consideration the radical narrative challenge that the connected histories of science have posed to either dialogic, postcolonial or Sinocentric perspectives on scientific modernity.

Connected Histories of Science

As an antidote to the prevalence of conjectural explanations for the Great Divergence between China and Europe, as well as of civilizational explanations in the global history of science, new insights are produced by those global histories of science that attempt to rescue the development of scientific knowledge from the requirement to provide a causal explanation for the breakthrough to modernity, that is, outside the trope of the

transition to modern science and the rise of the West (Lightman et al. 2013; Raj 2007). Connected histories of science prove less interested in the making of the Scientific Revolution, and more attracted by the processes of spatial distribution and co-formation of theories, ideas, discoveries and methods to produce knowledge about nature called 'modern science'. Largely influenced by Subrahmanyam's connected histories, these narratives have two characteristics (Subrahmanyam 1997, 2005; Fan 2007; Lissa 2009). First, they give priority to networks of circulation, exchange and negotiations of ideas and practices occurring in heterogeneous contact zones, rather than focusing on the larger knots of a polycentric, civilizational cartography of the development of modern science. Fa-ti Fan points out that concepts such as connectedness and trading zones

> do not presuppose rigid, inflexible, demarcating cultural boundaries between the parties that came into contact while noting the existence of differences. There were boundaries, of course, but we cannot take them for granted. … Nor do they privilege conventional binary categories such as Chinese/Western culture or civilization in explaining the contacts between the parties. Nor do they, moreover, essentialize power relations. On the contrary, they mark out a space for human actors as agents of historical change. They enable us to see mingling, interaction, accommodation, hybridization, and confluence as well as conflicts across borders of many kinds. (Fan 2004: 2)

Along these lines, Raj insists that 'it is in the asymmetry in negotiation processes that the power relationship resides, and it can be brought to light in its specificity only through a rigorous analysis of these processes, instead of being raised to the status of an explanatory category … These conditions could depend on the exchange of favors, patronage, friendship, obligation, or just economic exchange, to name but a few possibilities' (2013: 344). In a similar vein, Roger Hart reconstructs in detail the interaction between Chinese *literati* and Jesuit missionaries to show the different perceptions of asymmetries of power and the complex interactions between geohistorical and ideological constructions deployed as a means to make sense of cross-cultural encounters. Among these porous boundaries, Hart addresses the civilizational and geocultural ones, in a deflationary reading

of interaction: 'rather than viewing this as the "first encounter" of two great civilizations—"China" and "the West"—we should instead critically historicize this [*sic*] actors, by way of furthering their own interests in the context of seventeenth century China. … Narratives about this "first encounter" contributed to imagining China and "the West" during the twentieth and twenty-first centuries' (Hart 2013: 2).

Connected histories of science challenge either the idea that modern science emerged in Europe or the idea that it was later diffused, disseminated and transmitted to the rest of the world. Science did not come out of Western scientific laboratories. Rather in larger and spatially distributed networks of circulation that systematically transgressed material and ideational borders. As Raj argues, the making of scientific knowledge took place 'through co-constructive processes of negotiation between different skilled communities and individuals from both regions, resulting as much in the emergence of new knowledge forms as in a reconfiguration of existing knowledges and specialized practices on both sides of the encounter. … Knowledges that thus emerged were totally contingent on the encounter and that important parts of what passes off as "Western" science were actually made outside the West' (2007: 223).

The emphasis on networks of human and non-human actors, knowledge and practices, seems to resonate with Bruno Latour's critique of modernity and the Action Network Theory paradigm. For Latour (1987, 1993), the basic, flawed, assumption of 'the moderns' is that there exists a clear separation between Nature and Culture. This presumption looks inconsistent with the complex hybridism of the social production of knowledge mediated by material objects. But while, for Latour, the spatial articulation of modern science is concentrated in geohistorical knots located in Europe that he calls 'centers of calculation', the perspective of the connected histories of sciences, as Fa-ti Fan evidences, shifts the attention from knots to the heterogeneous space-time distribution and movement of the making of knowledge across colonial borders.[10] Second,

[10] Fa-ti Fan elaborates on the distinctiveness, contentions and dilemmas of the connected histories of science in his article 'Modernity, Region, and Technoscience. One Small Cheer for Asia as Method' (forthcoming) *Journal of Cultural Sociology*: *Special Issue*: *Theorizing Global Colonial Modernity.*

connected histories of science implement a distinctive set of concepts and heuristic tools, such as circulation, contact zones, power differentials, brokers and go-betweens (Schaffer et al. 2009). I shall return to these methodological strategies in Chap. 6, as they directly engage with the possibilities of rethinking the notion of the global. For now, it will suffice to remark that, analogously to postcolonial studies, rather than assuming scientific cultures as integral to territorially definable geohistorical entities which would allow for comparative analysis, connected histories of science take a closer look to the contextual, open-ended negotiation of ideas and practices and the asymmetries of power within which negotiation takes place. Yet, unlike postcolonial studies, connected histories of science offer a more nuanced, less confrontational image of these asymmetries of power.

Raj makes explicit that connected histories of science allow us to take a closer look into the development of scientific knowledge outside the divide between metropolitan, European, modern science, on the one hand, and colonial, indigenous sciences, marginal or residual knowledges, on the other hand. Raj notes how postcolonial scholars have denounced science 'as alienating and dehumanizing and, in certain cases, to open up alternative visions of what science might be' (2013: 340). Raj disagrees about the fact that 'these scholars see modern science as a hegemonic "master narrative" of Western power, a discursive formation through which the rest of the world was simultaneously subjugated and relegated to the role of Europe's binarily opposed Other' (2013: 340). This approach is critical of perspective such as Gyan Prakash's narratives of the penetration of modern science in India through medicine. The idea of penetration would be reductionist because one-sided. If connections are the main object of historiographical inquiry, modern science looks no more as 'the spread of Western science, achieved by means of an often violent imposition of "rationality" on cultures originally endowed with "another reason"' (1999: 341).[11] This methodological strategy allows 'one to tell a story that seeks not to highlight the non-Western origins

[11] Prakash (1999) has investigated the penetration of colonialism in India through colonial medicine. His interpretative approach is constructed upon the irreconcilability of Western conceptions of body and illness with traditional Indian understandings of cure.

of modern science but to offer a grounded global history that links the large-scale processes and the fine-grained observations of everyday life, echoing the global ethnographic method proposed by Michael Burawoy' (Raj 2013: 346).

Raj appeals to the global orientation to which Burawoy aspires for sociology; but he avoids a direct engagement with the issue of the problematic relation between concepts and narratives that Burawoy (2005a, b, c) poses in the same argumentative context. I share Burawoy's view that there is no possibility of separating the explanatory dimension of historical and sociological inquiry from its normative dimension. What Abbot (1991, 2004) and Abrams (1980) agree on denoting in terms of the relation between eventuation and causation. If the task of asking 'why' modern science emerged the way it did, the heuristic value of narrating the circulation of knowledge by taking into consideration the colonial power differentials results diminished. It is true that these asymmetries of power are manifest in the day-to-day business of cultural encounter, particularly within those dense social knots like contact zones. And these hierarchies are interstitial and flexible in concrete situations of interactions within extended networks. Nonetheless, they are not entirely dependent on the capacity of the historical actors to mobilize them towards selected aims. Those asymmetries are part of wider ideological structures.

Fa-ti Fan makes this point in his history of British naturalists in China. Fan registers the shifting attitudes of the British towards Chinese interlocutors as a response to the shifting balance of power between China and Europe in favor of British imperialism after the Opium Wars. The denigration of non-Western forms of knowledge about nature changed in emphasis as the defeat of Chinese power materialized. And the repercussions of these changes were evident either at the ideological level or in the cultural sphere, *and* in the specific contexts where the microphysics of power operated. What modernity means, its space-time coordinates, the horizons of sense it conveys, and the limits it imposes upon the possibility of questioning the changing forms of ethnocentrism it endorses pertains to these wide configurations of power.

The problem of engaging directly with the notion of modernity, without leaving it on the background of narrative remains an impasse. Kapil Raj's connected history of science is exemplificative of this impasse, which

is more conceptual than narrative. Following Raj, the construction of what we use to refer to modern science cannot be located in Europe, given the cross-cultural formation of ideas, practices and knowledge. Nonetheless, modernity remains the frame wherein these processes should be addressed, even though what 'modernity' signifies is a derivative aspect of the stories reconstructed. The emphasis on connections is related to a deflactionary definition of modernity.

One Copernicus Less

The trope of the epochal transition from medieval *scientia* to modern science is represented by the so-called Copernican Revolution. To what extent this revolution was a Western adventure into the secrets of the cosmos is a major site of contention for the critique of Eurocentrism. George Saliba has provided a thick historiographical account of the long-term processes of Islamic scientific discovery that preceded Copernicus' formulation centuries before the European Renaissance. Saliba shows that there is a consolidated path that connects several astronomical heliocentric traditions in pre-modern Middle East with India and China, and that once this path is explored, the attribution of the paternity of heliocentrism to Copernicus is misleading, and justifiable only against the grain of the enduring Eurocentric biases that contemporary historiography still reproduces. Beyond the historiographical question described by Arun Bala as the alternative between a narrow, Eurocentric view of the Copernican Revolution and a global, wider view to include the contributions of other non-Western scientific cultures, the Copernican Revolution epitomizes the diatribe around the possibility of displacing Europe from the center of the historical account of the emergence of modern science and possibilities that this displacement produces. On the one hand, Eurocentrism can be replaced by another, differently constructed and legitimized ethnocentrism; on the other hand, it is viable to explore the possibility that an alternative ethno-story is not the solution to the dilemma. When the relation between narratives and master narratives is tackled, the visual angle changes. The lemma ethnocentrism can be problematized not in terms of which *ethno-story* is more legitimate

than others, as if relations of power that buttress these alternative constructions would be insignificant. Rather to focus on the contestation of the plausibility of any '-centrisms', to express the making of the global dimension of science and the pluralities of the forms of knowledge that can legitimately claim to be other sciences. The 'center' in question is not geohistorical or cultural. It does not pertain to a geometrical space overlapping with the cartography of the world. Rather, it is an epistemological center: modernity. Therefore, rather than taking the frame of modernity for granted, or automatically inscribing the processes to be analyzed within its boundaries, the spaces of irreducibility between those processes and the frame of modernity itself can be investigated. Rather than accommodating narratives and theories to fit the flexible and elusive coordinates of modernity, critical thinking could benefit from taking the opposite direction. Along this path, the heuristic interrogative that drives research is an interrogation of the limits that the acceptance of the frame of modernity, however contested, imposes upon contemporary theoretical imagination and historiographical thinking. The following chapter is dedicated to the theoretical consequences of this reversed historiographical and methodological interrogative.

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3

Modernity and Eurocentrism

Modernity continues to dominate the intellectual scene across disciplines and structures of knowledge production, as well as appearing to be the uncontested anthropological horizon for the majority of people within and outside the West. However, modernity is under scrutiny, its theoretical foundations radically contested and its spatiotemporal boundaries questioned (Adams et al. 2005; Bhambra 2007a; Chakrabarty 2008; Dirlik 2012; Fischer 2004; Quijano 2007). This contestation is even more emphasized when motivated by the thereotical, political and historiographical critique to Eurocentrism. The parochialism of European ethnocentrism and of its universalistic pretensions appears irreversibly exposed. Therefore, the legitimacy of the colonial relations of power hidden beneath the way long-term and large-scale processes of social change are conceived within the frame of modernity are under attack. Nonetheless, tales of renewed European centrality, exceptionality and

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superiority are far from being dismissed. Any theoretical standpoint within the theoretical framework of modernity has little chance of avoiding the question of what stance it takes on Eurocentrism. What is at stake is the relation that alternative narratives and understandings of modernity, implicitly or explicitly, convey between norm and explanation, according to Burawoy's proposal (Burawoy 2005a, b); thought and desire, in a previous Wallerstein's formulation (Wallerstein 1999b); and formal rationality and material rationality, according to Weber's classical split. The relation between norm and explanation within the frame of modernity can be understood in terms of a generative conceptual tension. This tension designs a space of theorization whose landmarks are, on the one hand, the awareness that available sociological categories fail to produce non-Eurocentric knowledge about the world, and, on the other hand, the normative attitude to investigating the limitations of these categories in moving social theory beyond Eurocentrism inherited by nineteenth-century paradigms (Wallerstein 2001). Within this space, many critics have detected Eurocentrism surviving by means of perpetual shifts of meaning. A sense of *impasse* crops up on the surface of non-Eurocentric scholarly debates in the face of the recognition of the ever-changing self-transformative resemblances Eurocentrism morphs into in response to the growing level of sophistication and thoughtfulness of the effective heuristic devices deployed in criticizing it (Amin 2009; Bhambra 2007b; Chakrabarty 2011; Dirlik 2007; Huggan 2001).

John M. Hobson dreads a quite plausible scenario when he envisions that a surreptitious mutation of Eurocentrism is emerging as a reaction to the relative consolidation of a relational, dialogical perspective on the global history of modernity.

> I believe that we are on the cusp of a new neo-Eurocentric paradigm which poses a fresh challenge to global dialogism. In essence, the new challenge is of a picture of Europe that is no longer the master of invention and the creator of everything. Rather, the picture that is emerging is one of a Europe that is superior and exceptional precisely because of its ability to imitate and borrow from others before subsequently adapting these to higher ends. This in turn means that the target of non-Eurocentrism is now morphing. (Hobson 2012a: 22)

Whether or not this latest metamorphosis of Eurocentrism is the latest, a feeling of frustration leaks out. A feeling anyone familiar with biological knowledge of the power of mutation of certain viruses, or plants and animal fungal diseases, is used to living with. A sort of rational response to the awareness of how obscure the boundary between the morphing ability of the infecting organism and the augmented capacity of the observer to unearth the secrets of the former's survival strategies can be. The argument I make in what follows is that any attempt to overcome Eurocentrism within the logical, epistemological and historical-sociological frame of modernity is unable to ward off the recurrent palingenesis of Eurocentrism. This palingenesis can be conceptualized in terms of an isomorphism-generative capacity. The inability to overcome Eurocentrism within the frame of modernity is due to a fundamental underestimation of the morphogenetic relation between modernity and historical-social sciences. This morphogenetic relation allows either Eurocentrism to thrive by means of successive theoretical and semantic slippages, or modernity to act as an autopoietic, self-perpetuating conceptual frame. The combined effect of these intertwined logics is to neutralize critical attempts to overcome Eurocentric *explanantes* for the *explananda* of modernity. In support of this thesis, I draw on evidence from historiographical debates about East–West relations regarding modern science, and transpose the dilemmas explored in Chap. 2 onto the level of sociological conceptualization.

The Palingenesis of Eurocentrism

Several intellectual efforts have addressed the problem of making modernity a more egalitarian historical and conceptual space. An effective strategy consists in displacing the alleged European centrality in order to let under-recognized, marginalized, or silenced thoughts and experiences occupy, deform and transform both modernity as a spatial-temporal framework, and as a framework (Magubane 2005). Colonialism, the hidden agenda of modernity, has been effectively inscribed in the narration of the genesis of the modern world, to the point that coloniality has been acknowledged as constitutive of modernity

itself (Toulmin 1990; Mignolo 2003). A different line of critical thinking has opted for the strategy of thinking 'without modernity' (Dietze 2008). As Go (2012) has argued, the latter procedure of terminological erasure, however practicable, has proved rather sterile. If, as Abrams (quoted in Adams et al. 2005: 10) suggests, 'Sociology must be concerned with eventuation because this is how structuring happens, and history must be theoretical, because that is how structuring is apprehended', then the challenge of overcoming the limits of Eurocentric paradigms in social theory can be imagined as the attempt to construct non-Eurocentric categories of historical-sociological inquiry out of non-Eurocentric counter-narratives of modernity. This is Bhambra's *connected sociology* option. Here, 'connected histories and connected sociologies, together with a recognition of international interconnectedness, allow for the deconstruction of dominant narratives, and, at the same time as it opens social theory to different stories' (Bhambra 2014). 'Connected sociologies seek to reconcile them systematically both in terms of the reconstruction of theoretical categories and in the incorporation of new data and evidence' (Bhambra 2011: 140). Drawing on Subrahmanyam's connected histories (1997, 2005, 2011), Bhambra argues for the sociological relevance of those counter-histories of modernity that are relatively more independent of what used to be understood as the center of the modern world, that is, Europe.

Bhambra's concern is based on a radical detour into the analysis of different typologies of critiques of Eurocentrism that Wallerstein (1997) elaborated. Anti-Eurocentric 'avatars' of Eurocentrism, according to Wallerstein, end up merely reshaping European centrality without displacing it. Bhambra maintains that 'in failing to contest the historical adequacy of the concept of "Europe" and what it was assumed to have done, Wallerstein limits his analysis simply to a question of significance' (Bhambra 2007a: 4). Bhambra proposes a different definition of Eurocentrism. A definition that further clarifies what Samir Amin had enunciated in his seminal work on Eurocentrism. For Amin

> Eurocentrism is not a social theory that claims to provide the ultimate explanatory key for the issues of social science, thanks to its overall coherence and its totalizing aspiration. Eurocentrism is nothing but a deforma-

> tion, fundamental and systematic, that the majority of ruling ideologies and social theories share. In other words, Eurocentrism is a paradigm that, as well as all paradigms, works automatically, within the vagueness of its apparent evidence and common sense. For this reason it appears according to different modes, either in vulgar expressions spread by means of mass media, or in erudite assertions of practitioners of the different fields of knowledge. (Amin 1989: 9)

Whereas Bhambra specifies that:

> Eurocentrism is the belief, implicit or otherwise, in the world historical significance of events believed to have developed endogenously within the cultural-geographical sphere of Europe. In contesting Eurocentrism, I contest the 'fact' of the 'specialness of Europe'—both in terms of its culture and its events; the 'fact' of the autonomous development of events, concepts, and paradigms; and, ultimately, the 'fact' of Europe itself as a coherent, bounded entity giving form to the above. (Bhambra 2007a: 5)

By denying either European uniqueness, or its endogenous path of development, or 'ultimately' its historical presence as a matter of 'fact', Bhambra systematizes several versions of anti-Eurocentric critiques whose overall impact has been to graft anti-essentialism and relationalism into the living tissue of the debate on modernity.

A closer look at the internal coherence of Bhambra's definition of Eurocentrism, which inaugurates the scientific program of *Rethinking Modernity* (Bhambra 2007a), discloses the radical theoretical landscape that Bhambra draws. A casual glance at her formulation would leave untouched the intuitive association between Europe and Eurocentrism, evoking a logical continuity between Europe as presumed geohistorical center of Eurocentrism as a paradigm and, conversely, Eurocentrism as epistemological architecture articulating the centrality of Europe in modernity. Yet, a phenomenological discrepancy remains when one realizes that in Bhambra's definition of Eurocentrism, the terms of the relation between the presumed center and that paradigm that buttresses the alleged centrality, are, in fact, interpolated. It is not Europe that is the basic essence of tales of its own centrality; rather, it is Eurocentrism,

as a set of assumptions, that gives form to Europe fictitious immanence. Europe does not possess any kind of historical factual existence. Nonetheless, Eurocentrism does exist as the paradigm that generates historical-sociological significance, despite and paradoxically because of 'Europe's fictional status. Tales of European centrality enjoy an existence that is separate from the existence of the hyperreal point of reference they automatically create in history every single time these tales intrinsically interpellate 'Europe' by means of semantic procedures of historiographical construction.

Let's return to Bhambra's argument. It conveys a twofold critique. First, the critique of the chameleonic shapes that Eurocentrism has assumed from modernization theories to multiple modernities. Second, the deconstruction of Europe as historical entity, by means of the dismantling of the myths that provide Europe with its presumed cultural integrity: the Renaissance, the Nation-State and the Industrial Revolution (Bhambra 2007a: 83–123). In this context, Bhambra makes a powerful argument to show how the paradigm of multiple modernities articulates in space what the hegemony of modernization theories articulate in time. Multiple modernities is widely accepted as the most comprehensive framework to cope with the challenges to Eurocentric modernity born as a consequence of pressures to recognize non-European historical experience on a global scale as alternatively modern. In this context, the concept of civilization conflates either institutional assets (the free market, the nation-state, bureaucracy, and modern science) or culture. Yet, while the birth of modern institutions is located in sixteenth-century Europe, culture would be the historical space where distinctive forms of non-European societies find legitimate expression. 'Thus [Bhambra underlines] it is believed to be the conjunction between the institutional patterns of Western civilizational complex with the different cultural codes of other societies that creates various distinct modernities' (Bhambra 2007a: 66). According to this logic, hybridization as a process would be the historical *locus* where the solidity of the construct 'Europe', which had been iconic in earlier versions of modernization theories, sublimates into a more evanescent European civilizational specificity. The specificity of Europe as a civilizational path would allow for equally legitimate non-European paths to modernity. Nonetheless, despite whatever apparent overcoming of

Eurocentrism the majority of sociologists accords to different nuanced versions of multiple modernities, Bhambra submits that these 'are [but] variations on a theme where the theme is always the necessary priority of Europe, or the West, in any understanding of the world' (Bhambra 2007a: 145). Eisenstadt and Schluchter (Eisenstadt et al. 2001) are complicit with Eurocentrism to the extent their attempts to overcome it paradoxically end up endowing it with a renewed significance: this significance shifts from the primacy of European culture to the superior and primigenial specificity of European institutional patterns. The usual 'first-in-Europe' schema resurfaces.

Eisenstadt argues that the first radical transformation of 'modernity', based on the institutional innovation Europeans made, took place 'with the expansion of modernity in the Americas' (Eisenstadt 2000: 13). Eisenstadt (2000: 23) argues that the 'discovery' of the Americas 'is the first instance of a multiple modernity … Multiple modernities are, thus, seen to emerge from the encounters between Western modernity and the cultural traditions and historical experiences of other societies: a conjunction whose first occurrence was in Europe itself.' Bhambra contests that this avowedly non-Eurocentric point of view from the West is effective in establishing the West as both the origin of modernity and as the origin of multiple modernities (Bhambra 2007a: 67).

What are the upshots of Bhambra's position? If you agree to consider these successive 'variations on the theme' not from the perspective of who produces them but from the paradigmatic logic of European centrality that they are consistent with, we can reword variations as pertaining to *Eurocentrism palingenesis*.

Bhambra consistently substantiates her theoretical vantage point on the basis of extensive historiographical scholarship engaged in questioning myths of European cultural integrity. In this sense, even culture, the residual sphere of immanence where the idea of the European endogenous civilizational specificity has been tentatively secured by multiple modernities theorists, comes to be disclosed, demystified and subordinate to the interconnectedness of long-term and large-scale processes of exchange among entangled geohistorical locations. What this non-Eurocentric historiography shares, whether devoted to conjunctional explanations or to civilizational explanations, is the claim that the emerging phenomena

that these three connected historiographical myths (mis)represent are all by-products of complex global dialogical connections whose original morphogenesis no hyperreal construction named 'Europe' is legitimately allowed to boast about and attribute to its people's inner genius.

We have seen in Chap. 2 that, in evaluating the relevance of global dialogical history, John Hobson has brought to the forefront of historical-sociological debate what he considers an ongoing crystallization of a neo-Eurocentric paradigm. This crystallization of a new form of Eurocentrism exposes some inherent limits of global dialogism's theoretical assumptions.

> The old markers of Eurocentric world history—the European logics of 'immanence' and 'inventive exceptionalism'—are in the process of being replaced with the neo-Eurocentric markers of the West: the logics of 'emergence' and 'adaptive/imitative exceptionalism'. In turn, this leads to a new picture which potentially outflanks the non-Eurocentric dialogical critique of Eurocentrism. Indeed, if one probes further the implications are profound. For it brings into question much of the critique of Eurocentrism. (Hobson 2012b: 24)

If you shared Hobson's intuition, we could agree that Eurocentrism implies tales of superiority centered on the unique capacity of Europeans to actively appropriate non-European ideas and inventions. Once again, the palingenesis of Eurocentrism would then be producing 'fresh challenges' to non-Eurocentric world history. What would these challenges consist in? Hobson notes that 'at the extreme, the insights of dialogism could even be used to enhance the neo-Eurocentric approach, since what matters is not the number of Eastern inventions that have been borrowed but the point that Europe was able to work with them and assimilate them to higher ends' (Hobson 2012b: 19). Hobson warns against anyone among non-Eurocentric thinkers who might mechanically reply 'that this commitment to Western exceptionalism still betrays an unacceptable bias that underpins neo-Eurocentrism. And given this, non-Eurocentrics might rest a little easier, and continue their search for arguments which seek to deconstruct this myth and replace this meta-hierarchy with a more democratic conception wherein East and West are placed on a similar inventive or creative footing' (Hobson 2012b:

21). Interestingly, Hobson does not yield to the temptation to restate that the connected/relational nature of global processes would eventually be self-accomplishing regarding the task of avoiding Eurocentrism. Why? The successive semantic and theoretical slippages of Eurocentrism that Hobson and Bhambra detect do not operate only at the historical-sociological level. They do not merely imply homologous changes in the attribution of relevance of certain characteristic to the West, or to the East, or to both, in terms of a relationally constructed Eurasiatic modernity (Goody 2004a, Dirlik 2007, 2009, 2011). From the blatant triumphalism of European supremacy, to the exceptionalism of Western institutions, to the myth of the inventiveness of European cultural and scientific genius, Eurocentrism palingenesis designates a trajectory from lower to higher levels of abstraction. Eurocentrism palingenesis involves also a process of conceptual hypostatization that assumes each one of the discrete anti-Eurocentric argumentations produced along the debate over Eurocentrism as transient foundational underpinnings, to build other layers of European narratives of exceptionalism.

For this reason, in my interpretation, when Hobson tries to escape this hunting hypostatizing spiral, he finds relief in reframing historical-sociological issues into epistemological issues. This heuristic strategy can be conceptualized as a shift from the contestation of 'how' modernity took the form it took, to the construction of the theoretical problem of 'why' it did it that way. The *why* is the threshold of the bastion of Eurocentrism on whose door is written '*no admittance except on explanation*'.

> Non-Eurocentric dialogism is being outflanked by virtue of the fact that neo-Eurocentrism can offer an explanation of the rise of the West that is currently missing within the non-Eurocentric global dialogical approach. … This means that non-Eurocentrism can offer an account of European adaptiveness. But, as I shall now explain, non-Eurocentrism is lacking for the most part a theory and explanation of European adaptiveness; a lacuna that strikes a hole in the body of this literature. (Hobson 2012b: 25)

How do connected histories/sociologies approaches answer these questions? Does global dialogism theoretically overlap Bhambra's connected histories/connected sociology approach? Not enough to eclipse some of

the most distinctive insights connected histories/sociologies promote. Bhambra does not address most of the energy of her approach toward the construction of a more comprehensive, non-Eurocentric grand narrative of the world history of modernity. Her approach shares postcolonial skepticism of any master narrative even though it explicitly avoids many of the argumentative traps of radical relativism. Connected sociologies stands as an innovative open-ended frame to reconstruct sociological imagination, where continuous displacements of space-time coordinates potentially enable the emergence of categories for historical-sociological inquiry whose plausibility is not necessarily bound to the standards of validity its Eurocentric predecessors used to ground their epistemological legitimation. The focus is not explaining the 'rise of the West'; rather the dissolution of the historical 'fact' of Europe as geocultural entity. Bhambra leaves the issue of *why* in the background, remaining focused on the *how* of modernity.

Yet, this agnostic position is not 'neutral' against the grain of the norm-and-explanation tension designed by the presence of Eurocentrism within the framework of modernity.

What do I mean? It is legitimate to preserve any spatiotemporal connection allowing for a non-Europe-centered history and argue for the validity of this account, but then two orders of problems arise when working on concept formation. First, if one stands on the threshold of equivalence accorded to each set of categories emerging from each single counter-history, there will be no scalable conceptual heuristic device, because each set of categories will be valid only in the historical-logical apparatus of its emergence. This means their adequacy and significance would be inherently bound to the particularistic context of its genesis. Second, if one produces a single set of sociological categories aiming to grasp the complexity of all the counter-histories it is possible to write without having Europe as their center, but with no center at all, the situation would emerge where a 'non-centered' historiography normatively established would actually become like moving around the black hole of the imploded Europe as a hyperreal construction. Thus, even the prolific exercise of excluding Europe or any other center would not go beyond an over-subsumption of distinct historical forms under a set of concepts whose continuities are mainly given in negative terms as 'non-European'.

Somewhat similar to Edgar Allan Poe's famous 'The Purloined letter'. The latter scenario is a *cul-de-sac*. The former, instead, remains fascinating as long as it critically brings out the issue of the relation between particularism and universalism in historical-social sciences. Nonetheless, this non-Eurocentric connected histories scenario appears to underrate the urge to consider that existing alternative chronosophies and master narratives already compete within the frame of modernity.[1] To be sure, Bhambra wisely clarifies that

> While anything could be possible, only some things are permissible. [In addition] it is this aspect of permissibility, or plausibility, that guards against the lapse into relativism. Under the earlier philosophy of science, history is judged solely in terms of its accuracy (correspondence)—where accuracy relates to endeavors attempting to ascertain how things 'really were' in the past—I argue, however, that such claims to accurate representation only arise in relation to collective standards of adequacy negotiated in a contested present. (Bhambra 2007a: 148)

Inasmuch as this contested present cannot be assumed in an allusive manner, it is a constitutive part of the problem. The contested present deserves a conceptualization in terms of a contested historical context of power relations, where the standards of legitimation as well as the procedures of validation of knowledge are responses to historically determined normative-explanatory tensions. This does not mean that only those geo-historical locations relatively ascending in contemporary hierarchies of power at the world scale, and the counter-histories of modernity that support, justify and naturalize this rise deserve attention. Not at all. As long as new hierarchies seem to arise, the unstable nature of their transitional adequacy leaves room for the creation of alternative views and theoretical practices. It is even more necessary to work in the direction of enhancing the intellectual and political biodiversity of historical evidences and sociological perspectives, to the extent this process contributes to counter-hegemonic discourses. Nonetheless, and for this same reason, we should not underrate the fact that new emerging hierarchies behave as

[1] The concept of 'chronosophy' attains to Pomian's notion of long-term ideological structures producing a specific order of relation between remote past, present and remote future (Pomian 1984).

gravitational poles also for existing theories, in the sense that even those theories that do not intend to side with one or another of these ascending counter-histories that aspire to become hegemonic master narratives can endorse, or be appropriated by, universalistic non-European ethnocentric ideologies.

In order to expose what can be the unwanted, unexpected convergences between theories within the conceptual space of modernity, let me take as an example Decolonial Studies research.[2] This choice is motivated by the relative theoretical consolidation and crystallization of this perspective from the second half of the 1990s onwards. In extreme synthesis, Decolonial Studies reasserts the role of Latin America as constitutive of the modern world. The 'decolonial' option advocates that the conquest and colonization of Latin America by Europeans has been the *incipit* of modernity. Not simply because of the enlargement of the Euro-Asiatic system of long-distance trade. Rather, because of the complex system that created a European/Western identity forged in Latin America through the colonial encounter. A form of thought named Occidentalism, which predating Said's Orientalism. Renaissance and the Cartesian *ego cogito* were grounded, in fact, in a colonial *ego conquero* (Dussel 2002: 223).

The genesis of modernity/coloniality would coincide with the coming into existence of a system of relations connecting Europe with the Americas. The normative move to include subjugated geohistorical locations and subjectivities into the big picture of a renewed enlarged global modernity appears to be accomplished to the extent that is problematic to keep hiding the colonial agenda of modernity (Mignolo 2000). Yet, what does this imply in terms of narratives of modernity at large? The centrality of Latin America is coextensive with the centrality of Europe in the global space. This means that modernity did not emanate from the center (read Europe) to its peripheries. And this view stands out as an explicit critique of diffusionism in world history. Sixteenth-century Europe, it is maintained, was part and parcel of a wider Euro-Asiatic sys-

[2] Decolonial Studies as an analytic perspective emerged during the first half of the 1990s as an attempt to respond to the challenges of postcolonial studies in Latin American studies. For an intellectual history on the subject, see Latin American Subaltern Studies Group 1993. For a comprehensive and articulated discussion on the whole perspective, see also Escobar and Mignolo 2013.

tem, connected mainly by long-distance ties of material and intellectual exchanges. The core logic of this system of exchange consisted in plundering gold and silver from the Americas, which were used by Europeans to buy luxury goods produced in China. In accordance with Andre Gunder Frank's (1998) thesis of *Re-Orient*, China and not Europe was the center of the modern world (Gills and Frank 1992). It follows that this critique of Eurocentrism from Latin America is complementary to Sinocentrism, as articulated by Frank.

Does the strategy of displacing Europe with China at the center of world history provide an explanation for the 'rise of the West'? Does it enable any epistemological overcoming of Eurocentrism within the historical space of modernity? As Wallerstein put it in his single combat with Frank about *Re-Orient*, even such Sinocentric narrative, in its turn, 'seems unable to make European wealth, military strength, and imperial dominance of the world entirely disappear, at least between 1800 and 1950. But since there is no plausible explanation, it becomes a truly miraculous happening' (Wallerstein 1999a: 357). The question arises: to what extent does a Sinocentric narrative of modernity differ theoretically from the Orientalism, essentialism and diffusionism that the Eurocentric master narrative of modernity reproduces? This question becomes more pressing when carefully reflecting, for instance, on the role that, paradoxically as well as expectably, modernization theories are playing nowadays in the self-centered narrative of the success of China in the world economy (Dirlik 2011, 2012). Huaiyin Li (2013) has caught this paradigmatic shift in Chinese historiography and social theory since the 1980s. This shift has produced a large-spectrum revisionist move that openly exhumes modernization theories that were at their climax during the 1950s and 1960s in the USA. (Li 2013: 206–7). This shift has been anticipated by a previous process of resignification of modernization theories into the Marxist logical-grammatical system of meanings, as analyzed by Ma Xueping (2005). A kind of reverse Orientalism that displaces in time and space the effects of the critiques of developmentalism and Eurocentrism, and eventually neutralizes it, floods into a triumphalist

narrative of Chinese exceptionalism, which mirrors the historiographical myth of the European miracle (Callahan 2013; Zhang 2013).[3]

What are the partial conclusions one can draw from these strategic mobilizations of theories and horizons of sense? If, as Hobson suggests, in order to cope with an epistemological deficiency we accord priority to the *why* over the *how* of modernity, then we cannot avoid framing world history as a scene played by geohistorical, civilizational entities endowed with some sort of historical existence. In so doing, we would consider, as a morphogenetic question, the problem of explaining *why* one among these geohistorical locations 'rose' at a certain moment in history and ascended to world dominance, even though anyone is free to disagree about who/what was central, how long this domain lasted, upon which subjects, and by means of what devices. In synthesis, we would engage in the emergence of a different, plausible, variably adequate master narrative, differently ethno-centered. Whereas, on the other hand, we give priority to the *how* of modernity, as Bhambra proposes, and we aspire to build non-Eurocentric categories without explaining the *why* of modernity, we would abstain from explaining *why* at a certain moment in history Europeans gained wealth, military strength, cultural hegemony and imperial dominance over the world, or a large part of it. In this case, paradoxically, the pressure to reassess colonialism at the heart of world history would result in hesitation at the question of why colonialism, and thus coextensively modernity, emerged. As a consequence, even if we recognized that colonialism as a process, legitimated through Eurocentrism as palingenetic paradigm, is not an exclusively Western hallmark of world history, and admitted it can be acted by, or constructed around, other potential '(ethno)-centric', essentialist, orientalist universalisms, we would still fall short in sociologically conceptualizing the historical structuration of the processes of hierarchies production and narrative legitimation on a global level.

Notwithstanding Europe does not exist as a historical 'fact', its specter still haunts the world: the specter of Eurocentrism.

[3] William A. Callahan (2013) offers an interesting overview of recent scholarly and popular literature about China produced by both Chinese and non-Chinese authors that, taken as a whole, appears to promote from many angles the idea of so-called Chinese exceptionalism. See also Feng (2013).

Modernity-Eurocentrism: An Indissoluble Nexus?

Once agreed upon a definition of Eurocentrism as a paradigm operating at a level of abstraction intertwined with, but not exhausted by, the historical-sociological dimension, it becomes evident that it will not be from a permutational logic replacing a center with another center of modernity that a new criterion of relevance will emerge to construct non-Eurocentric categories of knowledge production. *A fortiori*, in case you consider that what Hobson detects as neo-Eurocentric arguments actually do mirror core logics of historical-sociological explanation in the context of Sinocentric narratives of global modernity. For Karl Popper, the distinctive feature of Western civilization was precisely its capacity to offer a flexible structure of knowledge able to confront, adapt to and actively reformulate frameworks of knowledge production pertaining to other civilizations (Popper 1994: 33–64). The Italian historian Carlo Cipolla insisted that 'when Europe absorbed new ideas from outside, it did not do so in a purely passive and imitative manner, but often adapted them to local conditions or to new uses with distinct elements of originality' (Cipolla 1976: 180, quoted in Hobson 2012b: 25). Ricardo Duchesne echoes this account of modern science. He affirms that 'a distinctive trait shown by Europeans was precisely their willingness to imitate inventions made by foreigners, in contrast to the Chinese who ceased to be as inventive after the Sung era, and showed little enthusiasm for outside ideas and inventions' (Duchesne 2006: 76, quoted in Hobson 2012b: 18).

Even among the most Eurocentric China specialists, very few would nowadays subscribe to Duchesne's description of the development of sciences in China. As Kim (2004) has precisely analyzed, theses of immobilism, 'laziness' and disinterest have been confuted by multiple evidence leaving little room for such a straightforward differentiation between Western and Eastern attitudes towards natural knowledge. However, this logic gathers much more consensus when formulated in a more sophisticated version. This sophisticated version renounces the *explanantes* derived from civilizational analysis, and endorses a more nuanced relational construction of the differences between China and Europe. This argument is

implemented to explain the Great Divergence through the prism of modern science, via a specific combination of conjunctional and civilizational elements. According to David Landes's canonical formulation,

> The mystery lies in China's failure to realize its potential. One generally assumes that knowledge and know-how are cumulative; surely a superior technique, once known, will replace older methods. But Chinese industrial history offers examples of technological oblivion and regression. We saw that horology went backward. Similarly, the machine to spin hemp was never adapted to the manufacture of cotton, and cotton spinning was never mechanized. And coal/coke smelting was allowed to fall into disuse, along with the iron industry as a whole. (Landes 1999: 55)

Twentieth-century Western historiography of modern science in China has widely agreed that mid-term effects of the Rites Controversy created determinant preconditions of the 'great divergence' in the development of scientific attitudes characterizing the success of the West and the failure of the East. When the Jesuits lost their internal conflict within the Catholic Church, the official doctrine of Rome changed. If the adaptive attitude towards the possible translation of local Chinese customs into Christianity that the Jesuits had adopted was the quintessential ideological meta-structure allowing for the possibility of the hybridization of knowledge between Chinese and Jesuit *scientia*, the decision that this Jesuit strategy was no longer tenable discredited the Jesuits' presence at the imperial court and among Chinese *literati*. Many members of the Chinese cultivated elite lost interest in the applicative approach of Jesuit *scientia* and reconsidered Jesuit mathematics as a form of knowledge not strictly relevant to practical applications, primarily to astronomy. According to Joseph Needham, within the frame of a wider 'indigenization' of knowledge conducted during the first decades of the Qing dynasty in the seventeenth century, *literati* turned to classical Chinese knowledge in order to prove classics the primigenial source of all existing knowledge (Elman 1984). In so doing, they precluded China from the possibility of enhancing that complex matrix of relationships between the mathematization of nature, pragmatic attitudes, experimentalism and applicative technology that would boost Europe world dominance (see Needham 1956: 336, 340).

This well-established view has been strongly contested by many scholars in recent decades. For Nathan Sivin, the reasons for this increasing return to classicism are to be found in the processes of transition of political power internal to Chinese institutions and society. 'After the defeat of Ming dynasty and the rise of Manchurian Ch'ing dynasty, the majority of *literati* adopted a loyalist position towards defeated emperor, and decided they would not have served a new non-Chinese dynasty. So they were motivated to spend their lives studying and teaching new mathematics and astronomy but in order to master the neglected techniques of their own tradition' (Sivin 2005: 19). Following this line, Elman reports that narratives of the 'Chinese origins' of Western science had existed since the very first years of the Jesuits' arrival in China as a pragmatic response to the Jesuit project of accommodation of Western knowledge into pre-existing Chinese systems of natural knowledge, during the last decades of the Ming era (1368–1644):

> On the Chinese side the accommodation project provided an unforeseen ally for the Chinese observation that if the Classics were indeed repositories of ancient wisdom—Chinese and European—then all European learning, including the mathematical and natural history fields of *scientia*, originated in China and was later transmitted to the West. The Chinese could agree with the Jesuits about cultural transmission in theory, but they were free to change the direction of that transmission in practice and make themselves central. (Elman 2005: 173–80)

Western science at large was not something new to the Chinese system of knowledge production as a whole, not so much regarding its specific contents, but rather in terms of approach to the problem of how man can know nature. As Wang Hui systematized

> The modern usage of science as a term meaning 'process' can be easily seen in recent Chinese thinkers' efforts to translate the word into concepts belonging to *Zhixue* (study of principle), concepts like *gezhi* (investigation and extension), *gewu* (to investigate things), and *qiongli zhi xue* (study of probing thoroughly the principle). The term *gewu zhizhi* (to investigate things so as to extend knowledge) is a verb-object structure, reflecting a dynamic subject-object relationship. In fact, *gezhi* as a noun consisting of

> two verbs ['to investigate and to extend'] can be viewed as a gerund ['investigating-extending'] or a verbal noun. Compared with the later popular concept of 'science', *gezhi* lays particular stress on the process of the subject's cognition, observation, and experience. (Wang Hui 1995: 3)

Gezhi was part of a wider architecture of knowledge production. This architecture, dating from much longer before the Jesuits' arrival, had already provided Chinese thinkers with a framework flexible enough to accommodate various forms of knowledge they encountered during maritime and terrestrial expeditions outside their territory. A framework at work when receiving emissaries from other scientific cultures and civilizations: what Elman names a consistent epistemological structure allowing for 'collecting the collectors' (Elman 2005: 34–53). From a Sinocentric perspective, the same adaptive/inventive ability as well as curiosity that would be the essential trait of Europeans that led to the rise of the West within a Eurocentric explanatory paradigm, appears to be a plausible hypothesis supporting a Sinocentric version of the world history of modernity. Defining features such as essentialism, diffusionism, Orientalism, inventiveness and adaptability are able to characterize other ethnocentrisms apart from European ethnocentrism, and aspire to impose their own parochial logic in terms of universalism. If one wants to preserve the history of ideas as dialogical and to accord prevalence to relationships over essentialized entities, it is necessary to admit the possibility that there is an Eurocentric logic also underlying Sinocentric constructions of modernity, and thus recognize that Eurocentrism is an isomorphism-generative paradigm.

Nathan Sivin has framed the question of *impasse* in explanation of modernity due to what I conceptualize in terms of isomorphism. He maintains that this *impasse* consolidates its epistemological continuity between East and West because of the fallacies of Eurocentric assumptions those explanations are based upon. His position can be articulated as follows:

> Why the scientific revolution did not take place in China is not a question that historical research can answer. It becomes a useful question primarily when one locates the fallacies that lead people to ask it. … In fact we have made very little progress so far in understanding how Europeans originally

> came to want that revolution in one country after another, since the attention of historians has been concentrated on how it took place. … Considered generally, this fallacy amounts to claiming that if an important aspect of the European Scientific Revolution cannot be found in another civilizations, the whole ensemble of fundamental changes could not have happened there. The flaw of reasoning that underlies it is the arbitrary assumption, never explicit, never discussed, that a given circumstance amounts to a necessary condition. … And these fallacies are disastrous because they assure us there is no point in comprehending *on their own terms* [my emphasis] the technical inquiries of non-Western cultures. [Especially when accepting that] historical study does not suggest that Europe by 1600 had a concentration of intelligence, imagination, talent, or virtue that no other civilization could match. … A scientific revolution, by the criteria that historians of science use, did take place in China in the eighteenth century. It did not, however, have the social consequences that we assume a scientific revolution will have. … In Europe, early modern scientists claim authority over the physical world on the ground that purely natural knowledge could not conflict with and therefore could not threaten the authority of established religion'. (Sivin 2005: 1, 7, 11, 14)

For Sivin, assumptions about the *how* of the 'rise of the West' ('rise' thought of by Hobson in terms of 'breakthrough') structure heuristic questions about the non-Western world. These assumptions transmute unresolved fallacies inherent to Eurocentric explanations of the European 'Scientific Revolution' into negative historiographical questions about China. In other words, the vacuum opened up by Eurocentric explanations of *why* Europe as historical entity underwent a certain unique, necessary path to modernity, are projected as shadows onto the background of China as derivative construct. These explanations are used to formulate hypotheses of the failure of China in achieving modernity. Questioning this Eurocentric logic of epistemic structuration, according to Sivin, would mean at least accepting that a Chinese Scientific Revolution occurred in the sixteenth century but did not generate the same social consequences as it had in Europe at the same time (Sivin 2005: 18). The question arises: what is it plausible to answer to the compelling question posed by Hobson, when he asks:

> Is it possible to produce a non-Eurocentric theoretical explanation of the things that 'Europe did right', without falling back into the trap of

> Eurocentrism and neo-Eurocentrism? Put more specifically, we need to know what the Europeans did right in order to put all the Eastern resource portfolios together to eventually make the breakthrough on the one hand, as well as answering why they sought to achieve all this on the other. And simultaneously, we need to confront the other elephant in this (already over-crowded) room, namely: why did the Easterners not press on into modernity? (Hobson 2012b: 31)

Modernity-Eurocentrism: An Indissoluble Nexus

If one subordinates the narrative of *how* modernity emerged to the explanation of *why* 'the breakthrough' took place, the *when*-and-*where* of the modernity narrative cannot but be produced according to a Eurocentric morphogenesis, since the very idea of breakthrough implies a conception of 'what was right to do' that cannot but be socially constructed *in European terms*. If, otherwise, one tries to overcome Eurocentrism by questioning the *why–how* structure of reasoning centered on 'the breakthrough', and conceives 'what was right to do' by subordinating its construction as historical object of analysis to a non-Eurocentric *where*-and-*when* (that is outside the geohistorical and cultural sphere of Europe), then modernity as narrative becomes unreasonably inconsistent with modernity as *explananda*. Is then modernity separable from Eurocentrism? I think not. Unless we do not assume this inconsistency as a heuristic split and think modernity as narrative conceptually autonomous from modernity as epistemic frame, in order not to throw the baby out with the bath water. I distrust this option on the basis of a theoretical argument that implies an intellectual disagreement: I am persuaded these two dimensions are inextricably entangled and thus considering them separated conceals the invariance of modernity as set of *explananda*, and thus Eurocentrism as latent structure of *explanans.* Modernity as episteme and modernity as narration are not to be considered separated because, as Björn Wittrock elucidates,

> When we speak of modernity and of modern societies, we seem to mean one of two things. First, we may speak as if we were giving an encompass-

> ing name to a whole epoch in world history, the modern age, as distinct from, say, the medieval age or classical antiquity. Such a terminology makes it legitimate to discuss questions as to when exactly the modern age may be said to have come into existence, what its origins may have been, or, indeed, if it has now come to an end. Second, we may speak as if we were actually characterizing distinct phenomena and processes in a given society at a given time. We may say that the technology used in some branch of industry of a country is modern but that patterns of family life are not. It is then an empirical question to determine to what extent different institutions and phenomena of a country may be described as modern. (Wittrock quoted in Harding 2008: 9)

Even though this definition correctly describes how modernity operates on two analytic levels, it does not fully represent the inherent intertwined nature of what it represents as 'substantive-vs-temporal'. First, it neglects the spatial dimensions inextricably connected to the time boundaries of modernity. In so doing, terms such as 'the medieval age' or 'classical antiquity', against which modernity would represent an ontological rupture and an evolutionary departure, are transformed into heuristic totems. These totems are supposed to represent adequate explanations for epochs experienced by non-Western society, even before the modern age was in place: paradoxically, world history would then be the history of how non-Western worlds are forcefully narrated through categories that emerged within the West, even before the West itself emerged as historical reality or even hyperreal construction (Woodside 2006). Moreover, this retroactivity would emerge against the grain of reciprocally foundational categories such as 'feudalism' for epochs such as the Middle Ages, whose conjectural epistemological condition, as Kathleen Davis has proved, makes their definition as problematic as the definition of modernity (Davis 2008). Second, the distinction between temporal and substantive definitions of modernity implements the same anachronistic logic, by falling into the Eurocentric trap of modernity that Bhambra has brought to the forefront of sociological debate:

> Notwithstanding attempts to distinguish between an historical understanding of modernity and a conceptual, or normative, one, it is my contention that this is not possible. As Blumenberg argues, the modern age 'is

> not present in advance of its self-interpretation, and while its self-interpretation is not what propelled the emergence of the modern age, it is something that the age has continually needed in order to give itself form' (1983: 468). Our identification of 'modern' society rests on a conception of what it means to be modern—whether the modern is understood in terms of social structures or of discourses—and it is from the Western experience that these definitions are drawn. In fact, this distinction between structure and discourse [is] argued to be one of the main ways of maintaining the dominant framing of modernity while seeming to challenge its less palatable aspect of Eurocentrism. (Bhambra 2007a: 3)

It follows that, in order to consistently take on Bhambra's criticism of the discursive/practice split, it appears fruitful to take into account that this split is pernicious. The problem should be reformulated as the problem of constructing the border that separates modernity as epistemological frame from modernity as a grand narrative, where what is a 'modern society' answers to *how* and *why* such substantive difference arose, while the anachronism of modernity's 'self-interpretation' responds precisely to the need to endow the myth of the origin of modernity with a *where-and-when*. In these terms, the plastic ideological architecture separating and then recombining modernity as analytic frame and modernity as master narrative becomes sublimated while this architecture keeps frantically trying to conflate many powerful centrifugal trends, whose combined effect is potentially self-destructive.

Logical Issues

An aporia thus emerges. The aporia that expresses, on the epistemological level, the *contradiction in terminis* I discussed in Chap. 2. An aporia that accounts for the epigenetic articulation of modernity: the consensus over modernity as a framework, either radically contested, or remade, or rethought, consolidates paradoxically when, simultaneously, the solidity of the consensus upon *where*, *when*, *how* and *why* modernity would come into existence slides into theoretical evanescence. Modernity appears an all-encompassing structure both in terms of playing tag autobiographies of European centrality, and in terms of the epistemological *a priori* that

frames the logical elaboration of whatever historical and social knowledge within its space and its status of framework appear to be forged by theoretical objectification as well as by methodological redundancy. In this sense, modernity loses any reference to the historical-social relations of its genesis, and thus it enters the realm of epistemological fetishes. Nonetheless, modernity has undergone and continues to undergo several transformations fostered by the implicit acceptance of its inevitability producing many shrewd and radical modifications. Paradoxically, modernity's narrative instability is modernity's epistemic strength.

When one looks more closely at how this framework translates into a generative normative-explanatory matrix of reasoning, one becomes aware that modernity looks tendentially autopoietic. Modernity has the capacity to recreate and reformulate its epistemological borders (McGann 1991: 15).[4] By modernity's capacity of autopoiesis, I refer to its ability to react resiliently to theoretical and conceptual challenges that threaten, with varying degrees of intensity, its epistemological invariance. As Vazquez maintains, this capacity is expressed either by continuously expanding modernity's epistemic territory in order to selectively include, silence or make inoffensively compatible whatever threat challenges its domain (where domain here is intended in terms both of power and of a logical set of assertions), or by reformulating its porous external limits. This continuous process is able to transform borders in frontiers of expansion and subsumption (Vazquez 2011: 29). Consequently, any attempt to produce critical knowledge about modernity risks being confined to the inherent logic specific to the epistemic territory we are considering, so that knowledge would be bound to oscillate within the space defined by modernity's specific duality of norm–explanation, articulated by means of Eurocentrism palingenesis.

[4] I metaphorically refer to Maturana and Varela's concept (Maturana and Varela 1980: 89). It does not imply any aspiration to apply natural sciences concepts to explain social reality, as this implicitly reasserts the hierarchical supremacy of natural sciences over historical social sciences and it leads to mental efforts of formalization whose sterility is directly proportional to its precision. On the contrary, for Luhmann, autopoietic systems differ from machines and the closed systems of classical equilibrium thermodynamics because they are recursive with respect to their operational features. They 'not only produce and change their own structures' but 'everything that is used as a unit by the system is produced as a unit by the system itself' (Luhmann 1995: 3).

If one assumes that this duality is inherent to modernity and its self-representation, it becomes more difficult to ignore the fact that constitutive duality also informs the critiques that are born from within the frame of modernity itself. In other words, the critiques that take for granted modernity as the stage of their representation. The autopoietic capacity of modernity is part and parcel of the incapacity of our sociological imagination to operate a logical regression that enable us to direct our critical gaze towards the epistemological foundations of that dualism itself: the idea of modernity. It may not be accidental that the autopoietic power of modernity as historical-sociological frame stands as the ultimate limit to logical regression as epistemological displacement, even in those perspectives and theories that have made a profound contribution to shedding light on the spatial and temporal *point-zero* ethnocentric nature of modernity's grand narrative (Castro-Gómez 2010: 237).

If, as Dennis Smith (1991: 1, quoted in Lawson 2007: 16) puts it, 'one of historical sociology's objectives should be to distinguish between open doors and brick walls, and to discover whether, how, and with what consequences walls may be removed', then it becomes intuitively perceptable that *modernity* itself is one of the main limits to the emergence of non-Eurocentric categories for a global historical sociology: walls of abstraction materialize, which anchor to modernity's own internal logic whoever swim toward the edges of this epistemolgical moat. But, legitimately, not everyone agrees we should break these walls; nor does everyone think that all spatiotemporal coordinates to get out are equivalent once out there; nor is everyone sure we should not wait for the barriers to crumble and implode; somebody, conversely, thinks we should actively demolish them. And, most of all, when any long-term and large-scale structure falls down, it always inflicts some wounds on the territory it used to designate; it suddenly leaves inhabitants' senses violently exposed to the flow of the disorienting wind of the uncertainty of displaced spatiotemporal borders. Like looking in the same old directions without those familiar perspective-painted walls to mould our sociological imagination, but with new pressing questions in mind: how would we configure the global according to a different space-time? And, even more important, if we were truly unsatisfied with the existing hierarchies of that world in ruins,

with what social relations do we want to replace the old ones, and what epistemological foundations will they be organized upon and shaped by?

The main *cul-de-sac* sociological imagination incurs consists in an (un)conscious underestimation of the generalized intellectual agreement around modernity as a frame, notwithstanding theoretical conflicts reshaping it. And consequently, it is not absurd to imagine that a certain degree of disillusionment with the constant normative reformulation of modernity's explanatory limits, in order to cope with pressures to make them more adequate, can produce conversely some kind of immunity to the inevitability of modernity as a frame. Becoming immune to the inevitability of modernity, I maintain, implies an effort to *unthink* the assumptions of the frame of modernity in order to decolonize social theory. Foundational assumptions about modernity are: modernity marks the transition to a secular age (Chap. 4); modernity is thinkable in terms of emancipation (Chap. 5). By questioning these assumptions, the way is paved for rethinking two fundamental categories of social theory: the notion of the 'global' (Chap. 6) and the notion of the 'endless accumulation of capital' (Chap. 7).

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4

Secularization as Ideology

The etymology of the word 'hierarchy' leaves little doubt about its theological derivation: the Greek word *hieros*, which means 'sacred', forms a single term with *arkhia*, which stands both for 'rule' and 'origin'. A plausible first documented appearance of 'hierarchy' seems to be in Pseudo-Dionysius the Areopagite's mystical neoplatonic writings in the sixth century AD as, about a millennium later, Antoine Furetière wrote in his *Dictionnaire Universel*, published posthumously in 1690. While until the fourteenth century 'hierarchy' meant 'subordination between the different choruses of angels divided into three hierarchies', as Furutièere documented, the term later came to designate an ecclesiastic structure of subordination 'that exists between the Prelates and the other ecclesiastics, the Pope, the Archbishops, the Bishops, the Curates and the Priests [who] constitute the hierarchy of the Church' (Verdier 2006: 13). In canonical law, secularization referred to the expropriation of ecclesiastical properties

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and rights; its semantic field was extended from this restricted meaning to include a wide historical process of transferring sense, power and legitimacy from religious to non-religious authorities (Davis 2008). The term 'secularization' was used in 1646 by Longueville during the negotiations that led to the Peace of Westphalia regarding the laicization of ecclesiastic territories in France (Dobbeleare 2002: 22). With this meaning it was deployed by Napoleon to dispossess ecclesiastic properties in 1803; it then came to designate a polemical device during the *Kulturkampf* in the second half of the nineteenth century (Lübbe 1965). By the formation of the German nation-state, the notion of secularization was suddenly extended to politics, ethics and sociology. During the first decades of the German Sociological Association's existence, both Tönnies and Weber, notwithstanding deep theoretical and political disagreements, agreed that secularization was a process that could define the whole specificity of the modern Western historical trajectory (Nijk 1968).

No doubt it is comfortable to see in the concept of hierarchy the secularization of a theological notion: the re-signification of an ecclesiastic term into a socio-political meaning able to conceptualize secular structures of power in the modern world. However the ideological dimension of the notion of secularization is much more far-reaching. For it is a theoretical intervention oriented to establish the nature of historical time as an articulation in global space of the authority of Western knowledge to produce what Partha Chatterjee has defined, in Schmidtian terms, the 'colonial exception': the power to declare a fracture in time as a new ontological and historical onset, in order to codify this fracture as a cogent configuration of reality (Chatterjee 2012: 194). In her re-interrogation of Koselleck's *Futures Past* through Chakrabarty's preoccupation with the colonial ability to establish 'where is the now', Kathleen Davis (in Cole and Smith 2010: 40) claims that 'secularization has been understood as a periodizing term that attempts to narrate the modernization of Europe as it gradually overcame a hierarchized and metaphysically shackled past through a series of political struggles, religious wars, and philosophical upheavals' (Chakrabarty 2004; Koselleck 1985). The particular historical entanglement of hierarchy and secularization, I contend, has to be rethought to understand how the secularization of hierarchy as a notion and the secularization of hier-

archies as social structures do not merely intercept a long-term process of transformation of existing hierarchical assets, rather it is secularization as a concept in social and political theory as well as a narrative of historical change that has actually been producing and is still producing anthropological, epistemological and civilizational hierarchies. In the name of the theoretical assumption of secularization, a Eurocentric mode of hierarchies production has imposed a definitional protocol of subordination through time (Ascione 2015). According to this protocol, a particular relation between faith and science has been transmuted into the organizational principle of establishing relations of dominance and marginalization among other forms of knowledge. This same definitional protocol operates through space: secularization is mobilized to subordinate entire systems of knowledge to those dominant in the West. Human groups associated with these denigrated forms of knowledge are thus constructed as bearer of inferior and primordial rationalities, according to a simple but powerful criteria: the less secularization as process and condition is detectable, the more distant from Europe (and thus from modernity) these groups are considered.

In a methodological article published in 1900, Emile Durkheim and Marcel Mauss formalized this double act of hierarchization that displaces onto a higher level of abstraction the co-constitutive interplay of sociological and anthropological Eurocentric knowledge:

> Classification is not a mere matter of forming groups; it is positioning groups according to very special relationships. We see them as being coordinated or subordinated one to the other, we state that these (the species) are included in these (the genera), that the second subsumes the first. There are those that dominate and those that are dominated, and others that are independent one from another. Any classification implies a hierarchical order for which neither the perceptible world nor our awareness can supply a model. … It is because human groups fit one into the other … that groups of objects are set out in the same order. Their regularly decreasing extension as we pass from genus to species, from species to variety, arises from the likewise decreasing extension presented in social divisions as one moves away from the widest and most ancient towards the most recent and derived. If all things are conceived as a single system, it is because society is conceived in the same manner. … Thus logical hierarchy is merely another

> aspect of social hierarchy and unity of knowledge is nothing other than the very unity of the community, extended to the universe. (Durkheim and Mauss 1903 quoted in Verdier 2006: 34)

Today, the solidity of this configuration of the Eurocentric mode of hierarchies production looks irremediably compromised by the relative decline of Western hegemony at the global level with severe threats to any self-contained understanding of European modernity. However, in this conjuncture, Habermas' concept of 'post-secular', alluding to the transition to a new, post-secular age, attempts to recast either Europe as *prima inter pares*, or a particular fault line between science and religion as universally valid, or modernity as legitimate historical and epistemological frame to let geohistorical pluralities coexist. I question the axiomatic nature of the assumption according to which modernity represents a rupture in space-time conceived as the coming of a secular age and confute the theoretical adequacy of the concept of 'post-secular'. My target is organized around three main focuses: I criticize Habermas' conception of post-secular as an attempt to provide new foundations to modernization narratives; I discuss Blumenberg's idea of secularization and question the Eurocentrism intrinsic to what he thinks of in terms of transition to the modern era; and I elaborate on Wang Hui's analysis of the relation between Western science and China in global modernity. I conclude by recasting the problem of secularization in terms of modernity as discourse that contingently and strategically establishes elite control over systems of thought at the global level and within the nation-state, which articulates hierarchies between social groups through the underlying possibility of reframing the dualism between civilization and its otherness.

Disenchantment and Modernization

Few thinkers in any historical period have the ability to influence the agenda within the public sphere. When the thinkers in question are those who have elaborated the very idea of the public sphere, then this number decreases to the value of 1 (Calhoun 1992). Habermas' concept of post-

secular is widely debated across intellectual communities (Cooke 2006; Gorski et al. 2012; Junker-Kenny 2014; Losonczi and Singh 2010). Its implications are crucial nowadays to understanding recent changes in the idea of modernity as a frame, and its hegemony in both academic and political debate (Habermas 2003, 2005, 2008a, b; Joas 2008). What the post-secular alludes to is intuitively related to the presumed transition to an age, a post-secular age, when the prevalence of secular claims over religious authority as a privileged way to make sense of the world is coming to an end: a partial reversal of the progressive trend toward the disenchantment of the world (Berger 1999; Smith and Holmwood 2013; Rawls 2010). Habermas clarifies that his own understanding of "post-secular" conflates a description of contemporary transformations within the European public sphere and the disclosure of possible future global scenarios in normative terms:

> Today, public consciousness in Europe can be described in terms of a "post-secular society" to the extent that at present it still has to "adjust itself to the continued existence of religious communities in an increasingly secularized environment". The revised meaning of the secularization hypothesis relates less to its substance and more to the predictions concerning the future role of religion. The description of modern societies as post-secular refers to a change in consciousness. (Habermas 2008a: 19)

Habermas does not limit himself to expressing these changes as occurring in the European public sphere in descriptive terms nor to drawing what he considers the normative implications of a correct interpretation of these changes. Habermas poses a theoretical problem, since he assumes these changes as historical evidence of erroneous analytical claims made by modernization theories.

> First, progress in science and technology promotes an anthropocentric understanding of the "disenchanted" world because the totality of empirical states and events can be causally explained, and a scientifically enlightened mind cannot be easily reconciled with theocentric and metaphysical worldviews. … Second, with functional differentiation of social subsystems churches and other religious organizations … restrict themselves to the proper function of administering the means of salvation … Finally, the

> development from agrarian through industrial to post-industrial societies leads to average-to-higher levels of welfare and greater social security [so] there is a drop in the personal need for … faith in a "higher" or cosmic power. (Habermas 2008a, b: 17)

In so doing, Habermas establishes a very particular relation between on the one hand, modernization theories' explanatory claims and, on the other hand, his hypothesis of the post-secular age which conflates both changes within the public sphere he describes and normative claims he proposes as a way towards a just society.[1] It will not have escaped the reader's attention that Habermas emphasizes modernization theories' descriptive/explanatory claims—what would be called diagnosis in Habermasian terms—while remaining silent about the fact that within the theoretical structure of modernization narratives, inherently convey normative claims about how 'backward' non-Western societies should be and what processes would be necessary in order for these societies to move along the modernization path traced by 'advanced societies'. Habermas explicitly contends that secularization is a universal tendency since his *Theory of Communicative Action* (Habermas 1984: 157–216). And this assumption has been re-affirmed recently in substance, even though with a different emphasis.[2] What does this interpretative double-standard between modernization theories' normative dimensions, on the one hand, and modernization theories' explanatory power, on the other hand, suggest? Why does Habermas distance himself from modernization theories' inner limits to construct his notion of post-secular?

This strategy of distancing is articulated via a selective reaffirmation of the thesis of disenchantment. Modernization theories' normative claims about how backward societies should act in order to make the transition from tradition to modernity were in fact part of the complex, wide articulation of the Eurocentric master narrative of modernity. This master

[1] On Habermas' cosmopolitanism see Fine and Smith (2003). For a wider critical assessment on the theme, see Rovisco and Nowicka (2014).

[2] In an interview given to Edoardo Mendieta (2010), Habermas maintains that 'The secularization of state power is the hard core of the process of secularization. I see this as a liberal achievement that should not get lost in the dispute among world religions. But I never counted on progress in the complex dimension of the "good life"'.

narrative assumed Europe as exceptional against all other world civilizations and superior both to these civilizations and, *a fortiori*, to all other human groups organized in smaller social formations labeled 'primitive' (Shilliam 2011). One of the multiple ways to synthetically conceptualize the foundations of this master narrative is the familiar thesis that science is the *locus* where an epistemological fracture emerged: a departure from pre-modern medieval metaphysical unity, which oriented humanity along the necessary path of the historical development of rationalization (Gaukroger 2006, 2010). In other words, Habermas does not question the disenchantment of the world as a process, although he admits that the process of disenchantment has not led to the relative irrelevance of religious forms of explanation against scientific causal explanation. What 'science' is Habermas referring to when he recalls Weber's concept of disenchantment?

Whereas Max Weber yielded to the temptation to color his analysis of the inevitable path world history had taken after the transition to modern capitalism with his own evaluation of what the rise of Western rationalism would have brought to the forefront in the anthropological horizon of entire humanity, his diagnoses were not optimistic. The inexorable 'fateful force' of the rationalization of the world through science would have led to a demythologization of natural history and to the decline of religious ethics faced with new cultural values organized around the hegemony of scientific rationality: a progressive, unstoppable disenchantment of the world. In this sense, it is revealing that Weber located Puritanism at the unprecedented conjuncture between long-term inner contradictions in Judeo-Christian theodicy (simply put, the question of the divine/human origin of evil), and the contextual emerging need for modern capitalism prompted by modern scientific rationality to fully develop through an adequate religious ethos. As Mackinnon (2001: 337) outlines,

> The 'need' for an 'ethical' account of the 'meaning' of the distribution of fortune produced increasingly rational conceptions. But as 'magical' elements were progressively eliminated, the theodicy of suffering found more problems because '"undeserved" woe was all too frequent; not "good" but "bad" men succeeded'. The search for rational consistency culminated in

> predestination, which so enlarged the powers of God and so diminished those of man that it created an ethical chasm between depraved humanity and its Creator. (Mackinnon 2001: 337)

This unique historical configuration gives an answer to Weber's inaugural problem in *The Protestant Ethics*, worded in the original Talcott Parsons translation, as follows:

> To what combination of circumstances the fact should be attributed that in Western civilization, and in Western civilization only, cultural phenomena have appeared which (as we like to think) lie in a line of development having universal significance and value. Only in the West does science exist at a stage of development which we recognize today as valid. Empirical knowledge, reflection on problems of the cosmos and of life, philosophical and theological wisdom of the most profound sort, are not confined to it. Though in the case of the last the full development of a systematic theology must be credited to Christianity under the influence of Hellenism, since there were only fragments in Islam and in a few Indian sects. (Weber 2012: 13)

The passage shows Weber's preoccupation with establishing a correct relationship between science and faith by means of the immediate assertion of Christianity's superiority over other world religions. Western superiority in religion complements Western uniqueness in science.

When we think of Weber's idea of disenchantment as recalled and reformulated by Habermas, Weber's reference to science looks unproblematic: it corresponds to a familiar narrative of the triumphal march of knowledge and discovery through the history of scientific geniuses such as Bacon, Galileo, Newton, Kepler and other heroes of similar or lesser magnitude (Harding 2011). However, this coincidence between science as disenchantment of the world and the Scientific Revolution as the historiographical construct that locates the origin of modernity is not so obvious, even though it represents a redundant invocation in social theory.

Modern Science and the Canon of Sociology: The Politics of Unquestioning

Floris Cohen has affirmed, 'for many scholars who have indeed gone ahead to investigate detailed aspects of these historical processes that together made the disenchantment of the European world, the connection with the Scientific Revolution seems hardly to exist' (Cohen 1994: 178). Cohen has argued by means of accurate historiographical inquiry that Weber's position on science is more enigmatic than the majority of sociologists are ready to acknowledge. The acknowledgment of a fracture between turn-of-the-twentieth-century sociology's founding fathers and American structural-functionalist synthesis and canonization operated by Talcott Parsons and his fellows, produces a derivative space of inquiry. It leads to an exploration guided by inconsistencies within the familiar view of the causal and narrative chain that connects the birth of modern science in sixteenth-century Europe, the disenchantment of the world and the transition from traditional to advanced societies (Parsons 1951, 1964). To Weber, the role of science as an impressive move towards the mathematization of the world in Western civilization was a function of, not entirely explained by but certainly not explainable without, the need for the exact calculation of cost–benefit in capitalist trade, given the increasing relevance of long-distance exchange (Cook 2007). To this aspect Weber devotes a few pages in *The Protestant Ethic*. Yet, Cohen claims that

> In a life's work devoted to nothing so much as to an in-depth investigation into the unique ways of the civilization of the West, the names of Kepler and Newton do not occur; that of Galileo, just once. One off-hand remark about the religious affiliation of Copernicus; one allusion to Jan Swammerdam as an exemplar of 17th-entury desire to cultivate science as a means to find God revealed; one reminder that Baconian utilitarianism was not what brought forth early modern science; one remark about the origin of experimental science in mining as well as in the Renaissance art (in particular music); one footnote suggesting a possible relationship between science and Puritanism in the 17th-century: this is about all

> Weber has to say further on science and its place in Western civilization. (Cohen 1994: 226)

When European disciplinary sociology crossed the Atlantic under the structural-functionalist synthesis made by Parsons from the 1930s onwards, Weber's idea of disenchantment was made part of what Connell has referred to in terms of the canon of Western sociology (Connell 1997, 2007, 2009; Lee 2003; Patel 2009; Reed 2013). This canon came to historically articulate a sociological conceptualization of disenchantment as a long-term process of social change peculiar to Western modernity, whose onset was historically located in space-time through the historiographical fetish of the Scientific Revolution, which was also acquiring its relevance in those same years (Osler 2000). For Weber—Cohen contends—appeared 'to be aware to what considerable extent the disenchantment of the European world took place under the aegis of early modern science, [however], the process of disenchantment has taken thousands of years' (Cohen 1994: 178–9). 'Science', Weber added, 'as well as other scholarly endeavors, belongs to the process too, both as a member and as a motor' (Weber, cited in Cohen 1994: 178).

For Habermas, instead, disenchantment is a process coextensively originating with modernity: it is the distinctive hallmark of European societal difference in space against all other human cultures, and the rupture in time as a departure from the European Middle Ages that gives birth to a new epoch.

The effect of complementarity in this reciprocal legitimation between the disenchantment promoted by science and the Scientific Revolution as the myth of the historical origin of the disenchantment of the world endowed the European master narrative of modernity with precise spatiotemporal coordinates and an internal cohesion it had never had before, and that it will never have from the 1980s onwards (Ashman and Baringer 2001; Bala 2006, 2012; Lloyd and Sivin 2002). As a consequence, the inevitable character of progress through science that Hegel had cast as the universal history of European modernity and its global projection across world civilizations was reframed in terms of the technological materialization of science to produce secularization elsewhere. Within the frame of modernization theories, secularization came to occupy the theoretical

position of the dynamic response to the need of backward societies to reduce, remove and replace all the traditional cultural resistances to the supposedly unstoppable universal 'syndrome of becoming modern', as Inkeles and Smith worded it.[3] Secularization thus became a decisive variable to derivatively explain success or failure of development, economic growth and the functional differentiation of societies within nation-states (Adas 1989; Nandy 1990; Prakash 1999). Yet, a crucial problem was overlooked or, put differently, a particularistic perspective was made unproblematically universal and deployed as self-evident. What was this science that modernization theories evoked as the ultimate depository of Western contributions to the evolution of humanity? What are its defining features, scope, aims, methodology and epistemological foundations?

American sociology after structural-functionalism pragmatically bridged the orientation of social sciences towards man in the formula of behaviourism, with the orientation of politics and economic theory toward the world in the formula of modernization theories. It became less and less interested in the fact that science itself was undergoing a deep process of destabilization in its own epistemological foundations (Fausto-Sterling 1981; Feyerabend 1999). Dramatic changes in the understanding of science as a whole were emerging also in history of science, where the debate over the sense, meaning and scope of the Scientific Revolution as a historiographical construct was going to animate the successive decades (Cantor 2005; Ghevarguese 1987; Poovey 1998; Shapin 1994). However, these contested, path-breaking mutations both in science and in its multiple historiographical and sociological dimensions were able to attract only a tiny minority of sociologists and social scientists (O'Murray 2011: 1–26). The bulk of modernization theorists were (and largely still are) not among these. Many of them still looked at science as the most desirable status of certitude and validation of knowledge, and as the main route to institutional and social legitimation, rather than as an open-ended source of dialogue, inspiration and critique. So,

[3] The attempt to traduce the theoretical assumption of secularization in quantitative indicators for empirical studies of non-Western societies is a leitmotif in American social science of the post-WWII period. See Eisenstadt (1966, 1970), Hoogvelt (1978), Hoselitz (1960) and Inkeles and Smith (1974).

the more they could assume science as a monolithic, authoritative black box-like legitimation reference, the more their quest for accountability as (social) scientists was matched (Abbot 2005; Akera 2007; Adams et al. 2005; Latham 2000; Mirowski 2005).

It could appear unsettling that Habermas, who relentlessly rejected positivism in favor of a hermeneutic approach from the beginning of his intellectual life, implicitly grounds his fundamental idea of disenchantment on such an unproblematic positivist understanding of science (Keat and Urry 2011: 218–27). And in fact this is an over-generalization to the extent it is taken as the most prominent aspect of Habermas' critique of modernity. Nonetheless, there exists an intellectual reason for this positivist bias. The sociology of science after Merton's later intellectual activity, the history of science after Koyré and Sarton, or the philosophy of science after Kuhn, were transforming in multiple ways the epistemological problem of understanding what are the heterogeneous, contrasting, extra-scientific logics of science as a social institution. The corollary was an emphasis on the complexification, rather than the exemplification, of the essential features of the scientific enterprise as a whole.[4]

As a result, the black-box image that twentieth-century social science inherited from its nineteenth-century positivist canonical ancestor was clearly, to say the least, less than adequate (Knorr-Cetina 1999). Fuller (2000: 7) has noted how Habermas' theory of communicative action, and with it his understanding of modernity as an unfinished project, was irreconcilable with those emerging, revisionist views about science. Declaredly based on the Kantian idea of 'universal', Habermas' assumption was, and still is, tied to the possibility of an all-encompassing ontological foundation for social relations. But, Fuller maintains, 'to the extent we recognize that radical conceptual difference in science can be explained in terms of the institutionalized communication breakdown that euphemistically passes for "autonomous research communities" […] the efforts of Jürgen Habermas, Paul Grice, and others to demonstrate by a priori reasoning that there are "incontrovertible foundations to communication" makes the goal of this quest 'simply chimerical'.[5] This unproblematic under-

[4] For a recent re-appraisal of Merton's sociologies, see Calhoun (2010).

[5] William Rehg has provided an articulated argument to assert cogency of scientific arguments according to Habermas' theory of communicative action. It is relevant to note how this attempt

standing of science is more compatible with Habermas' reliance on Kant than with a more sophisticated assessment of science as social institution and a heterogeneous epistemic territory. In fact, even though Weberian sociology is one of the main pillars in any Eurocentric master narrative of modernity, the positivist aspiration to a full-fledged nomothetic science of society was precisely the principal divergence between Weber and Durkheim. Within this sociological tension, Habermas' understanding of science oscillates between structural-functionalism at the historical height of US modernization theories of political world hegemony, and the role of science and technology in modernity elaborated by German critical theory between the 1950s and the 1960s (Steinmetz 2005).

Which Science

It was Immanuel Wallerstein who foresaw in this unproblematic acceptance an intrinsic theoretical limitation. When, by the beginning of the 1970s, he engaged in methodological issues concerning the will to elaborate a structural-functionalist systemic (however Eurocentric) unit of analysis that would have been wider, more relational and thus more adequate than the nation-state to analyze historical-social processes in the *longue durée* on a world scale, he understood that the normative pretensions of modernization theories, according to which the West had to be considered a replicable model of social and economic development, were indissolubly connected to the acceptance of fundamental epistemological assumptions that lay at the foundation of the relevance of the nation-state as unit of analysis.[6]

Wallerstein and Hopkins alluded to the fact that the nation-state drew its solidity from the unquestioned reliance on Newtonian space and time, in the form of a Kantian philosophical synthesis, as a fundamental category of thought (Bach 1982, in Wallerstein and Hopkins 1982). In order to assess the epistemological validity of their methodological option,

consistently attains to the existence of a possible ontological foundation for scientific arguments (Rehg 2009).

[6] On world-systems analysis charges of Eurocentrism, see Dussel (2002) and Hobson (2012).

driven by a relational ontology in International Relations and Historical Sociology, world-systems analysts dismissed Newtonian space and time as external, quantitative coordinates for historical phenomena. Following Braudel, they accorded to processes the fundamental property of being endowed with their own, qualitative, internal space-time. Within the global space of the modern world, they argued, multiple temporalities, both linear and cyclical, co-existed and reciprocally interacted. Later, in the search for a more solid articulation and methodological formalization of such epistemological critical foundations for his perspective that drew upon a non-positivistic understanding of science, Wallerstein explicitly turned to Ilya Prigogine's scientific theories of complexity (Wallerstein 1998a, b).

What did Wallerstein find in Prigogine's work? Prigogine, together with Isabelle Stengers, from the 1970s onwards, articulated a profound reconsideration of the status of the legitimation of modern science in terms of an engagement with far-from-equilibrium biological systems. The possibility of this dialogue was incited by Prigogine's explicit admission of the need, for his theories to be fully grasped, to adopt 'the language of social sciences'. Wallerstein converged with Prigogine in acknowledging the intrinsic limits of classical physics as a paradigm within natural science and thus as model for the nomothetic aspirations of the social sciences. While classical Newtonian physics saw equilibrium and reversibility as normal conditions for the laws of nature, complexity theory affirms that nature proceeds via probabilistic laws. Whereas reversibility implied a deterministic linear inferential model of causal explanation, the reliance of complexity theory on the irreversibility of the 'arrow of time' implied a probabilistic, open-ended, multilinear model of causal explanation that left room for unpredictability and creativity in natural phenomena. As a consequence, the explanatory power of classical physics was limited only to particular exceptions, while the vast majority of natural phenomena, it was maintained, fall into a wide array of non-linear, stochastic processes endowed with emergent properties of self-regulation and creativity (Prigogine and Stengers 1979, 1984, 1988; Stengers 1997). Prigogine and Stengers recast the overall transition to what they called the 'new alliance' between social and natural sciences in Kuhnian terms

as a paradigmatic shift from the disenchantment to the re-enchantment of the world.

The notion of a paradigmatic shift suggests the idea of a historical transition; a passage from one regime of truth to another, chronologically ordered as a sequence. Along this line of reasoning, complexity theory has fostered postmodern sociological understandings such as new materialism and assemblage theory (Braidotti 2002; Delanda 2006). In this context, the idea of re-enchantment is extended in an allusive manner to include a non-rationalistic approach to social agency as a defining feature not only of non-Western societies, but also of the West itself. An intellectual move towards the rediscovery of what the Cartesian-Newtonian synthesis and Enlightenment reason had considered marginal and doomed to extinction is animating a rediscovery and re-signification of the relation between man and nature through matter (Dolphijn and van der Tuin 2012). As Cole and Frost (2010: 9) put it, 'even natural science, whose influence on some of these new accounts of matter is far from nugatory, now envisages a considerably more indeterminate and complex choreography of matter than early modern technology and practice allowed, thus reinforcing new materialist views that the whole edifice of modern ontology regarding notions of change, causality, agency, time, and space needs rethinking'. What Bennet has called an 'enchanted materialism' aspires to a profound reconsideration of the ontological status of social entities, inspired by a reaction against the hegemony of rationalism within Western thought, to the point that even radical feminism has been called to a post-secular turn (Braidotti 2008). Put this way, the shift from disenchantment to re-enchantment mirrors the shift from modernity to post-modernity and from a secular to a post-secular age. These theoretical moves reciprocally interpellate and produce the sensation of the emergence of a different age in the human condition of living and thinking. Yet, is this transition narrative adequate to locate secularization, both historically and theoretically, within the context of a historical sociology that pays critical attention to the traps of Eurocentrism and aspires to endow social theory with a relational and global dimension? How plausible is it to affirm that modernity can be considered secular up to a certain point in time, and then be described as post-secular in the last few decades? What would be the role of reason if we think of contemporaneity in terms of

a post-secular age? And what are the implications of displacing normative claims involved in the idea of post-secular by articulating it in the space and on the global scale of non-Western worlds? In order to answer these questions, a preliminary remark is needed. The problem of the possibility of any ontological foundation in science as well as the problem of the deep changes in scientific method can only be merely mentioned here. The aim is to supplement the thesis according to which the science which modernization theories, historical sociology and postmodernism rely upon is something that results in an incommensurably more coherent epistemic space than in natural science itself, both in its history and the epistemologies it admits.[7] Appreciating this breathtaking vastness, the reader will allow me to indulge in hyperbole and say that modernization theories, and any social sciences anchored to analogous chronosophies of stages and/or successive modernities, endorse an uncritical usage of science that renders them much more unaware of their own scientism than extensive areas of modern science. This does not mean thinking of science as good or bad, as progressive or not, rather it is reduced to a single coherent unity whose overall upshot consists in producing the disenchantment of the world.

This is the disenchantment to which secularization refers, even though secularization nowadays looks unable to entirely fulfill its promise to replace religion in making sense of the world. For Habermas (2010: 18), since 'postmethaphysical thinking cannot cope by its own with the defeatism concerning reason which we encounter today both in postmodern radicalization of the "dialectics of Enlightenment" and in the naturalism founded on a naïf faith in science', a new reciprocal understanding between reason and faith is be formulated.[8] Habermas proposes a paradox:

> Practical reason provides justifications for the universal and egalitarian concepts of morality and law which shape the freedom of individual and

[7] As introductory reading to the challenge to scientific method from theoretical physics, see Dawid (2013), Gale and Pinnick (1997), Keiser (2002, 2005), Mertz and Knorr-Cetina (1997), Schroer and Sigaud (2008), Susskind (2008), and Susskind and Lindesay (2005). For molecular biology and genetics, see Dupré (2008), Parry and Dupré (2010), Meaney (2001), Meloni (2014), and Nordmann (2014).

[8] See Habermas' conversation with Cardinal Ratzinger in Habermas (2006).

> interpersonal relations in a normative plausible way [but] at the same time [it] fails to fulfill its own vocation when it no longer has sufficient strength to awaken, and to keep awaken, in the minds of secular subjects, an awareness of the violation of solidarity throughout the world, an awareness of what is missing, of what cries out to heaven. … Could an altered perspective on the genealogy of reason rescue postmethaphysical thinking from this dilemma? At any rate it throws a different light on that reciprocal learning process in which the political reason of the liberal state and religion are already involved. (Habermas 2010: 18)

An altered perspective on the genealogy of reason is where Habermas places his renewed hermeneutics of modernity: he attempts to redefine the border between science and religion in terms of reciprocal distancing, connection and legitimation. This relation reaffirms science as the inner logic of disenchantment and, conversely, transfers to religion(s) the function of re-enchantment, that is, the ability to fill the gap of 'what is missing', regardless of any interest in questioning what are we thinking of when we refer to 'science', as well as regardless of the possibility of science as re-enchantment. To be sure, shattering the assumption of the disenchantment would mean downgrading the exceptionality of the West in producing a unique and specific form of knowledge and thus delegitimizing the whole architecture of modernity as an ideological construction enacting a constant reproduction of hierarchies among human groups. A whole set of new and different questions would arise in the vacuum left in historical sociology by the erosion of the normative-explanatory power of the disenchantment of the world. A whole set of interrogatives that, within the frame of modernity, would assume the relevance of disrupting dilemmas. Habermas opts to occlude these dilemmas by his concept of post-secular, through which he attempts simultaneously to save science as pristine Western ethno-science with the universal value of a superior form of rational knowledge, and its emergence marking the onset of modernity as a distinctive era in human history conceived in terms of the dynamics of secularization. A dynamics about which 'the data collected globally'—Habermas hastens to specify in pure neo-positivist rhetoric—'still provide surprisingly robust support for the defenders of the secularization thesis' (Habermas 2008a, b: 19).

Blumenberg's Legitimacy of Modernity and the Geopolitics of Knowledge

It does not require a sophisticated acumen to detect in Habermas' recent preoccupation with 'the weakness of the theory of secularization' a contemporary redefinition of the hermeneutical attitude that has led Hans Blumenberg since the 1960s to challenge the claim of the category of secularization to explain modernity. Whereas Blumenberg to reoccupy positions remained vacant' in the temporal borderland between modernity and the Middle Ages, Habermas perceives 'an awareness of what is missing' as a normative space for a contemporary ongoing transition to a post-secular age. Blumenberg projected his gaze into the past to reconfigure modernity as constructed in terms of a historical threshold to an epoch marked by the prevalence of the ever-present possibility of rearticulating in new terms old questions about itself as an epistemological organizing principle; Habermas moves within such a possibility of self-reflection in the present to design the historical trajectory of the passage from one societal organization to another, from an era that is passing to a different age that is approaching, constructed normatively as the passage from a secular to a post-secular age.

Blumenberg argued against Löwith and other anti-modernists who considered modernity as a by-product (in the pejorative sense of loss) of the secularization of Christian structures of meaning, in favor of the legitimacy of modernity as a rupture in time that produced an autonomous inner, self-reflective act. 'This act peculiar to modernity consists in the self-affirmation or self-positioning of Man and his techno-rational power, understood as a demiurgic power not limited to the predetermined world of possibles, but independently capable of opening itself to a universe of possibles' (Blumenberg 1983: 533). The onset of modernity, according to this view, would not be detectable in historical time, rather through historical time, and conceivable in terms of an interpretative gesture of an attribution of sense. Modernity would be then thought of as 'a fundamental opposition between the transformation of an unchanging substance which assumes different accidents throughout the course of history and the "reoccupation of answer positions" which have fallen vacant' (Blumenberg 1983: 65). Modernity, according to Blumenberg, is

not merely an answer to questions Middle Ages thinking was unable to answer. Rather it is a new way to formulate the question that lacerated Christianity from within. What was the question? The question was theodicy, as it reappears in Habermas as it was involved in Weber's lifework.

In Blumenberg's terminology, in fact, for Weber it was modern capitalism that set the stage for reoccupation, where Puritanism in its Calvinist version was the adequate answer. In this sense, Weber's concern with the material bases of societal organization represents a complexification of the Marxian problematic of the transition from feudalism to capitalism within the context of German historical schools, but it also represents a translation of this problematic onto the level of theodicy as the core site of doctrinal divergence in an alternative religious ethos, more or less adequate to boost the growth, intensification and expansion of modern capitalism. For Habermas (2010: 22–3), the trajectory of the historical problem of theodicy and its implications for the modern European public sphere is located in the narrative of a linear process of de-Hellenization of Christianity in Western thought: 'The move from Duns Scotus to nominalism does not lead merely to the Protestant voluntarist deity [*Willensgott*] but also paves the way for modern natural science. Kant's transcendental turn leads not only to a critique of the proofs of God's existence but also to the concept of autonomy which first made possible our modern European understanding of law and democracy. Moreover historicism does not lead to a relativistic self-denial of reason. As a child of the Enlightenment, it makes us sensitive to cultural differences and prevent[s] us from over-generalizing context-dependent judgments.' For Blumenberg, modernity and its historical configurations consisted in an open-ended possibility of reformulating the question of theodicy, by legitimately interpellating and changing its social structure of sense. In his book *The Theological Origins of Modernity,* Gillespie radicalizes Blumenberg's position and affirms that:

> Superior or more powerful modern ideas did not drive out or overcome medieval ideas; rather they pushed over the remnants of the medieval world after the internecine struggle between scholasticism and nominalism had reduced it to rubble. Modern 'reason' was able to overcome medieval 'superstition' or 'dogma' only because that 'dogma' was fatally weakened by

> the great metaphysical/theological crisis that brought the world in which it made sense to an end. (Gillespie 2008: 12)

Gillespie (2008: 36) explains how nominalism has been an epistemological turn that redefined the relation of God, Man and Nature, in such a way that 'God is in the world in new and different sense than scholasticism and traditional methaphysics imagined. He is not the ultimate whatness or quiddity of all beings but their howness or becoming. To discover the divinely ordered character of the world, it is necessary to investigate becoming, which is to say, it is necessary to discover the laws governing the motions of all beings. Theology and natural science thereby become one and the same'. Nominalism provided the theological legitimation for the emerging new epistemology of natural knowledge: modern science. Modern science conquered and at the same time was given the possibility of producing knowledge that was going to be in ever looser accordance with literal interpretations of the Scriptures. With the shift from exegesis to allegorical meaning, such a reorganization in different realms of knowledge reassigned to theology the problems originating in theodicy and to science those originating in cosmogony. Yet, in establishing this fault line between the two, nominalism did not merely separate them; rather it established cogently the logics of validation for the way faith and reason, and science and religion, reciprocally had to relate. The whole Christian inner struggle between Scholastic and nominalism emerged around the issue of elaborating a coherent and plausible way to rethink the fault line between faith and reason, that could not but imply a redefinition of the limit between the mundane and the transcendent in terms of the acceptable limits to the possibility of rational knowledge. In the battle ground of the dispute over universals, the Scholastics had found with Aquinas a viable synthesis to conjugate faith and reason via the hermeneutic circle *credo ut intelligam et intelligo ut credam* (I believe in order that I may know and I know in order that I may believe); nominalism defeated this view after two centuries of internal doctrinal battles, and affirmed the prominence of God as pure will and power over reason. Separating these spheres, on the one hand, elevated faith to the only possible way to Truth; on the other hand, it limited to the cosmos the reign of knowledge

that could be attained through reason.[9] Thus, nominalism offered and affirmed negatively what can be known through reason. If thinking of limits in terms of liminal understanding defined the legitimacy of modernity, it at the same time disclosed to modern science the residual realm of reason by limiting, *stricto sensu*, its space of intelligibility.

The Claustrophobia of Transition Narratives

To what extent is this perpetual redefinition of the fault line between the knowable and non-knowable, or between the mundane and the transcendent, the transgression of an ultimate frontier of knowledge, and to what extent is it a reformulation of an intrinsically unstable border? Imaging a historical trajectory describable in terms of secularization does not seem able to provide any adequate narrative structure of the relation between past, present and future with an internal coherence. Rather, it shows that the shifts of this fault line and the limit it continuously sets look like a reiterative displacement where directionality of any kind loses any descriptive power. Cole and Smith formulate this abstract non-directionality in linguistic terms when they recall the way Blumenberg understands transcendence. They affirm that the language of modernity is the language of ineffability. In what Blumenberg calls 'its continually renewed testing of the boundary of transcendence', post-scholastic language is precisely 'the language of impossibility …. It marks both the transcendent and its non-arrival.' Blumenberg—they continue—'located the transition from the Middle Ages to modernity through the end of the discourse of Scholastics, succeeded by the discourse of modernity'. Nonetheless, they argue, 'Blumenberg's return to the question of transcendence is also profoundly a return to the medieval' (Cole and Smith 2010: 5). Why? 'Because unless a discourse can be conceived of as unlike any other, its putative likeness will be subsumed into its attributes, into what defines it constitutively or essentially. Only what stands against it, what opposes it, what cannot be rendered in its terms,

[9] The exemplar theoretical dispute over the universals can be evinced from the diatribe between Scotus and Ockham (see Tweedale 1999).

can become its likeness.' (Cole and Smith 2010: 8) This means that where Blumenberg tried to express time coordinates to set the adequacy of transition narrative from the Middle Ages to modernity, and thus the legitimacy of the Modern Age as self-reflective discursive act, Cole and Smith see a contradiction. Their critical hint suggests that while Blumenberg's thesis works conceptually, it is also destabilized by its inner contradiction between hermeneutics and historicity when modernity comes to be defined as a distinctive epoch in human history. If the transition to modernity is connected both to the end of a discourse and to the emergence and affirmation of a new discourse, then locating this threshold of unlikeness historically implies the adoption, in the present, of an hermeneutical gaze that should work as a regulative principle and theoretical foundation for the construction of that threshold. In other words, to legitimate modernity as an epoch, the Middle Ages has to be legitimized as an epoch too, and the reciprocal construction of modernity and the Middle Ages as diverse epochs has to be established by declaring when one discourse came to an end and when a successive one came into being. As a consequence, even though Blumenberg wanted to free the self-definition of modernity from its anchorage to a chronological narrative of continuity-as-degradation from the Middle Ages, by demonstrating the inadequacy of the notion of secularization and by rethinking the idea of epoch, his hermeneutic gesture cannot but find itself unavoidably in need of those same historiographical pillars he wanted to theoretically downgrade.

The paradox is that the more one takes Blumenberg's hermeneutics seriously, the more this hermeneutics contradicts the narrative of transition to modernity. This contradiction is inherent in Blumenberg's founding logical axiom that is the conceptual split between secularization and legitimacy. For Blumenberg, while secularization is not able to postulate any proper ontogenetic origin since modernity would be reduced to a derivation and hetero-determination by the Middle Ages, legitimacy would legislate modernity as an epoch, by reframing transition in terms of dissolution. Dissolution would thus be the historical space where the possibility of self-affirmation of Man appeared, allowing for reoccupation as response to vacuum. Legitimacy would thus express, in terms of condition, what secularization wanted to conceptualize in terms of process,

with the advantage that legitimacy would be able to free modernity from any derogative historical heritage from the Middle Ages. But, if Cole and Smith are right in seeing a contradiction between hermeneutics and historicity, then this contradiction emanates from the underlying tension that Blumenberg himself constructed as a way of defining the distance between secularization and legitimacy. In fact, faced with the political act of periodization, secularization and legitimacy cannot but collapse into each other, since it is only by their interplay that modernity can fully acquire its meaning both as an era and, coextensively, as a specific form by which connoting Europe, and the West.

It is this same epistemological structure that constitutes both the condition of possibility and the condition of instability of Habermas' concept of post-secular. Habermas is not interested in questioning the fault line between the Middle Ages and modernity as Blumenberg is; Habermas takes this fault line for granted. Rather, Habermas alludes to a transition where a new relation between faith and reason is able to normatively define the prevailing character of a new approaching age, a post-secular age (Kirk 2007). The epistemic landscape drawn by this interaction between transition narratives and interpretative concerns, one that is diachronic, recursive, self-reliant, condemns sociological imagination to think within a claustrophobic mindset. A mindset that is unable to move beyond the heterogeneous space of Eurocentric gaze in the clutches of European agency (Hobson 2012b). Why? As Davis (2008) has argued, the act of producing liminal spaces between competing discourses, where the hegemony of one discourse creates a transformation in existing power relations, is always associated with conflict and negotiation. To the extent Western social thought still claims the power to unilaterally perform this act of periodization, it is still invoking its right to establish what Chatterjee (2012) has called the colonial exception. As a consequence, postmodern theories of complexity, or Blumenberg's appraisal of modernity, or Habermas' concept of 'post-secular', all entail nuanced versions of a core transition narrative with differently articulated hermeneutical emphasis that equally share the implicit presumption according to which Western social thought is the legitimate bearer of the universal power to cogently impose periodization that are worldly significant. For neither the problematic of secularization nor that of legitimacy is ever critically

articulated at the global level, where the global is not a by-product of European expansion nor of modernity as such, but is conceived as an ever-present condition of possibility and a relational territory of differences. Any anxiety of self-reflection that anchors its explanatory power to self-contained European transition narratives is in need of unilateral acts of periodization, and thus remains inexorably constrained within a claustrophobic Eurocentric, Europe-centered morphogenetic *locus*.

Wang Hui and Secularization from a Sinocentric Perspective

Both the internal and external borders of this *locus* are constantly redefined according to a single generative logic. This logic corresponds to a Eurocentric mode of hierarchies production that, on the one hand, associates the ethnocentric construction of Europe as civilization with the meta-geography of its historical spatialization in terms of a continent, and on the other hand, deterritorializes this construction in hyperreal terms and puts this image in motion to produce the perception of a coherent historical trajectory of social change. As Pocock maintains, 'it should come as no surprise that the invention of continents was the work of humans who had left the land and were looking back at it from the sea' (Pocock in Pagden 2002: 56). Elshakry suggests that it is even possible to analyze to what extent the very definition of science as Western has been produced not in Europe, but in colonial borderlands (Elshakry 2010). Thus, if one translates this geographical image into a global sociological imagination, the entire epistemological structure of the transition narrative to modernity, organized around the assumption of secularization, appears a parochial assertion of exceptionality. In this light, even the idea of legitimacy as a condition cannot be mobilized as a confutation of secularization as a historical process; rather it is its specular hermeneutic complement. It is no accident that the fundamental problematic of who asks the questions that, if unanswered, disclose the historical space for Blumenberg's reoccupation, remains constantly neglected. Not only because asking who inevitably means asking from where the questions

arise or are reformulated. Rather because a who that is self-contained is the expression of an essentialist ontology presumably endowed with superior historical agency. It is within this intertwined global space that secularization has to be rethought, understood, and unthought. This means rescuing the dilemmas of an emerging global, non-Eurocentric, relational historical sociology from the occluding power of the post-secular.

In this regard, Wang's attempt to locate China within global modernity and thus reconfiguring the co-constitutive role of modernity in the historical production of China as geohistorical entity is relevant for the attention he has devoted to the role of science.[10] Wang's (1995) emphasis is on translation as the crucial aspect of the encounter between the West and the East in China during the late Qing period. According to Wang (2011: 155), the late Qing era has to be thought of in terms of 'the era of worldviews', since competing universalistic systems of knowledge were facing each other, in the endeavor to provide 'comprehensive explanations for the operative principles of the universe, the rules of change in the world, the base of politics and morality, and criteria for feelings and aesthetics, and sought a general method to discover the truth'. Science, in this context, was not a modular element of a wider Western worldview whose borders could be clearly distinguished from other dimensions of Western culture, such as religion, metaphysics, aesthetics and morals; nor was it merely a matter of epistemology and its derivative spaces among hierarchically organized forms of knowledge. From a Chinese perspective, the border between science, faith, metaphysics and morals 'arose not from the framework of epistemology, but was conceived and matured through debates on cultural differences between East and West' (Wang 2011: 154). Conversely, any attempt to understand the categories of Chinese worldviews with which modern science as a distinctive worldview interacted merely through epistemology or ontology, would translate in the 'loss of any chance to comprehend the historical process through which this theory was produced' (Wang 2011: 120).

The historical, political and social configuration of the scientific worldview in China, according to Wang, can be generalized as a process of universalizing or axiomizing science, and its mission consisted in incor-

[10] On the idea of a global modernity emerging in the Eurasian space, see Dirlik (2007).

porating western science into the discourse of the existing Chinese worldviews, competing among each other for cultural hegemony. There is a difference between universalizing science and scientizing universalism. The latter refers to the fact that, with the establishment of the hegemony of science, any universalistic discourse has to be proved reliable according to a 'scientific' protocol of legitimization; the legitimacy of the former, however, still requires a universalistic defense. During the late Qing era, since the authority of science was not yet established, categories such as civilization, progress, development, state and morality were all used to confirm the significance of science and its values. For the same reason, what was universalized in the process was not simply science, but all principles of nature, politics and morality commonly recognized by the people. The trinity of nature, politics and morality was the general characteristic that emerged from the struggle between, as well as mutual infiltration of, the scientific worldview and the heavenly principles worldview. In this sense, the scientific worldview may have resulted from the importation to the East of Western ideas, but was born in the womb of the Chinese worldview of the heavenly principles (Wang Hui 2011: 155).

In this dialogic process of negotiation, conflict and accommodation, new concepts were established as forms of representations of modern China: new principles of classification, such as public/collective, nation/race, individual/ society, class/state, nature/society, freedom/dictatorship, government/people, reform/revolution, and all the hierarchical structures in social relations (Wang Hui 2011: 157).

Once translated by, through and into a Chinese civilizational context, these binary oppositions conveyed meanings that, even though they were overlapping to some extent with their Western derivative conceptual references, were also non-coincident with them. These new concepts were new not to the extent they were alien, but to the extent they conveyed unprecedented meanings, originated in the process of translation. These different philosophical meanings came to be mobilized within the May Fourth Movement, where the ideas of modernity as science assumed both ideological and political relevance.

Both sides in the May Fourth cultural controversies assumed dualisms, such as China/the West, quietistic/dynamic civilization, Chinese/Western

learning, and spiritual/material civilization, as the fundamental premises of the debate, and they strategically associated science, knowledge, reason and utility with Western dynamic and material civilization, while identifying morality, spirituality, instincts and aesthetics with Eastern, Chinese static and spiritual civilization. Hence, the original dualism of civilization was transformed into a new dualism of epistemology, including oppositions such as science vs morals, knowledge vs emotion, reason vs instinct. As Wang puts it, 'the classification of knowledge greatly relies on the classification of civilizational discourse. […] This shows that the epistemology and the theory of civilization, both focused on difference and separation, do not weaken but reinforce the premise of the universalism' (Wang 2011: 153–4).

From a Sinocentric point of view, the perpetual, however discrete rather than continuous, non-directional shift of the fault line between different forms of knowledge took the shape of competing rationalities. The border between science, philosophy and theology, whose existence is the axiomatic prerequisite for any construction of secularization, does not have any substantial, historical, theoretical character in itself. Its foundation lies in the ability of Eurocentric knowledges to adaptively create these perceived boundaries that are simultaneously civilizational and epistemological, as well as meta-historical and meta-geographical. And this appears evident whether we move within the European construction of the border between the mundane and the transcendent, or we observe its re-articulation as a Western worldview among other competing and exchanging worldviews. Disaggregation and recomposition do not respond to any inherent logic of transition to modernity, but to the ever-present possibility of establishing concrete power relations in the present: secularization is a pragmatic mobilizing option that seeks to establish hierarchies through the grand narrative of modernity. As Wang observes:

> What is important is the ideal represented in the elite, as secular. In a society that holds up the elite ideal everywhere, it can become a tool of suppression. But in a society inundated by the forces of secularization, the combination of kitsch and secular power has stifled any critical potential for challenging the authority of this system. In traditional despotic society, state power took

> on the guise of an ideal in order to cleanse society of its existing foundations, and in the 'civil society' of market societies, real critical space has been eliminated in the name of the secular. But the third sort of situation in which both exist is the most complex, for with the coexistence of civil society and despotism, civil society ends up constituting an elitist 'anti-elite' critique of secular despotism, while despotism at the same time crushes all forms of social protest in the name of an idealist secular modernity. The modernity of the elites is primarily the continuous forging of the grand narrative of modernity, in which they play the heroes of history. (Wang 2011: 76)

As with every conceptual structure, secularization can be appropriated contingently and strategically. Yet, within the frame of global modernity it acquire a markedly political power. And the more modernity as a frame is extended to include and assimilate differences, the more it becomes flexible enough to polarize existing power relations. The Western narrative of secularization, in the vagueness of its historical substance, can be manipulated and mobilized to buttress, in each different context, sharp social dualisms opposing secularist against non-secularist ideological positions, which work as ways to legitimize political control and violence.

Eurocentric Hierarchies of Knowledge, Nation-State and Coloniality

The contingent and strategic character of secularization sheds light on the concept of post-secular as an elite Eurocentric discourse to structure power relations both at the global level and within the state. In global terms, the post-secular provides the paradigm of multiple modernities with the horizon of a Eurocentric global transition narrative able to orient historical time towards a civilizational scenario where the morphology of world intercultural dialogue is nothing but a contemporary version of Eurocentric modernity that preserves Europe as *prima inter pares*. Habermas (in Mendieta 2010: 1) explicitly embraces Eisenstadt's framework of multiple modernities: he affirms that 'there are by now only modern societies, but these appear in the form of multiple modernities because great world religions have had a great culture-forming

power over the centuries, and they have not yet entirely lost this power'. Habermas surreptitiously conflates all the possible sociological determinants of what Weber called status groups under the all-inclusive category of religion. Ethnicity and race are subsumed by religion as definitional protocol. Once reframed as religious belonging, religion is set to overdetermine other social dimensions such as class, gender, sexual orientation or cosmology. Habermas (2008a, b: 20) conceals these intertwined subsumptions in his early nineteenth-century paternalistic style when he says with perplexity that 'in societies like ours which are still caught into the painful process of transformation into postcolonial immigrant societies, the issue of tolerant coexistence between different religious communities is made harder by the difficult problem of how to integrate immigrant cultures socially. While coping with the pressure of globalized labour markets, social integration must succeed even under the humiliating conditions of growing social inequalities.'

In political terms, the idea of the post-secular strengthens the role of the nation-state as the regulative structure for social relations and as a privileged institution where conflicting tensions have to be reconciled through a reassessment of the role of religion. Habermas translates the whole problem of the complex matrix of social stratification and its conflictive nature in terms of establishing a correct relation between reason and faith as poles of the tension to save the 'impartiality of the liberal state'. 'For the liberal state guarantees the equal freedom to exercise religion not only as a means of upholding law and order but also for the normative reason of protecting the freedom of belief and conscience of everyone' (Habermas 2010: 21). 'What must be safeguarded', he also affirms, 'is that the decisions of the legislators are not formulated in a universally accessible language but are also justified on the basis of universally acceptable reasons' (Habermas in Mendieta 2010: 9). This perspective obscures the fact that it is precisely the nation-state that is the institution where Eurocentrism, capitalism and colonialism concretely articulate difference in terms of subordination among social groups. Moreover, the state does it precisely by means of the legitimizing appeal to the principle of universalism.[11] Anibal Quijano has framed this dou-

[11] For a challenging assessment of the relation between science as hegemonic discourse and race as hierarchical system of subordination, see Roberts (2011).

ble capacity of the nation-state in terms of coloniality when he argues that the state translates the global design of scientific European racism into inter-civilizational hierarchies that locate the West as superior in the political relations of ethnicity. Coloniality simultaneously produces both a hierarchical system within the realm of international relations and a hierarchical system within the borders of the nation-state (Quijano 2007). According to Quijano (2000: 216), race and ethnicity have been and largely still are 'basic criteria to classify the population in the power structure of the state, associated with the nature of roles and places in the division of labour and in the control of resources production. And that both the criteria are structurally associated and mutually reinforcing, although neither of them is necessarily dependent on the other to exist or change.'

Hobson (2012a, b) complexifies this view when he describes the global multilayered structuration of the international system in terms of 'gradated' sovereignty among states with differential power resources. Hobson maintains that this structuration is created by the interplay of institutional Eurocentrism and scientific racism. We can infer that there exist three intersectional vectors of hierarchical configurations: a geo-historical hierarchy at the inter-civilizational level, a political hierarchy between nation-states at the intra-civilizational level, and a social hierarchy within the nation-state. This matrix of power is endowed with the self-regulative capacity to reframe its prerogatives and conceptual taxonomies (Mezzadra 2011). Religion as proposed by Habermas falls within this transformative logic since it is the central organizing principle of a particular, contemporary, possible configuration of Eurocentric modernity. This configuration conveys the power to establish a new fault line among systems of knowledge that belong to different human groups, since it is based on the assumption that there exists a specific hierarchical structuration of religious beliefs where 'great world religions' are legitimate expressions of world civilizations and vice versa; while those that do not fall under the genre that this a taxonomy establishes cannot but belong to subordinated social collective identities. The discourse over the post-secular proposes that Europe steps down from superior to *prima inter pares* and instead of imposing its geopolitical structuration of knowledge, condescendingly recognizes some bias of its previous

hubris. Nonetheless, this occurs when the only plausible alternative to the dialogue between civilizations seems to be a clash of civilizations. For the first time in the last two centuries, Europe and the West are no longer in the condition to affirm their superiority over other civilizations, as had been long foreseen by nowadays outmoded prophets of the end of history (Washburn and Reinhart 2007).

The emphasis on religion towards which Enrique Dussel converges when he proposes a return to a common trans-historical philosophical root, shared by all great philosophical traditions, certainly legitimates Indian, Islamic, Chinese, even Aymaran (as Dussel proposes) or other possible emerging hyperreal ethnocentric constructions to claim their respective dignities before Europe and the West (Dussel 2012; Escobar and Mignolo 2013: 345–59). Yet, at the same time, since this move resembles a return to the imaginative world of Karl Jasper's axial age, it allows the paradigm of multiple modernities to claim descent from a retrospective legitimating theoretical ancestor (Jaspers 1953; Eisenstadt 1982, 2003). In fact, this stepping down of the West from superior to *'The West' primus and Europe prima* comes with two conditions: first, religious belonging (and conversely non-belonging) becomes the privileged definitional protocol for social stratification, differentiation and subordination. Where, as Masuzawa suggests with his thesis of the 'invention of world religion', 'being religious, practicing or engaging in what has been deemed "religious" may be related to the question of personal and group identity in a way altogether different from the one usually assumed (i.e., assumed on the basis of the Western European denominational history of recent centuries). In some cases, for that matter, religion and identity may not relate at all' (Masuzawa 2005: 5). Second, beneath the surface of a cosmopolitan global space where these macro-aggregate geohistorical and cultural entities interact and dialogue, there emerges a new elitist, inter-civilizational formulation of the power to establish the border between civilization and its otherness. If the construction of ethnocentered identities is grounded in the definition of its alterity, then the specific civilizational discourse that the concept of the post-secular endows with a long-term historical horizon and normative power, must be read against the grain of the determined configuration of the Eurocentric mode of hierarchies production and the subordination, marginalization and elision it generates.

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5

Emancipation as Governamentality

The idea that modernity is distinctive because of the possibilities of emancipation it revealed to humanity as a whole is the long-lasting heritage of the European Enlightenment, which frames the political horizon of modernity. Since the turn of the eighteenth century, social theory has unproblematically adopted this assumption as a normative dimension for constructing its twofold institutionalization and legitimation strategy within and outside the nation-state. Within the unequal distribution of power and resources, social theory speaks to two interlocutors: to whoever is in power, and to whoever is not. To the former, social theory speaks the language of governance, monitoring, and control of social change. To the latter, social theory speaks the language of the construction of a just and wealthy society. Sociology remains largely trapped within this ambivalence. The way this ambivalence is constructed and maintained involves the strategic mobilization of entangled narratives of emancipation. This entanglement conflates the narrative of modernity as the era when humanity frees itself from the chain of obscurantism and tradition, with the narrative of unprecedented technological advancement that produces wealth to be distributed and to benefit the greatest possible number.

G. Ascione, *Science and the Decolonization of Social Theory*,
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The colonial difference is systematically excluded from the realm of possible angles from which the narrative dimension of emancipation can be observed and reconstructed. Robbie Shilliam (2013) refers to this parochialism and inadequacy when he juxtaposes the white worldly narrative of the abolition of slavery to the black worldly narrative of the redemption from slavery. Shilliam (2013: 144) registers a disconnection between these two ways of framing the end of formal slavery, and he adds that 'similar disconnections exist in the lofty abstractions of European Enlightenment and promises of modernity upon which we measure the worth of our thoughts and actions. But, however we are implicated in the legacies of slavery we must consider the following: if the audacity of freeing the individual from natural and social bonds underwrites the canons of modern social and political thought, and if, in this day and age, all progressive practices must proclaim to be humanist, then for the love of humanity, we must all undertake some kind of journey in and with the world of Black redemption.' These disconnections create a relevant polysemy in the notion of emancipation. They make emancipation a contested space. Nonetheless, the notion of emancipation frames the boundaries of political and social imagination; it imposes some limits on it and on the transformative ability of alternative stories to place the colonial difference at the center of the reconstruction of a post-Eurocentric social theory. For this reason, I intend to disarticulate the constitutive relation between the narrative and the normative aspects of the notion of emancipation through a threefold analysis: historical-sociological, epistemological and logical.

The first layer, historical-sociological, involves how narratives of liberation and struggle come to be conceptualized through the notion of emancipation, as well as and to what extent these narratives can be rewritten when the colonial difference is reconsidered as an assumption for concept formation, rather than as a set of processes to be analyzed through the existing concept of emancipation derived from the European Enlightenment. The second layer, epistemological, concerns the theoretical impact of decolonial and queer/transgender/transsexual/intersexual standpoint methodologies upon the normative dimension of the notion of emancipation. These standpoints irreversibly destabilize the notion of emancipation and strongly reduce its power to shape political imagina-

tion. The third layer, logical, points to the inconsistencies that the mere acceptance of the notion of emancipation conveys. To the extent these inconsistencies are assessed, emancipation can be rethought as a tool of postcolonial governamentality rather than a frame for liberation practices, however limited and contested.

The historical-sociological dimension is articulated as a critique of Wallerstein's two narratives of modernity from the perspective of coloniality. The second, epistemological, is a detour into Foucault's notion of the technologies of the self. How do these two layers interact? For Wallerstein, the two modernities emerged during the long sixteenth century; they conflated the promise of liberation from traditional political authorities with the promise of liberation from the obscurantism of the deistic understanding of Nature. It was only in the wake of the French Revolution, Wallerstein maintains, that a full-fledged geoculture emerged, in the shape of European universalism, which was able to persuade the newly created citizens of the Western nation-states that there existed a necessary link between the two modernities and that the horizon of technological progress coincided coincide with the path towards a just society (Wallerstein 1995a: 137).[1] For Foucault, instead, modernity means the conscious ability of the subject to act upon the present in an emancipative way, within a complex articulation of *lato sensu* technologies that either shape the possibilities of liberation or structure the constraints of social regulation.[2] In other words, 'disciplines, both collective and individual, procedures of normalization exercised in the name of the power of the state, demands of society or of population zones, are examples' (Foucault 1997: 129).

Either the distinction between the modernity of technology and the modernity of liberation (Wallerstein), or that between modernity as an

[1] Wallerstein maintains that for the first three centuries of the existence of the modern world-system, the ideological level experienced a lack of unity, caused by the inability and partial disinterest of the ruling class, during the Dutch hegemony, to produce a global geoculture. When the system entered the period of the British hegemony, instead, a series of transformations at the political and ideological level coalesced to give birth to an integrated geoculture that allows the system to think of itself as a whole.

[2] Foucault locates the genealogy of emancipation within a long-term narrative structure entirely designed within the continuity/discontinuity patterns of transformation that connect modernity with its Greek antecedents.

era and modernity as an ethos (Foucault), neglect the colonial question. Both historically and theoretically: both in the sense of the centrality of coloniality in the history of the modern world, and in rethinking modernity as a frame through the prism of the epistemological upshots produced in contemporary social theory by the collective effort to relocate the colonial question at the center of modernity, as the underlying structure of power relations. Moreover, from the vantage point of critical perspectives on sexuality and power such as queer, transgender, transsexual standpoint epistemologies, the two modernities are not ontologically distinct to the extent that the process of subjectification/liberation includes body/mind transformative technologies of the self as condition of possibility in the social struggle for recognition and equality. A radical reconsideration of the historical role that the notion of 'emancipation' plays within the ideological, political and cognitive systems of governance is thus proposed. This reconsideration is at the same time a critique of the speculative approach that Laclau deployed in his conceptual and terminological analysis of the notion of emancipation. Laclau (1996) framed the problem exclusively in logical terms, and he proposed to exploit the inevitable ambiguity of the concept of emancipation to conceive a new political agenda for political modernity. An agenda whose aim would be to re-establish the universal aspirations of Enlightenment onto new and enlarged bases. Conversely, what follows I suggest that an effort to move beyond the political vocabulary of modernity is the premise for reimagining liberation practices and for learning as much as possible from those existing practices, whose transformative power exceeds domestication within the notion of emancipation.

Emancipation, Science and Technology: A Coalescence of Colonial Violence

For Wallerstein, modernity has two connotations: 'the first signified the most advanced technology, in a conceptual framework of the presumed endlessness of technological progress'. The second signified 'the presumptive triumph of human freedom against the forces of evil and ignorance. A trajectory as inevitably progressive as that of technological advance.

Though not a triumph of humanity over Nature; rather a triumph of humanity over itself, or over those with privilege. Its path was not one of intellectual discovery but of social conflict. This modernity was not the modernity of technology, it was rather the modernity of liberation, of substantive democracy. … This modernity of liberation was not a fleeting modernity, but an eternal modernity. Once achieved, it was never to be yielded' (Wallerstein 1995b: 472). For Wallerstein, Galileo epitomizes the simultaneous birth of the two modernities and their protracted overlapping from the fifteenth to the eighteenth century, since 'those who defended the modernity of technology and those who defended the modernity of liberation tended to have the same powerful political enemies', such as the Church and traditional authorities.[3] For Wallerstein, 'one way of resuming Enlightenment thought might be to say that it constituted a belief in the identity of the modernity of technology and the modernity of liberation' (Wallerstein 1995b: 474). The two modernities, Wallerstein continues, began to diverge in correspondence with the so-called Age of the Revolutions (Palmer 2014)[4]:

> The French Revolution was not an isolated event. It might rather be thought of as the eye of a hurricane. It was bounded (preceded and succeeded) by the decolonization of the Americas—the settler decolonizations of British North America, Hispanic America, and Brazil; the slave revolution of Haiti; and the abortive Native American uprisings such as Tupac Amaru in Peru. Above all, the French Revolution made it apparent, in some ways for the first time, that the modernity of technology and the modernity of liberation were not at all identical. Indeed, it might be said that those who wanted primarily the modernity of technology suddenly

[3] Exemplary of the shared imagery Wallerstein refers to is a passage in Bertolt Brecht's *Life of Galileo*, when the character of Galileo affirms: 'I predict that in our lifetimes astronomy will be talked about in the market-places. Even the sons of fishwives will go to school. For these city people seeking after novelty will be glad that the new astronomy now lets the earth move freely, too. It has always been said that the stars are affixed to a crystal sphere to prevent them falling down. But now we have plucked up courage and we let them soar through space, unfettered and in full career, like our ships, unfettered and in full career' (Brecht 1980: 3).

[4] The notion of the 'Age of the Revolutions' has been extended in time and space from a global perspective in the collection of essays from major historians D. Armitage and S. Subrahmanyam (2010). Wallerstein himself had attempted to explain the French Revolution by connecting it to the large-scale processes of social change within the frame of the capitalist world-system (see Wallerstein 2001: 7–23).

> took fright at the strength of the advocates of the modernity of liberation. (Wallerstein 1995b: 474)

In the wake of the French Revolution, liberalism emerged as hegemonic ideology in the wealthiest states of Europe.[5] Notwithstanding the foundational rhetoric of *laissez-faire*, liberalism heavily depended on the ability and the strength of the state as an institution 'furthering the modernity of technology while simultaneously judiciously appeasing the "dangerous classes". [The ruling classes] hoped thereby to check the precipitate implications of the concept of the sovereignty of the "people" that were derived from the modernity of liberation' (Wallerstein 1995b: 475). 'Suffrage, the welfare state, and national identity were offered to the dangerous classes of the core states. This gave them hope that the gradual but steady reforms promised by liberal politicians and technocrats would eventually mean betterment for them' (Wallerstein 1995b: 479). He concludes that once the confusing overlapping of the two modernities is dismantled, a new collective effort towards the modernity of liberation can emerge in the wake of the distrust in the providential salvific power of the modernity of technology, to the extent the latter is to be made dependent on the quest for the accomplishment of the former.

Yet, this renewed plea for the modernity of liberation suffers from the fallacies of the narratives from which he draws legitimization. The idea that modernity emerged in Europe and that it came to be diffused to the rest of the world through the colonial expansion is guilty of underestimating the constitutive relational role of non-European agencies in the birth of what we are used to refer to in terms of modernity. John Hobson has defined this bias as the intellectual space between structural-Eurofunctionalism and Eurofetishism (Hobson 2012: 237–41). Hobson has focused on the denial of Eastern agency in Western theory as a long-term structure of thought from the dawn of the Age of the Revolutions to present

[5] In Wallerstein's schema, liberalism emerged immediately after the Congress of Vienna (1814–1815) and the Restoration, when it became clear that, notwithstanding the defeat of Napoleon, the political transformations Napoleon had brought to the rest of Europe *manu militari* were not reversible. The full hegemony of liberalism, however, came only after the social movements of 1848, when the ideology of radicalism emerged as a class-oriented threat to ruling strata, who came to opt for the moderate liberal program of slow and selective concessions to the working classes.

times. However, to the extent the scenario Hobson describes is centered on East–West dialectics, he tends to downplay the co-constitutive role of the Americas, particularly Latin America, to a derivative appendix of the transformations of power relations between China and the Atlantic world.

From the perspective of Latin America, instead, Enrique Dussel asserts the process of the colonization of the Americas as the foundational geo-political act of modernity. According to Dussel, the modern *ego cogito* of Descartes, that is, the European aspiration to produce a rational understanding of the principles of nature that would have been able to emancipate Man from traditional authorities and the constraints they put on knowledge, 'had been anticipated by more than a century by the practical, Spanish-Portuguese *ego conquero* (I conquer) that imposed its will (the first modern "will-to-power") on the indigenous populations of the Americas' (Dussel 2000: 471). Dussel (2009) questions the space-time borders of modernity constructed around the 'discovery' of the Americas, when he explores the continuities between the hegemony of Portugal during the Age of the Explorations and the subsequent rise of the Spanish crown to domination over the Atlantic. Dussel describes a long-term process of integration between Spain and Portugal from the fifteenth to the sixteenth century, notwithstanding their inter-state political, commercial and military competition, that constitutes the first stage of global modernity. Analogously, even though from the perspective of connected histories, Gruzinski (2004) speaks of this same period as one dominated by the 'Catholic Monarchy', as a way to conceptualize the integration of Portugal and Spain from a broad cultural and ideological perspective.[6] Thanks to the invasion of the Americas and the processes of creolization that followed, the 'planetary overture' of Europe to the Atlantic worlds transformed the world into a global space. Thus, even though after the French Revolution a new configuration of a hegemonic geoculture acquired prominence, this configuration re-articulated the structurating ideology of social control and colonial domination that the colonization of the Americas had already produced. Dussel distinguishes

[6] The process of cultural and ideological integration between Spain and Portugal was to culminate with the construction of a single system of universities under the reign of Karl V.

among different 'modernities'. He describes them not by their attributive characteristics (liberation and technology), rather by their historical sequence. A sequence that is consistent with Arrighi and Silver's theory of hegemonic cycles in world economy (Arrighi and Silver 1999). For Dussel, the first modernity was inaugurated by Spain and Portugal. The invention of the colonial system coalesced with this overture, and it was the main structural reason for the steady growth of Europe as a global power in a global system largely dominated by China until the turn of the eighteenth century. A second modernity began in the seventeenth century and was dominated by the Dutch system of overseas long-distance trade, with the powerful rise of the bank system and an urban bourgeois elite culture. A third modernity was dominated by England, and came together with the Industrial Revolution and imperialism; it was only at the turn of the eighteenth century that Europe became the center of the world system, overcoming Chinese power and elaborating the ideological structure to manage this centrality, that is, the Eurocentric triumphalist master narrative of European superiority and exceptionalism (Dussel 2012). In this narrative, the emancipative power of modern rationality signaled a departure from the theopolitical configuration of the relation between power and knowledge. Nonetheless, as Michael Adas contends, European colonialism was buttressed by shifting ideological configurations of this relation, rather than being characterized by the replacement of faith with reason and religion with science.

> In the early years of European expansion, European travelers and missionaries took pride in the superiority of their technology and their understanding of the natural world. … Still, throughout preindustrial period, scientific and technological accomplishments remained subordinate among the standards by which Europeans judged and compared non-Western cultures. Religion, physical appearance, and social patterns dominate accounts of the areas explored and colonized. … Europeans' sense of superiority was anchored in the conviction that because they were Christian, they best understood the transcendent truths. Thus, right thinking on religious questions took precedence over mastery of the mundane world in setting the standards by which human cultures were viewed and

> compared. The Scientific Revolution did not end the relevance of Christian standards. (Adas 1989: 6–7)

Even though during the first three centuries of modernity, liberation and technology had the same enemies in Europe (to paraphrase Wallerstein), the 'two' modernities that were distinguishable in Europe were, to a certain degree, making the same victims outside Europe: the colonial subjects. Daniel Headrick has accurately explained how the second expedition of Columbus marks the beginning of the actual colonization of the Americas, when the colonizers brought with them from Europe animals, weapons and diseases that were unknown to the natives, and altogether proved lethal to them. Steel and gunpowder, moved by rapid Arabic horses, were formidable allies of exotic bacteria and viruses in the battles fought and won by the Spaniards against the natives (Headrick 2012). Thus, Headrick maintains, modern scientific and technological knowledge, and the colonial conquest of the Americas, cannot be separated analytically and understood by assuming the former as a cause of the latter, or vice versa. From the point of view of the colonial subjects in the Americas, there is no possibility of distinguishing between modern science and technology on one hand, and the normative dimension of the alien systems of thought and beliefs with which science and technology were imbued, on the other hand. They are part and parcel of what Aníbal Quijano has conceptualized in terms of the colonial matrix of power of modernity.

Quijano (2007) thinks of modernity as a historical and social heterogeneous whole characterized by an unprecedented organization of power he names 'colonial matrix of power'. The colonial matrix of power emerged during the sixteenth century and had become fully global by the end of the nineteenth century. This matrix involves multiple dimensions such as labor, institutions, sexuality, cosmology, epistemology, race, technology and authority (Quijano 2000, 2007). These dimensions are all but derivative expressions of a core morphogenetic instance, such as the economic structure of exploitation. Rather, as Grosfoguel specifies, race, gender, sexuality, spirituality and epistemology are not additive elements to the economic and political structures but integral and constitutive part

of modernity (Grosfoguel 2005).[7] The emancipative power of modernity to free men from the chains of obscurantism of traditional authorities that the Enlightenment celebrated, from the perspective of the colonial subjects, first came to the Americas under the flag of evangelization, servitude and slavery. When the colonizers reached the Americas, as well as the other colonial worlds, indigenous peoples did not experience a particular organization of production alone, or a system of beliefs, or a new medicine, or a new understanding of their place in the cosmos, or a different horizon of perceptions for their existence and the way this could improve and empower them as human beings or individuals. They suffered from the violent imposition of coloniality as integrated matrix of power.

The State and the Age of the Revolutions

Despite this intimate co-extensiveness of coloniality and modernity, Western historiography has long celebrated the affirmation of political modernity as a consequence of the French Revolution and its worldly significance for the transition from the legitimation of power based on subjection to the legitimation of power based on citizenship.[8] Yet, a vast revisionist move attempts to rewrite the worldly history of political modernity through the methodological prism of the connected histories that tie the revolutionary changes in the configuration of powers occurring globally in the decades from 1760 to 1840 (Armitage and Subrahmanyam 2010: xi–xxxii; Bhambra 2015).

[7] Grosfoguel attempts to provide a more solid theoretical background to the notion of coloniality by grounding its articulation upon Kontopoulos' understanding of the concept of heterarchy. Heterarchy is distinguished from hierarchy by its shifting and multiple entanglement among different levels of hierarchies. For Kontopoulos, heterarchy is 'a level structure formed by a process of partial ordering; especially, if it involves complex multilevel interactions (not only across adjacent levels); a structure involving at least several-to-several connections between adjacent levels and, potentially, projections of such connections to other nonadjacent levels; in brief, a partially ordered level structure implicating a rampant interactional complexity' (1993: 381).

[8] One of the most appealing critiques of the ideological dimension of European political universalism remains Mamdani (1996).

When seen from the global perspective the Age of the Revolutions casts a different light over some of the most resilient historiographical myths of the Western triumphalist self-biography of political modernity. The first question consists in asking: were the American and French Revolutions the only epicenters of these uprisings? Was the 'spark' of the rebellion a by-product of social and political change endogenous to the West that inspired and provoked other revolutions in Latin America and the Caribbean? According to Nash, this picture needs to be complexified. The political and ideological impact of the French and American Revolutions has to be re-assessed, in light of the existence of a network of relations that connected Latin American with Caribbean revolutionary movements (Nash 2010). Rather than being inspired exclusively or prominently by Western models of political modernity, Latin American and Caribbean revolutions were part of a 'world crisis'. The global articulation of the world crisis was stimulated by long-term/large-scale phenomena of circulation of knowledge and political practices across the Atlantic (Hunt 2010), as well as across the Pacific (Shilliam 2015). Single vectors of these processes of circulation were often intellectuals and activists in exile. Jasanoff explains that the movements of these go-betweens designed intricate cartographies far more complex and entangled than the meta-geography of Eurocentric diffusionism in the history of ideas is keen to concede (Jasanoff 2009). This world crisis was largely extended beyond the Atlantic and the Pacific spaces. When China is brought into the global scenario of the Age of the Revolutions, Pomeranz remarks, the picture gets even more articulated. For the particular context of the rebellions that jeopardized the political map of imperial power during the late Qing era was coeval to the redistribution of power on the global scale that followed the outcomes of the protracted competition and conflictuality between Great Britain and China (Pomeranz 2010). The Age of the Revolutions in global perspective sets a different analytical agenda of social theory, which needs to ask different questions: to what extent can the 'world crisis' that coincided with the Age of the Revolutions be read through a single conceptual apparatus? In other words, if the global dimension of the Age of the Revolutions becomes a premise for reconstructing the connected histories of political uprisings from 1760 to 1840, does the historical-sociological vocabulary of political modernity

suffice to grasp the complexity of these phenomena once the centrality of Europe as epicenter of global social change is suspended?

Subrahmanyam and Armitage admit that 'a global approach to the Age of the Revolutions clearly demonstrates that the dimensions even of political change in the period under study were markedly heterogeneous' (Armitage and Subrahmanyam 2010: xxvi). And when the historiographical problem of narrating this heterogeneity calls into question the issue of explaining causally the narrated processes of social change, Subrahmanyam and Armitage remark, it becomes even more evident that 'the Age of the Revolutions was a period in which the global and the local were re-articulated in radical ways' (2010: xxix). What is radical in this re-articulation?

Western historians, such as Palmer or Hobsbawm, have always been keen to concede that the American or the French Revolution were not isolated or purely endogenous phenomena. Yet, 'the broad tendency of that historiography was inevitably diffusionist in character' (Armitage and Subrahmanyam 2010: xxix–xxx). Hunt makes explicit the argumentative strategy and epistemological frame that endorsed Eurocentric diffusionist narratives of political modernity when she points out the inner difficulty of any aspiration to produce a single integrated history of the Age of the Revolutions, against the grain of thick historiographical inquiries that assume each single revolutionary transition as heuristic space formed by a network of global connections. In fact, she recalls, the translation of the historical heterogeneity of the Age of the Revolutions into an univocal interpretative schema has been made possible, since the nineteenth century, by escalating at the level of master narrative (Hunt 2010: 33–6). The elaboration of this master narrative was based precisely upon the elision not only of the global connectedness of the Age of the Revolutions, but also of the anti-colonial struggles this complexity involved.

This master narrative was constructed not only by silencing or domesticating the transformative potential of anti-colonial struggles. The condition of possibility for the legitimacy of the master narrative of political modernity consisted in the disconnection of the narrative of the transition from subjects to citizens in Europe, from the global reconfiguration of the ideology of Western superiority whose coming into existence coincides temporally with the Age of the Revolutions. A privileged

angle of observation to grasp the relevance of this major change in the self-perception of the West as superior geohistorical entity at the global scale is the relation with China as a civilization. If one remains on the level of historiographical concepts, 'the Age of the Revolutions' overlaps with 'the Great Divergence', and the set of processes that Bin Wong has defined as the fluctuations of power differentials between China and Europe (see Rosenthal and Bin Wong 2011). These fluctuations corresponded to major shifts in the reciprocal perceptions of strength and superiority between learned elites and dominant strata in Europe and China (see Clarke 1997; Adas 1989: 177–93).[9] In Europe, this divergence transformed a multilayered cultural interest in Chinese civilization into the prevalence of the construction of China as irremediably inferior, stagnant, despotic, immature and barbarian (Arrighi 2007; Ching and Oxtoby 1992; Jones 2001; Elman 2003). Not by chance, only when the idea according to which the Chinese were inferior to Europeans became largely hegemonic in European culture, the claim of Western superiority became that particular historically determined, full-fledged, Eurocentric epistemological-and-narrative framework to manage the acquired centrality we keep calling *modernity*. It was during these decades that the image of European superiority assumed the clear tints of exceptionalism and triumphalism that eventually led Max Weber, at the turn of the nineteenth century, to formulate the mega-question: 'Why in the West, and only here (as we like to think)?'. Conjectures about the reasons why the ascent of Europeans to world dominance occurred the way it did came to be made deterministic orthodoxy through teaching: the more the ethnocentric claim of superiority was founded on unquestionable axioms universally accepted, the longer Western world dominance would have been secured, at least ideologically. Faithful scientism, the teleology of progress, the rational subject, the naturalization of social hierarchies historically produced, are all main chapters in this ethno-story. In this process, the cultural and institutional asset of the European nation-state

[9] Mathew Mosca (2013) has recently provided a very interesting account of the radical change in the perception of Chinese global power among Chinese officials in the late Qing period, after their defeat in the First Opium War.

passed to design the highest materialization of rationality in the realm of the political organization of social power.

For European thinkers, emancipation signified a sort of collective, identitarian, ethno-centered coming of age for the West. From Kant onwards, European thinkers loved to talk about an *Ausgang*, or 'way out' from immaturity through reason. This civilizational understanding of emancipation was complementary to the process of subjectification at the individual level. This identification between the prototypical Western white male heterosexual Christian bourgeois individual subject and the West as the civilizational form towards which all the other geohistorical entities would have converged was all but metaphoric: it was ontogenetic. It was this identification which filled the pages of the European *Bildungsroman* from the nineteenth century to the 1930s, as Franco Moretti (2000) analyzes. And, further, it was this same identification that provided the social legitimization for the emergence of psychology as a social science to explain, in Freud's words, 'Civilization and its discontents'. In the wake of the disastrous end of World War I, Russian aristocrat and father of phonetics Nikolai Trubetskoy (1982 [1920]) took this identification as the assumption to build his own criticisms against the universalizing hubris of European civilization, and argued against the unilateral and violent imposition of the chauvinism of European cosmopolitanism on the whole of humanity. For him, Western civilizational ideology did not differ, in its underlying structure of meaning, from the classical Adlerian mechanism of compensation produced by an inferiority complex that translates itself into a superiority complex. It was no coincidence that the title he had originally intended for his book *Europe and Humanity* was *On Egocentrism*.

To this Eurocentric notion of integrity between civilization and individuality, in the same years Du Bois opposed a radically different view; one that consisted in a destabilizing critique of this Eurocentric architecture that had found in Hegel's *Universal History* and later in Karl Jaspers' notion of the Axial Age, a systematic form. Du Bois (1903, 1939) questioned the assumption of the Hegelian universal history of civilization by constructing the Negro as a distinctive civilization whose cultural emergence was displaced in space, thus not integral to the geohistorical imaginary of Western modernity. His subversive reading of Hegelian dialectics was based on a racial understanding of the relational nature of

historical change. Instead of assuming the European notion of civilization as a distinctive and self-contained geocultural entity, Du Bois modeled his own understanding of civilization on the base of the historically determined condition of black diaspora. In so doing, he replaced the fixity of the integrity between culture and place with the morphogenetic power of geo-historical mobility and cultural intersectionality, which emerged from the experience of slavery and deportation across the Atlantic. From this perspective, Du Bois proposed, it was possible to understand the worldly configuration of capitalist modernity (see Boy 2015). This constitutive intersectionality had a psycho-political dimension too. Instead of proposing an individualized human being integral to his own civilization, Du Bois connoted this subject as inextricably transpassed and formed by the line of color: a double consciousness. This alternative understanding of the identification between the individual and civilization has been further developed by Glissant in order to turn the condition of *creolité* from a derivative connotation into a legitimate site for the production of subjecthood through emancipative practices in, through and at the margins of history: 'To risk the Earth—Glissant invites—, dare to explore its forbidden or misunderstood impulses. Establish in so doing our own dwelling place. The history of all peoples is the ultimate point of our imaginative unconscious' (Glissant quoted in Chambers and Curti 1996).

The idea of emancipation was both a development of the Eurocentric notion of universal history and a constitutive aspect of the project of colonial domination inaugurated by the construction of the modern subject as rational being endowed with the self-reflexive consciousness described by John Locke (Balibar 2013). The colonial formation of this construction authorized European thinkers to ascribe to themselves the monopoly of theorizing the normative dimension of freedom as a project, and as a universal project for humanity.

This modern/colonial project was marked by the intention to allow man to control nature through reason, in order to free European man from the constraints he found himself entangled in, while simultaneously dominating colonial subjects because of the providential historical role white man ascribed to himself. Castro-Gómez notes how the conceptual pillar of emancipation from these *vincula* was the progressive reduction of epistemological ambiguity, both of human knowledge and of human condition,

through reason. An ambiguity that derived from the human ontological insecurity in the face of the overwhelming weight of the Christian religion (after the nominalist turn we explored in chapter 4), whose God's absolute will must prevail over reason. Scientific-technological rationality, in fact, was at once a political and epistemological attempt to create such a space for emancipation (Castro-Gómez 2002, 2007).

Thinking Through Anti-colonial Struggles: Major Insights from 'Minor' Colonialisms

The European project of emancipation was not theoretical. Political modernity materialized through the modern state. The state was the institutional configuration that would have disclosed a viable path toward the rational organization of human social life. On the one hand, the state was able to legitimately provide various social bodies with collective goals and rules. On the other hand, social sciences were born in order to translate the project of modernity into practices of government. Re-elaborating Foucault from the perspective of Latin America, Castro-Gómez notes how 'all policies and institutions of the state (school, law, hospitals, prisons) are defined by the juridical imperative of "modernization", that is, by the need to discipline passions and orient them toward collective good, through labor. It was a matter of tying all citizens to the process of production through the submission of their time and bodies to a series of norms that were defined and legitimized *by knowledge*' (Castro-Gómez 2007: 275). Both in Europe and in the colonial worlds, existential social spaces of action and thinking were framed in a generalized, hierarchical, tendentially totalizing system of life. In this process of modernization through state-building and nation-building, decolonization has played a crucial role whose complexity cannot be reduced to the formal overcoming of the political status of colonies.

The syncopated and jeopardized space-time of political decolonization translated into the construction of postcolonial nation-states, both in Latin America during the nineteenth century, and in Asia and Africa in the aftermath of World War II. Yet, the construction of the postcolonial state that followed the different national liberation movements came

along with the emergence of new generations of non-Western intellectuals. Their critical approaches have been forged within, in the wake of, and around anti-colonial struggles, across the border of Western thinking through the transmission belt of national academia in the Third World. These approaches have challenged theoretically the conceptual imperium of the Leviathan. Several twentieth-century intellectual endeavors from the former colonial and contemporary postcolonial worlds, such as Subaltern Studies historiography of peasants' revolts, Caribbean critical theory, decolonial engagement with Latin American indigenous struggles, *inter alia*, converge towards a profound redefinition of the entire ideological architecture founded upon the Western notion of the 'political'. What are the limits of political modernity and its alleged emancipative power, from the perspective of the colonial difference? In other words, what practices of emancipation in the colonial world and the postcolonial nation-state exceed political modernity? To what extent are such practices able to place anti-hegemonic constituency into political modernity as a space of emancipation?

Ranajit Guha and the Indian Subaltern Studies collective offer an interesting entry point to these questions. Indian Subaltern Studies covered a very long history of rebellions, from the Moghul Empire throughout British colonialism to the making of the national liberation movement, to the Maoist-inspired Naxalite guerrilla raised in the wake of the Sino-Indian War. In so doing, Indian Subaltern Studies have convincingly denounced the limits of both Marxist and liberal nationalist historiographies that relegated subaltern agencies to the realm of the pre-political (see Ludden 2002). Historicism has been thus called into question by affirming that subaltern agency was part and parcel, as well as constitutive of, political modernity even though the forms of subaltern agency could not be decoded through the grammar of Western rebellions: a site of theoretical dissonance with those rebels Eric Hobsbawm had eloquently ideal-typified as 'primitive' was thus established. Rather, as Gramsci observed about the process of unification of the Italian state, subaltern agency was by definition fragmented in the face of hegemonic power. The formation of the Italian nation-state in the second half of the nineteenth century, Gramsci understood, was not the 'glorious son of patriotism' unifying the North and the South. The Italian unification was irreduc-

ible to the model of the English Glorious Revolution or to the mass mobilization that boosted the French Revolution. Rather it was a by-product of an *ante litteram* internal colonialism, as Stavenhagen (1965) and Gonzalo-Casanova (1965) theorized in the 1960s about the formation of Latin American states that subjugated the South, where a 'passive revolution' paved the way for a state of dominion over popular masses, without a real class hegemony (see Ascione 2009).[10] Guha radicalized this view and understood the Indian postcolonial state as 'domination without hegemony'. Subaltern agency rhapsodically but uninterruptedly resurged along Indian history and interacted with nationalism, Marxism or Maoism, even though these grammars were never able to fully subsume subaltern agency within their Eurocentric conceptual grid of mobilization. Subaltern agency tactically allied with these movements, but it preserved a space of radical irreducibility and uncoded practices.

The theoretical solution Guha and his colleagues proposed to interpret this social space that exceeded the Western grammar of political modernity was that the Western notion of political modernity needed to be stretched to include a non-conceptual space of agency which claimed its right to be recognized as just as modern as Western forms of political participation and mobilization. This answer has, significantly been sufficient to rewrite the history of modernity by including those marginalized and subjugated groups and experiences that the Eurocentric master narrative of emancipation had excluded from history. Nonetheless, as I shall argue, to the extent that this strategy of extending the contested boundaries of political modernity becomes a methodological drive, it shows the limitations that the acceptance of modernity as a frame imposes upon the possibility of freeing sociological imagination from the constrains of Eurocentrism.

[10] Stavenhaghen (and Gonzalo-Casanova) elaborated the concept of 'internal colonialism' to describe the continuation of racial hierarchies within the post-colonial Latin American independent states. National creole elites perpetuated the former structures of white colonialism over black and indigenous groups, preventing them from entering the polity and denying them full citizenship in order to dispose of their workforce as much as they could. The concept of internal colonialism was thus able to override the borders of the nation-state and relocate its operations according to a global logic of ethnicization of the colonial world population, which rooted itself inlong-term systems of political exclusion, cultural marginalization and economic exploitation.

Analogously to the historigraphy of peasant and urban revolts elaborated by the Indian Subaltern Studies Group, Sybille Fisher and Nick Niesbett have both produced path-breaking interpretations of the Haiti Revolution. They have contributed to the crucial critical reappraisal of C.L.R. James's *Black Jacobins*. And these insights have been effective in relocating the Haiti Revolution at the center of political modernity, as the first anti-racial liberation movement in modern history. Haitian revolutionaries at the end of the eighteenth century—it is maintained—aspired to obtain historical and political citizenship within the polity of modernity, while the triumphalist narrative according to which the West leads the way towards freedom and equality, ominously negates the transformative and worldly relevance of those anti-colonial political modernities (Bhambra 2016; Fischer 2004; Niesbett 2008; Linebaugh and Rediker 2002). Yet, the question arises: to what extent were these rebellions 'disavowed modernities'? To what extent, conversely, were these struggles enactments of the possibility of consciously disavowing modernity and moving beyond it? In other words, on what basis is modernity legitimated to domesticate dissent and antagonism, in the literal sense of hosting them in the Hegelian House of Spirit? Is there not a certain degree of historiographical anachronism in rewording the entire history of struggles in the colonial worlds in the language of political modernity? Were all anti-colonial movements, from the eighteenth century onwards, struggles for modernity? And by whom is modernity authorized to translate those untheorized, underconceptualized spaces into the familiar semantic space of emancipation? Is modernity an appropriate frame to conceptualize this wide and complex array of social and historical tensions? Or, to put it negatively: what are the constraints that modernity, as a narrative and epistemological frame, imposes on the sociological imagination oriented to understand these struggles and historical experiences? Whereas Audre Lorde affirmed: 'Give name to the nameless so it can be thought', my doubt is: 'Does the nameless necessarily want to be thought as modern?'[11]

Walter Mignolo suggests a way of answering these interrogatives. He reconsiders political emancipation from the vantage point of colonial-

[11] This sentence from Audre Lorde is the opening exergue of Sandoval (2000). It is a verse of Lorde's poem 'Poetry is not a luxury'.

ity, by distinguishing emancipation from liberation. The problem is not merely terminological but historical and epistemological. On the one hand, Mignolo forces the term emancipation to signify the practices of subjectification that belong to European liberalism and correspond to the white bourgeois ideal of affirming the new centrality of the middle class against the institutions of the *ancien régime*. On the other hand, he proposes the notion of liberation to conceive mobilizing practices of decolonization enacted by groups and subjects whose condition of subalternity proves resilient to the transition from the status of colonial subjects to those of citizens of independent states. Liberation would thus refer to the political project of decolonization. Liberation would involve, as Fanon explained, both the colonizer and the colonized in their mutual production, rather than being a one-sided project involving only former colonial subjects. Liberation would thus imply a delinking from the Western notions of freedom and equality that the idea of emancipation conveys (Mignolo 2007a).

What are the narratives of colonialism that buttress the distinction between emancipation and liberation, as Mignolo puts it? The condition of possibility of the distinction between emancipation and liberation is strictly related to the advantages (and disadvantages) of thinking from Latin America and theorizing from the border produced by the violent encounter of European colonizers with native peoples and slaves across the Black Atlantic. From the perspective of the indigenous peoples, colonialism as a whole consisted in the destruction of their communities, the enslavement of their people, the demolition of their places, forced exodus, the erasure of their cosmologies, and the annihilation and plunder of their cultural resources. For Quijano, 'in the Americas, there was such widespread destruction of the indigenous populations, especially among hunting and gathering populations, and such widespread importation of labour-force that the process of peripheralization involved less the reconstruction of economic and political institution than their construction, virtually *ex nihilo* everywhere (except perhaps in the Mexican and Andean zones). Hence, from the beginnings, the mode of cultural resistance to oppressive conditions was less in the claims of historicity than

in the flight forward to "modernity"' (Quijano and Wallerstein 1992). Nonetheless, this view is bound to, and draws its own legitimacy from, the unquestioned acceptance of modernity as historical-sociological, epistemological and logical frame.

No doubt the colonization of the Americas offers a privileged theoretical and narrative space to attack Eurocentrism, yet the intellectual privilege of speaking from the 'first periphery' of European colonialism derives its authority from the acceptance of modernity as historical ontogenesis producing a distinctive era in human history. What are the disadvantages and limitations of this hermeneutic logic? How does this same story look from other vantage points formed within other space-times of the colonial difference?

Amilcar Cabral's thinking, produced in the midst of the struggle against Portuguese colonialism of the 1960s, is crucial in this regard. Thinking through Portuguese colonialism sheds a different light on the process of construction of the modern world as a colonial project. Not only because the genesis of Portuguese colonialism during the fifteenth century destabilizes the space-time coordinates of modernity organized around the colonization of the Americas, by cutting them transversally. Not even because the creation of the system of Atlantic slavery that largely contributed to determining the geography of the Age of Explorations was fundamentally a by-product of Portuguese colonialism. Rather because all these historical specificities, re-articulated in the long term, provide the humus for Cabral's irruption in the temple of White Man: theory production. His speech at the Tricontinental Conference of Havana in 1966, eloquently entitled 'The Weapon of Theory', represents an important critical intervention for the decolonization of social theory. Cabral affirms the need to place the historical heterogeneity of the colonial worlds at the center of the analysis even within the homogenizing facade of anti-imperialism and anti-colonial struggle. Cabral refuses to align even with the political, historical and ideological model offered by the Cuban revolution, since he radically takes heterogeneity of the colonial difference as the basis for theory production. Cabral affirms that the need for decolonization has to be framed within a theory of decolonization,

and that the need for a theory of decolonization has to engage with the decolonization of theory.[12] Cabral (2009: 3) opts for conceiving decolonization as 'the result of our own experiences of the struggle and of a critical appreciation of the experiences of others. To those who see in it a theoretical character, we would recall that every practice produces a theory, and that if it is true that a revolution can fail even though it be based on perfectly conceived theories, nobody has yet made a successful revolution without a revolutionary theory.' In so doing, he is affirming simultaneously the theoretical relevance of the colonial difference even within anti-colonial struggle, and a fundamental principle of method, that is, the end of the monopoly of whiteness over the elaboration of concepts. The image of the White Man, even progressive or paternalistic, that learns from the vitalism of the anti-colonial struggles still assigns to the former the ability and the right to sublimate and systematize the anti-colonial practices in theory, as well as the insights fragmentarily produced through those practices. A mechanism not very different in substance from the colonial exploitation of sugar refining, transforming the brown into the white, or of mining, that is, the extraction of precious minerals from the detritus they are settled in, or even of biopiracy, copyrighting both the usages, the molecules and the genetic codes of life forms.

For Cabral instead, theory and practice are never distinct; rather they are constantly re-articulated by the struggle for decolonization. Not so much in the sense of their reciprocal co-constitution, rather in the deeper sense that they do not belong to distinct levels of conceptualization ordered along a descending hierarchy of abstraction that goes from theory to practice, as if the latter would be closer to experience and the former closer to ideas. They are at one and the same time means of thinking-and-acting, acting through thinking and thinking through acting.

Cabral makes it clear that the making of history involves simultaneously and coextensively both the liberation of the social from the colonial, and the process of thinking and narrating liberation, as a reaction to colonial oppression. For Cabral there is a line of continuity that connects

[12] Reiland Rabaka has located Cabral within the genealogy of black thinking, together with Du Bois and Fanon *inter alia*, emphasizing the distinctiveness of Cabral's approach to the issue of race and class (see Rabaka 2009: 165–227).

colonialism, imperialism and neo-colonialism. This line is the negation of the history of the dominated peoples. This line of continuity is not necessarily interrupted by the construction of a post-colonial nation-state. Decolonization is thus a matter of history. It is a matter of the proliferation of histories of the decolonizing peoples.

Can modernity boast about being distinctive because emancipative? Is any self-legitimating historicist account of emancipation plausible? Cabral clearly states, even against the Marxist narrative of the stages of the history of modern world, that social change in the colonial, and thus in postcolonial, worlds is a global interconnected phenomenon that in particular areas or for certain human groups may not inevitable mean a steady progressive transformation, rather it can mean acceleration, slowing down, or even social and cultural regression. Cabral affirms that 'at the level of humanity or of part of humanity (human groups within one area, of one or several continents) these three stages (or two of them) can be simultaneous, as is shown as much by the present as by the past'. Whereas modernity, in the Marxist, Leninist, Maoist grammar of 1960s Thirdworldism, represents a particular historical configuration of class structure, Cabral questions both the overwhelming explanatory power of class, and the presumption that the history of emancipation begins with modernity.

> This leads us to pose the following question: does history begin only with the development of the phenomenon of 'class', and consequently of class struggle? To reply in the affirmative would be to place outside history the whole period of life of human groups from the discovery of hunting, and later of nomadic and sedentary agriculture, to the organization of herds and the private appropriation of land. It would also be to consider—and this we refuse to accept—that various human groups in Africa, Asia, and Latin America were living without history, or outside history, at the time when they were subjected to the yoke of imperialism. It would be to consider that the peoples of our countries … are outside history, or that they have no history. (Cabral 1970: 95)

For Cabral, emancipation means anti-colonial constituency rather than historical transition, as global history does not begin with modernity,

provided that modernity coincides with colonization. It follows that there are social and historical spaces of otherness that cannot be grasped within the frame of modernity. Spaces that resist translation into the shared language of intelligibility of political modernity. Spaces that call for a different possibility of decodification. So how do we start to reconstruct the theoretical possibility of regarding decolonization as at the borders of emancipation?

Valentine Mudimbe's critical pan-Africanist notion of African philosophy is one of these *loci*. Mudimbe's intervention opposes emerging conceptual spaces of decolonial contestation to the irreducibility of those spaces to Western idea of epistemology. Spaces that, according to Chela Sandoval's methodology of the oppressed, act as deregulating systems, which discloses alternative ways of thinking. Mudimbe calls these spaces *gnosis*. For Mudimbe (1988: 9) gnosis 'means seeking to know, inquiry, methods of knowing, investigation, and even acquaintance with someone. Often the word is used in a more specialized sense, that of higher and esoteric knowledge, and thus it refers to a structured, common, and conventional knowledge, but one strictly under the control of specific procedures for its use as well as transmission. Gnosis is, consequently, different from doxa or opinion, and, on the other hand, cannot be confused with episteme, understood as both science and general intellectual configuration.' Thanks to Mudimbe's intervention the decolonization of theory is made porous to the osmotic exchanges with a vast constellation of knowledge that has suffered and is still suffering from the asymmetrical distribution of power that the epistemological dominion of modernity imposes either at the global level of world academia, or within epistemic cultures and contexts, and within the microcosms of intersubjective relations of knowledge production.

A gnostic approach to theory does not mean taking refuge in esoteric or irrational forms of knowledge; rather it marks a distinctive tendency towards critical knowledge production. It configures an intellectual space of resistance and contestation that is constantly formed and deformed by the transient presence of those non-dominant knowledges oriented towards a radical critique of the paradigmatic construction of dominant and hegemonic knowledge, within each single context where hierarchies of understanding, of narration, of speech and representation are involved. Both within, across and outside the frame of modernity.

Historically the original meaning of gnosis emerged in late antiquity at the intersection of Eastern, Western and African cosmogonic knowledges. It denoted what Couliano has called 'the first counter-culture' to Christian hegemony and domination. Against the long-term process of construction and institutionalization of the authoritative Christian structure of religious and secular power through the imposition of dogmas and the normalization of dissent through the creation of the notion of "heresy" and the persecution of heretics, many threads belonging to the constellation of gnosis proposed an understanding of the human that was antithetical to Christian notions of genesis. Instead of the gender-biased derivation of the feminine from the masculine inherent in the doctrine of sexual sin, the human was thought of as derived from monstrous androgynous superior cosmic creatures able to self-procreate, which inoculated the human with the spark of knowledge and freedom: a queer mother for humanity. Cognitively, gnosis consisted, as Bloom and Couliano agree, in a powerful tendency toward the deconstruction of dominant knowledge, which 'undid the genealogies, scrambled hierarchies, allegorized every microcosm/macrocosm relation, and rejected every representation of divinity—that is, nothing but power in a theosophic horizon, I emphasize—as self-referential. … A reversal exegesis that run up against tradition' (Couliano 1992: 263).

Thus, a gnostic approach to theory consists in the obstinate and methodical practice of asking unauthorized questions to destabilize the assumptions that existing power relations legitimate and are legitimated by, relentlessly conducted wherever power as such reaffirms its own discretionary authority over its own alleged natural right to postulate.

Sexuality, Technologies of the Self and Postcolonial Governamentality: A Conceptual Frame

Quijano's notion of coloniality provides an open-ended platform to denote and connote the multidimensional heterogeneity of colonial dominance, whose articulation includes gender and sexuality. I think it is a notion sufficiently open to cope with the uncanny presence of queer, transgender, transsexual and intersexual sites of knowledges production,

provided that, rather than coloniality subsuming and accommodating the queer, the latter has to be mobilized to generate a radical critical tension within coloniality as a flexible conceptual construction (Roen 2001).

For Saldívar (2012), the irruption of sexual and racial diversity produces sites of irreconciliability between divergent modernities. For Perez (2001), the articulation of race, gender and sex is not analytically distinguishable from the production of knowledge at the borders of modernity, thus Chicano/a studies emerge as a privileged theoretical *locus* for the production of subjectivities which questions the political legitimacy of the state, as well as the cognitive support social sciences provide to it. Sandra Soto (2010) goes further when she underlines the connections between the broad articulation of colonial power and the hybridization between racialization and sexuality; so she extends this space of racial and sexual hybridity to queer epistemologies. Ferguson draws upon Licia Fiol-Matta's *A Queer Mother for the Nation* (2002), to move forward on this point; he poses a radical interrogation to queer standpoint methodologies, when he claims that the focus should be retargeted on 'the intersections of race and sexuality and how those intersections promote often tenuous but still hegemonic queer studies, so the autonomous, self-making, and self-determining subject of that version of queer studies becomes the object of interrogation' (Ferguson 2007: 114–5). Holmes (2009: 1–14) correctly remarks how the theoretical issues involved in the exploration at the borders of sexualities disclose new paths of investigation about the relationship between power and knowledge, displacing conventional social theory into destabilizing regions of thought, whose capacity of stimulating concept formation lies in the reiterated attempt to stimulate the collapse of the unifying aspiration of the subject to fully appropriate the object. However, subject is thought. According to Stryker and Whittle, queer, transgender studies are concerned with:

> Anything that disrupts, denaturalizes, rearticulates, and makes visible the normative linkages we generally assume to exist between the biological specificity of the sexually differentiated human body, the social roles and statuses that a particular form of body is expected to occupy, the subjectively experienced relationship between a gendered sense of self and social expectations of gender-role performance, and the cultural mechanisms that

> work to sustain or thwart specific configurations of gendered personhood. … The field of transgender studies seeks not only to understand the contents and mechanisms of those linkages and assumptions about sex and gender, biology and culture; it also asks who 'we' are—we who make those assumptions and forge those links—and who 'they' are, who seem to 'us' to break them … Methodologically, transgender studies exemplifies what Michel Foucault once called 'the insurrection of subjugated knowledges'. (Stryker and Whittle 2006: 3–13)

This tension is particularly relevant when it concertizes in the political space of the production of the modern political subject through the social regime of the state. In fact, questioning sexual taxonomies becomes crucial to negatively constructing the exterior limit to citizenship. Queer, transgender, transsexual and intersexual subjectivities create continuous definitional short-circuits, either in terms of the definition of the subject by the state, or in terms of the possibility of emancipation as a political project of self-determination in and through history.

Susan Stryker echoes Holmes when she maintains that 'transsexual embodiment, like the embodiment of the monster, places its subject in an unassimilable, antagonistic, queer relationship to a Nature in which it must nevertheless exist' (Stryker 2006: 248). Sexual identification is the foundational act of recognition and taxonomy that the state operates at the moment of birth. Intersexuality provides a limit-notion in this regard. Chase remarks that 'the birth of an intersex infant today is deemed a "psychosocial emergency" that propels a multidisciplinary team of intersex specialists into action. Significantly, they are surgeons and endocrinologists rather than psychologists, bioethicists, representatives from intersex peer support either male or female as a "sex of assignment", then informs the parents that this is the child's "true sex". Medical technology, including surgery and hormones, is then used to make the child's body conform as closely as possible to that sex' (Chase 1998: 302).

As Donna Haraway pioneered, uncanny sexualities involve a certain irreducibility and inbetweenness of social spaces that mark multiple departures from the emancipatory frame of Western progress narratives as well as any teleological notions of agency. Against the demonization of technology, Haraway (1991) argues in favor of a different understanding

of life, sexuality and emancipation that is not confined within the primordial myth of the organic. The unitary subject of modern politics can be reshaped through the fragmentation of the self, whose connections and disconnections with human and non-human entities transform it into a cyborg whose existence beyond the boundaries of Western humanism is *in se* a form of contestation and displacement. Felski recalls how for Haraway 'the cyborg is outside salvation history and has no origin story; it rejects the seductions of vanguard politics and teleological notions of agency. Without minimizing the logics of domination shaping our own era, Haraway seeks nonetheless to recuperate both political agency and the redemptive promise of the future. Coding the transgendered subject of the postmodern as liberating icon rather than nightmarish catastrophe, she sees new and unimagined possibilities in hybrid gender identities and complex fusions of previously distinct realities' (Felski 2006: 568).

So, if the separation between the modernity of liberation and the modernity of technology in narrative terms, as I have argued, is flawed from the perspective of coloniality, when emancipation as a political notion is considered from queer, transgender, transex and intersex epistemology, its nexus with the notion of technology results inconceivable. First, because all these sites of knowledge production converge towards a much wider and complex understanding of technology than historical sociologists, such as Wallerstein, are familiar with. Second, because rather than a narrative and theoretical divergence between emancipation and technology, the latter is understood as integral to the aspiration to reach the former at the subjective level (Raymond 1979; Rubin 2003; Stone 1991; Hausman 1995).

Foucault's notion of technology offers hints of a frame, in this regard. A frame that calls for queer subversions and postcolonial reconfigurations. Whereas Max Weber's ideal-typical construction of rationality immediately forced Weber himself to wonder 'If one wants to behave rationally and regulate one's action according to true principles, what part of one's self should one renounce? What is the ascetic price of reason? To what kind of asceticism should one submit?' I posed the opposite question: How have certain kinds of interdictions required the price of certain kinds of knowledge about oneself? What must one know about oneself in order to be willing to renounce anything? Foucault responds

by extending the notion of technology. Foucault distinguishes between '(1) technologies of production, which permit us to produce, transform, or manipulate things; (2) technologies of sign systems, which permit us to use signs, meanings, symbols, or signification; (3) technologies of power, which determine the conduct of individuals and submit them to certain ends or domination, an objectivizing of the subject; refers to the technologies of the self as those technologies, which permit individuals to effect by their own means or with the help of others a certain number of operations on their own bodies and souls, thoughts, conduct, and way of being, so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality' (Foucault 1988a: 18).

Butler radicalizes this position when she affirms that 'thinking the body constructed demands a rethinking of the meaning of construction itself' (Butler 1993: xi; see also Prosser 1998). From the perspective of queer and transsexual standpoint methodologies, technology, whether surgical or hormonal, has enabled people to enjoy an unprecedented control over their own body, albeit within the frame established by the medicalization of such attempts to become emancipated from ascribed sexual identities. To be sure, the social acceptance of technological intervention reproduces gender hierarchies to the extent that a very different degree of social legitimacy is accorded to gender reassignment surgery and endocrinology on the one hand, and hormonal treatments for reproductive purposes on the other.

Against the limited horizon of the medicalization of transsexual, transgender and intersex strategies of emancipation through transformative technologies of the self, Spade contests the accepted notion of body alteration and its association with deviance and pathological perceptions of the self. In a seminal article, Billings and Urban (1982) had affirmed that 'body alteration is always a privatizing and depoliticizing response to gender role distress, they paint transsexuals as brainwashed victims who have failed to figure out that they are only undermining a revolution that seeks to save them' (Billings and Urban in Spade 2006: 318). Spade subverts this normative logic, which he sees as a corollary of the medicalization of sexual heterogeneity. For him, Billings and Urban rely upon 'an arbitrary line between technology and the body that they place

at sex-change procedures. They fail to include in their analysis the fact that people (transsexuals and non-transsexuals) change their gender presentation to conform to norms with multiple other technologies as well, including clothing, make-up, cosmetic surgery not labeled SRS, training in gender-specific manners, body building, dieting, and countless other practices' (Spade 2006: 319). Within this tension, Spade subverts the terms of the problem of the relation between emancipation and the technologies of the self:

> Such an analysis requires seeing the problem not as fundamentally lying in the project of gender change or body alteration, but in how the medical regime permits only the production of gender-normative altered bodies, and seeks to screen out alterations that are resistant to a dichotomized, naturalized view of gender. An alternative starting point for a critique of the invention and regulation of transsexualism is a desire for a deregulation of gender expression and the promotion of self-determination of gender and sexual expression, including the elimination of institutional incentives to perform normative gender and sexual identities and behaviors. This understanding suggests that the problem with the invention of transsexualism is the limits it places on body alteration, not its participation in the performance of body alteration. (Spade 2006: 319)

Spade focuses on the ambiguous relationship that the technologies of the self entail with power, on the one hand, and with the process of the production of subjectivity, on the other hand. If the problem with a specific technology of the self is about the limits that it places on heteronormativity and subjectification, and not its participation in the performance of subjectification, then in what ratio do the technologies of the self express both a power structure and a space for emancipation?

Thomas Lemke's reading of Foucault's theories of power moves across these ambiguities. He recalls the centrality of Foucault's elaboration of the intermediate space between technologies of domination and technologies of the self, through the notion of governamentality (Lemke 2001). For Foucault, it is necessary to 'distinguish the relationships of power as strategic games between liberties—strategic games that result in the fact that some people try to determine the conduct of others—and the states of domination, which are what we ordinarily call power.

And, between the two, between the games of power and the states of domination, you have governmental technologies' (Foucault 1988b: 19). Governamentality thus inhabits the in-between space of government that is a regulated mode of power and mentality, that marks a consensual technology of self-discipline. So, governamentality is where 'the technologies of domination of individuals over one another have recourse to processes by which the individual acts upon himself. And conversely, he has to take into account the points where the techniques of the self are integrated into structures of coercion and domination' (Foucault 1993: 203–4). Lemke recalls that 'power is not a capability, but it rather relates to guidance and "Führung", i.e. *governing the forms of self-government*, *structuring and shaping the field of possible action of subjects*' (Lemke 2002: 3; see also Bröckling et al. 2010). This pervasiveness of the relationship between power and knowledge translates the social imperatives of modernity into constraints that do not necessarily materialize into coercion. Foucault is clear about this point when he says that 'the exercise of power is not added on from the outside, like a rigid, heavy constraint, to the functions it invests, but is so subtly present in them as to increase their efficiency by itself increasing its own points of contact' (Foucault 1977: 2006–7).

So, to what extent does emancipation from power remain exterior to these mechanisms of social codification? And to what extent, conversely, does it work as a conceptual tool that makes antagonism readable for power and transparent to it? To what extent is emancipation within the frame of modernity a discipline of contestation? The construction of subjectivity through emancipation within the frame of political modernity involves powerful means of encoding dissent. Not only parties, unions and all the institutions of political representativeness. As Chatterjee (1993), *inter alia*, has shown, in the postcolonial nation-state, contestation, rebellion and participation as social activities are forced to be coded within and through a political imagery that orients social action, its narratives and aspiration, into a conceptual grid whose boundaries coincide with the notion of emancipation as universal that modernity has built for itself, even though this process remains constantly incomplete. To be sure, it is precisely this impossibility of fully subsuming contestation within the political imagery of modernity that emerges as the main characteristic of the twentieth century. Chatterjee remarks that the project

of decolonization and the construction of postcolonial states has made manifest that beneath the rhetoric of political modernity lies the transition from 'a conception of democratic politics grounded in the idea of popular sovereignty to one in which democratic politics is shaped by governmentality' (Chatterjee 2014: 4). In this context, the notion of emancipation sets the boundary between what practices and theories are legitimately liberating because inscribable into the flexible taxonomy of political modernity, and what practices are not recognizable as such. And this boundary is traced to circumscribe what can be questioned without challenging the Enlightenment assumption that modernity, and modernity alone, is the historical and theoretical frame to conceive and realize the self-reflexive *ethos* of acting upon the present. Emancipation as a project of political modernity either shapes the social diagnostic that provides the cultural devices of historical interpretation of contemporaneity, or sets the horizon of expectations for transformation as eschatological outcome of the ability to act upon the present. In this sense, emancipation works as a postcolonial technology of governamentality.

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6

The Predicament of the 'Global'

In the heterogeneous vocabulary of contemporary human and social sciences, the notion of the 'global' is as much central as problematic. This is due either to its diffusion in the wake of globalization theories, or to the chimerical aspiration of reaching a general agreement around its meaning that accompanies any reflection on its historical construction (see Robertson 2001). Bennet et al. (2005: 146) summarize that 'the concepts of the globe as a spherical object and, metonymically, as the planet earth appeared together in the sixteenth century. The adjectival form (global) appeared in the seventeenth century referring only to the former. In the late nineteenth century "global" appeared in its more common contemporary sense, combining a geographical ("the whole world; worldwide; universal") and a mathematical or logical meaning ("the totality of a number of items, categories, and so on; comprehensive, all-inclusive, unified, total"). In the twentieth century, the more active and historical form—globalization—appears, parallel to other comparable historical markers such as "modernization" and "industrialization" and related to the notions of postmodernity.' In what follows, the 'global' is connected both as a methodological issue and as a cultural product. As a methodological issue, it pertains to debates in social theory regard-

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ing the adequacy of constructing the world a single unit of analysis for long-term/large-scale processes of social change. As cultural product, 'global' inherits the colonizer's view of the world and its aspiration to conceive the world as a whole. The two dimensions are strictly related, even though this constitutive relation is often underrated. This is because methodology surreptitiously suggests a relatively neutral space of theorization, while it is precisely in the methods of the social sciences that the colonial construction of categories becomes invisible. Methodology is the space where the epistemological ritual of modernity celebrates its cultural neutrality under the alleged transparency of concept formation.

Far from any narrative of influence, or impact–response logic, the connections between the methodological and cultural dimensions of the 'global' are articulated into an integrated conceptual and terminological unity. Stuart Hall defined articulation as 'the form of connection that can make a unity of two different elements, under certain conditions … The "unity" which matters is a linkage between the articulated discourse and the social forces with which it can, under certain historical conditions, but need not necessarily, be connected' (Grossberg 1986: 53). The necessary condition for the articulation of the cultural and the methodological global in post-World War II Western thinking is diffusionism. James Blaut defined Eurocentric diffusionism as the 'theory about the way cultural processes tend to move over the surface of the world as a whole. They tend to flow out of the European sector and toward the non-European sector. This is the natural, normal, logical, an ethical flow of culture, of innovation, of human causality. Europe, eternally, is Inside. Non-Europe is Outside. Europe is the source of most diffusions; non-Europe is the recipient' (Blaut 1993: 1). For this reason, to the extent human and social sciences attempt to move beyond Eurocentrism, the understanding of the global implies a questioning of its colonial foundations.

The question is: is it possible to reconstruct the 'global' beyond its Eurocentric foundations? A plausible path resides in our ability to investigate the limits that these Eurocentric foundations continue to impose upon the aspiration to take a global turn that posits the centrality of the colonial question, in order to reconstruct a more adequate historical and sociological context for contemporary social theory. Yet, inasmuch

as the attempt to move away from the parochialism of the Eurocentric understanding of the planetary dimension of social change is paralleled by the persistence of modernity as a frame, this frame ends up imposing considerable constraints upon the ways the global can be constructed. The effort to affirm the global dimension of social change as an assumption risks transmuting the operational notion of the global into a purely logical premise, thus subtracted from the critical understanding of its historical constitution: a metaphysical, ahistorical, apodictic space-time dimension.

The path I propose consists in sociologically conceptualizing the ways in which modernization and globalization theories unintentionally or intentionally reaffirm Eurocentrism, even when the construction of a global sociology aspires to overcome the limits of state-centrism and methodological nationalism. Eurocentrism, in fact, is reaffirmed by erasing, eclipsing or mystifying the constitutive nexus between the colonial difference and the construction of the 'global' as a theoretical issue, rather than simply as an allusive dimension to 'thinking globally'. To be sure, thinking globally was not extraneous to the institutionalization of disciplinary sociology in Europe during the nineteenth century either. As Merle recalls, Henri de Saint Simon and his followers promulgated the quintessential views related to *Le Nouveau Christianisme* through their newspaper, eloquently named *Le Globe* (Merle 1987). Harvey (1982, 1985, 2002) points out that Marx's historical materialism was entirely developed within the historical awareness of the globalizing forces of capitalism. Connell (1997) argues that Weber's generalizations about world civilizations contained, *in nuce*, many of the connotations that a global historical sociology should rescue from the hegemony of modernization theories. Inglis and Robertson (2009) have traced the origins of global sociology back to Durkheim's analysis of supranational phenomena. The only significant and destabilizing exception to this Eurocentric architecture was Du Bois, for the reasons I have explored in Chap. 5. Yet, the problem of addressing the global as a premise to concept formation, rather than a derivative by-product of the development of social forces, was outside Du Bois' theoretical horizon.

Thinking the global implies the more specific idea that it is plausible, and theoretically advantageous, to understand the world as a single

integrated space-time and that this analytical frame is more appropriate than the nation-state. Historically, the reorientation of sociological analysis towards the global marks a shift in emphasis that is characteristic of post-World War II, when the problem of decolonization irrupted in theory production. This irruption involved many different and divergent political attitudes towards the colonial when thinking globally.

Very often the global turn is reduced to the formal overcoming of state-centrism in a chronological succession of paradigms that moves from modernization theories through dependency theories and world-systems analysis, to the proliferation of divergent strains of historical sociologies and globalization theories (Go 2014). Rather, the emergence of the global as a methodological issue derived its relevance from the irruption of the colonial difference in the realm of theoretical production that followed the reconfiguration of global powers in the immediate aftermath of World War II. In the sociological imagination of the global turn, World War II splits the 1940s irrevocably. Yet, as is clear to any Cold War historian, the debates and concerns that emerged after the end of the armed conflict prosecuted, in part, and reformulated political and theoretical issues raised before, when the problem of the hegemonic transition from Great Britain to the United States of America, and the transition from colonies to independent states, came to be understood in terms of a process to be managed: a matter of global governance. The construction of the global is rooted within the story of the politics of the global governance of post-World War II decolonization, rather than within the formal succession of research traditions, theoretical paradigms and units of analysis, from methodological nationalism and state-centrism to the world as unit of analysis.

As Neil Brenner correctly notes, from a critical geographical perspective, 'the emphasis on global space does not necessarily lead to an overcoming of state-centric epistemologies. Global territorialist approaches represent global space in a state-centric manner, as a pre-given territorial container within which globalization unfolds, rather than analyzing the historical production, reconfiguration, and transformation of this space' (Brenner 1999: 59). In a similar vein, but from a critical international relations theory perspective, David Chandler registers a risk of oversimplification about the label 'global' attached to social theory. 'In

understanding the globalization of politics as a response to processes of social and economic change,' he maintains, 'the shift towards the global has been essentialized or reified. Rather than the shift from national to global conceptions of politics, power and resistance being a question for investigation, it has been understood as natural or inevitable: as a process driven by forces external to us and out of our control' (Chandler 2009: 535). Nonetheless, this spatial (and temporal) critique as well as this political-ideological critique are insufficient as they fail to address the colonial difference. Eurocentrism, pervades the genealogy of the global to the extent that the colonial question does not affect methodology and the process of concept formation.

Method itself is an articulation of the historically determined relationship between power and culture, thus, a different, non-formalist, substantial criterion of relevance is needed: one that consists in the assertion that thinking the global is coterminous with the political and theoretical problem of how to think the colonial. In this sense, if the formal shift from state-centrism to the global does not suffice *in se* to overcome Eurocentrism and resist the coloniality of method, then conversely, not all forms of state-centrism imply an equivalent attitude towards the colonial. For this reason, the entire genealogy of the global turn has to be rethought, specified and partially reversed. This posture is supported by the revisionist historiographical gesture of rewriting the intellectual history of post-World War II attempts to think the global, to eventually operate a theoretical displacement of the Western theoretical archive, which shows the latter's inability to autonomously overcome the limits of its own premises.

Modernization as Theoretical Counter-Insurgency

From this perspective, the post-World War II terms-of-trade controversy about the role of international commerce in the worldly distribution of wealth was the first attempt to think the global by decolonizing theory. Rather than dependency theories being a reaction to modernization theories, it was the latter that came out as an early theoretical counter-

insurgency movement to repress the first formulations of the core–periphery theory. Toye and Toye (2004) have convincingly reconstructed the genesis of the terms-of-trade controversy from a global perspective concerning political economy. Since 1948, a year before the famous 'point four' in Truman's presidential address, the German economist Hans Singer had been working on a paper for the newly born Economic Development Commission of the United Nations (see Rist 2002). The clue for this research was offered by some quantitative analyses of serial data on international trade from the nineteenth century onwards, that Folke Hilgerd, the UN Statistical Office director at the time, had been compiling since 1943. Singer began studying a very specific problem: during the inter-war period, a number of former colonies had run export surpluses (particularly India towards Great Britain), which they subsequently wished to use to import capital goods for their national economic plans. Yet, in this interval, the prices of capital goods had risen, so the export surpluses were worth less in terms of imports than they had been when they were earned (Toye and Toye 2004: 110–36). Singer's argument was radicalized by Raúl Prebisch: while poor countries were helping to maintain a rising standard of living in industrialized countries, they were not receiving any compensation; rather they were getting poorer and poorer. Prebisch enriched Singer's thesis with a methodological coherence that Singer argument's lacked, by introducing the fortunate meta-geographical interpretative model of core–periphery. And this view rapidly created a vast consensus among scholars from former colonies within the United Nations. But Prebisch polemically also argued against the presumed universalism of economic theory, as Friedrich List had advocated against Smith and Ricardo's theory of free trade in the first quarter of the nineteenth century. 'One of the most conspicuous deficiency of general economic theory, from the point of view of the periphery, is its false sense of universality … an intelligent knowledge of the ideas of others must not be confused with the mental subjection to them from which we are slowly learning to free ourselves' (Prebisch quoted in Toye and Toye 2004: 131). The project of decolonizing knowledge was thus entering the worldly theoretical scenario of political and scholarly controversies in a manner that immediately created two irreconcilable sides: Western industrialized countries on the one hand, and former

colonies, mainly agricultural and raw materials exporters, on the other hand. Toye and Toye have defined the firm reaction that followed the exposure of the Prebisch-Singer thesis as the 'North American critical onslaught'. North American economists attempted to delegitimize the Prebisch-Singer thesis by affirming the inaccuracy of its statistical base or the inconsistency of its explanatory multifactorial model. More broadly, the whole, embryonic perspective that was emerging within the United Nations was soon dismissed as 'speculative' by the leading figure of the opposite camp, Walt Witman Rostow.

Like all the economists of their generation, Rostow shared intellectual horizons with Prebisch that were also significantly similar to Singer's: they all passed from studying economic cycles during the 1930s to include secular trends in the analysis of economic development by the end of World War II. But their heuristic questions were radically different, since these were determined by opposite political attitudes towards the colonial question. In a paper, divided into two articles published in succession in 1950 and 1951 in *Economic History Review*, Rostow proved aware of the political pressures on world trade coming from the changing configuration of powers within the international system. Rostow declared that his intention was 'to indicate the schismatic state of economic theory and analysis with respect to the terms of trade', since 'movements in the terms of trade hold a central position in the analysis of current international (and inter-sectorial) economic problems and in the formation of policy designed to solve them. The issues involved in the structural adjustment of world trade, which has been proceeding over recent years, are not likely to be transitory in nature, although their form and impact on different portions of the world economy will certainly change' (Rostow 1950: 1–2). An important place among his major sources was accorded to the body of statistics produced by Hilgert and his colleagues at the United Nations, which Singer had also used. But Rostow's core question was designed entirely within the logic of hegemonic transition, from an economic point of view. As Gilman points out, Rostow intended to use economic history to suggest international trade policies that could effectively enhance the newly established US power at the world level, as a reoccupation of the spaces revealed by the relative collapse of the European colonial empires

(Gilman 2003). Rostow's theoretical problem was provoked by the rise of the USA (and its structures of knowledge) to world hegemony that followed the decline of the British economy in the wake of the demise of the latter's colonial empire: how, in the inter-war period, had Great Britain dissipated the advantages accruing from highly favorable terms of trade? Rostow brought in a vast 'array of variables' and called for a closer interaction between economists and historians in order to construct an interpretative model that could grasp the 'continuous interplay of short-term and long-period forces'. But the history and the economics he relied upon did not envisage the colonial question at all (Rostow 1950: 20).

Modernization theories were effective in crystallizing into method the North American critical onslaught against the first elaboration of the decolonization of theory, applying a radical state-centrism that negated the colonial question. To be sure, the notion that each nation-state corresponds to an autonomous political entity whose space is defined by the geohistorical borders within which a distinctive society evolves through time, was all but unfamiliar to Western thinking. Yet, the formalization of the nation-state as a unit of analysis in 1950s American social sciences marked the construction of a distinctive normative epistemological strategy to the extent it involved the underlying cogent notion of replicability (see Bach 1982; Agnew 1993). Replicability, within the frame of modernization, is something different from simple mimicry of a path or a competitor, because of the promise that the historical experience of the more advanced nation-states could have been replicated elsewhere in space and time, that is, *ad libitum* and *urbis et orbis*. The majority of modernization theorists, both in sociology and in international relation theory, were well aware of the global dimension of world politics (Galtung 1966; Etzioni 1965; Nettl and Robertson 1968; Lagos 1963). State-centrism and methodological nationalism within the horizon of modernization does not mean naively ignoring the single worldly context within which political entities exist. It rather meant that the worldly context for the historical development of a distinctive society within a single nation-state had to be thought in a way that could not interfere with the presumed replicability of the path to modernity. It had to be thinkable, before even being feasible through

policies, that the capacity of each state to break through to modernity could depend exclusively on the correct implementation of the packaged model of modernization, without the disturbance of any possible external interference. Replicability of modernization theories involved a pragmatist credo in social engineering, whose underlying foundation consisted in an extremely determinist notion of *program* as historical, economic, cultural and social ontogenesis. This established irrelevance of global connections actually meant the domestication, both in the performative and the etymological sense, of colonialism in sociological explanation: the negative effects of the colonial relations of power were transmuted into the inability of the locals to move from tradition to modernity, or the structural obstacles inherent in their particular society. Nothing but the hallucinatory and enduring mantra of developmentalism.[1]

Holism and the Colonizer's Gaze

Sociology literature about the global proves almost oblivious to the circumstance that the first explicit call for the methodological formalization of a global sociology had been expressed by the new president of the American Sociological Association, Wilbert E. Moore, in 1966, just a few months before his election. This move inaugurated a distinctive trend in American sociology, which, however, remained largely anchored to its own tradition of methodological nationalism, quantitative method and individualist behaviorism. As Steinmetz (2010) has argued, knowledge transfer from Nazi refugee social science scholars to the USA did not affect the ahistorical orientation of American sociology, and Historical Sociology remained a niche area from the 1930s to the 1970s.[2]

Nonetheless, Moore's article 'Global Sociology: The World as a Singular System' placed a straightforward emphasis on social systems

[1] Among the vast literature of critique of the concept of development, see the fundamental Arrighi and Drangel (1988), Escobar (1995), Mitchell (2002), Rahnema and Bawtree (1997) and Sachs (1992).

[2] On the so-called *Methodenstreit*, see Di Meglio (2004).

as 'sovereign systems' and as unit of analysis, suggesting that American sociology should have taken a new direction towards the global (Moore 1966). In a polemical vein against his predecessor, Moore affirmed that 'it is only in social systems that one makes explicit the emergent qualities that derive from the interaction of the human actors in any social context, and thus avoids the kind of classical exemplification of the reductionist fallacy embodied in George Homans' presidential address to the American Sociological Association in 1964' (Moore 1966: 479). In his excursus over the history of the discipline, Moore described the inter-war period as the beginning of the process of Americanization of sociology, which corresponded both to the crisis of European national schools of sociology, and the narrowing of sociological imagination to a certain parochialism. As a reaction against this parochialism, the Americanization of sociology took the opposite direction and from the 1930s to the 1950s there was a renewed interest in looking outwards. Rather than looking at the world through historical civilizations like the former European sociological tradition, American sociology turned its attention to the ethnography and anthropology of 'primitive cultures', in order to understand comparatively the process of modernization on a global scale that the USA was presumed to be leading. To parochialism, Moore remarked, relativism offered an alter ego. But it was precisely this binary between the two remote poles of modernization—the sociological global vis-à-vis the anthropological particular—which had to be overcome. To be sure, sociology and anthropology across the Atlantic were very close to each other from a methodological point of view: Bertalanffy's General System Theories (GST henceforth) offered an innovative path of analysis for both (von Bertalanffy 1950, 1951). GST merged history, ecology, engineering and communication studies into a common meta-theory. Parsons' (1951) application of this approach to social systems was largely hegemonic. It was a pillar of the rarely questioned positivist frame of post-World War II American sociology (Steinmetz 2005). The hegemony of structural functionalism resulted in statements such as Moore's: 'social systems are real, they are earnest, and they may be both smaller and larger than societies, however defined' (Moore 1966: 59). The notion of system was, in fact, first of all ontological: it affirmed the real existence of an integrated global

super-system of relations called *the world*. It implied holism, that is, the epistemological priority of the whole over the parts that form it, and the irrelevance of the latter outside the integrating understanding of the former. It buttressed methodological relationalism, that is, the prevalence of forming relations over formed entities. It followed that social wholes were thought of as integrated systems whose dimensions and activities were defined in space and time by the extension and duration of their constitutive relations. Analogously, in his *Introduction to Social Anthropology*, Evans-Pritchard stated that 'the social anthropologist studies societies as wholes—he studies their ecologies, their economics, their legal and political institutions, their family and kinship organizations, their religions, their technologies, their arts etc. as parts of general social systems' (Evans-Pritchard 1951: 11). As Talal Asad (whose seminal critique of anthropological reason is recognized by Edward Said as one of the premises of his *Orientalism*) remarked, these aspirations to study 'primitive' social systems, whose authority was a direct expression of the colonial rule, collapsed into micro-analysis under the pressure of emerging nationalist structures of knowledge production in the newly decolonized countries (Asad 1973). Scholars in the Third World, Asad continued, began to 'recover indigenous history and denounced the colonial connections of anthropology' (Asad 1973: 13). So sociology and anthropology were both affected by decolonization, but their respective institutional backgrounds and social legitimation produced divergent methodological responses. American sociology responded by constructing a frame that was able to literally *in-globe* the worlds of historical and social change.

In addition to the sociological conceptualization of the global, Moore paid particular attention to the problem of the globalization of sociology. Nation-building and state-building initiated relevant demographic changes in the constitution of sociology as an international academic field and as a community of scholars, thanks to the construction of national sociological traditions in former colonies. A change which, for intrinsic reasons, could not be paralleled by anthropologists. The horizon Moore took for granted was the modernization of the colonial worlds as a selective implementation of Western structures and meanings. And the globalization of sociology should

have followed an analogous path. For him, in fact, ethnography and anthropology no longer sufficed 'for dealing with the modernization of traditional societies … two-party transactional models as contained in the older theory of "acculturation" simply will not fit most of the evidence … We may "take a giant step" toward global sociology by returning once more to the *exotic* places, dearly beloved of ethnographers … The main, overwhelming fact about them is that they are losing their pristine character at an extremely rapid rate' (Moore 1966: 483, emphasis added).

Holism, which in the decolonizing countries did not survive the collapse of functionalist anthropology, conversely enjoyed a more favorable institutional space of intellectual citizenship within the context of American sociology. Holism seemed to offer the theoretical advantage of dismantling the limits of the nation-state as a unit of analysis and the legitimacy it took from an overall state-centrist frame of analysis for political economy and international relations. As Moore proposed, 'in practice, society has come to be defined "operationally" either as units identified by anthropologists as "cultures", not always with explicit criteria, but duly recorded as separate entities in the Human Relations Area Files, or as coterminous with national states, which, though they may not be truly self-subsistent, do mostly get represented in the United Nations, and do form the principal takers of national censuses and assemblers of other aggregative and distributive social quantities' (Moore 1966: 480).

The call for a global sociology was part of a wider effort by US social science to think globally about the postcolonial world, epitomized by the transformation in the structures of knowledge that corresponded to what Ravi Palat defines as the imaginative geographies of US hegemony: the creation of Area Studies, the multidisciplinary field of study of Third World countries from an integrated perspective that included, but was remarkably more extended and multifaceted than, anthropology (Palat 1996). By the turn of the 1950s, Wallerstein, Hopkins, Arrighi and other scholars who were going to elaborate world-systems analysis, had been studying Africa before experiencing the political uprising that from 1968's social movements to the oil crises of 1972 impressed a new course on world politics and the forms of production and distri-

bution of wealth. In his latest interview for the American Sociological Association, Wallerstein remembers: 'I was a product of Columbia sociology, but I was also a heretic. Columbia sociology in the 1950s was the center of the world. It thought of itself, and was thought of, as the center of sociological world. And it had a very strong point of view. But within that framework, they were somewhat tolerant. … But a number of years later, Paul Lazarus said of me and Terry Hopkins that we were "His Majesty's loyal opposition"' (Williams 2013: 207). The experience of 1968 as a 'World Revolution', its interaction with Thirdworldism and feminism, as well as the radical critique by organizations of the New Left of both imperialism and the institutional parties of the 'Old' Left, played a crucial role in the theoretical commitment to rethink politics, as well as historical and social change (Bhambra and Demir 2009). It gave different and often divergent imprints to the generation of scholars whom Magubane (2005) refers to as the second wave of historical sociologists.

Coincidentally with the temporal boundaries of the *lustrum* 1968–1972, a crucial transformation occurred in the way the world was constructed in its singularity. Geppert does not make a particularly problematic statement when he affirms that the significance of the Christmas 1968 Apollo space mission 'was not at all the continued exploration of outer space, its scientific results, or the proof of the actual technical possibility for so doing. It was, rather, a radical change in self-perception on a genuinely global level, literally resulting in a new Weltanschauung, i.e., ways of viewing the world. For the first time ever, it was felt that the entire earth could be seen—and see itself—from without and as a whole' (Geppert 2007: 594). The famous picture 'Earthrise' that Apollo 8 sent to back to Cape Canaveral was a partial view of the planet, but it was the first eyewitness picture taken from a sufficient distance to capture the whole globe. The accuracy and spectacularity of 'Earthrise' was largely overcome by picture 22727, popularly named 'Blue Marble' and capillary diffused worldwide by global media, which the Apollo mission took in 1972. Derek Cosgrove has made a particular study of these events 'with the intention of placing them in the cultural and historical context of Western global images and imaginings. [Those] representations of the globe and the whole Earth in the twentieth century have drawn

upon and reconstituted a repertoire of sacred and secular, colonial and imperial meanings, and these representations have played an especially significant role in the self-representation of the post-war United States and its geo-cultural mission' (Cosgrove 1994: 270). For Cosgrove, the intertextuality of these two iconic images combines two overlapping discourses about the global: One-World and Whole-Earth. 'One-world is a geopolitical conception coeval with the European and Christian sense of *imperium*. It signifies the expansion of a specific social-economic order across space … Whole-Earth is an environmentalist conception that appeals to the organic and spiritual unity of terrestrial life. Humans are incorporated through visceral bonds between land and life (individual, family, community)' (Cosgrove 1994: 290). The characterization of these two discourses, whose reciprocal interpellation loudly resonates both with non-Western yet dominant holistic notions of the global, such as the contemporary revival of the Chinese concept of *tianxia*, and with the totalizing integrated understanding of historical, ecological and societal processes that systemic thinking such as GST aspires to achieve, provided a synthetic and powerful representation of the USA's geopolitical and geocultural projection of its own role in history (Tingyang 2005). This reciprocal interpellation was, however, asymmetrical, since the *One-World* discourse subsumed the planetary imagination of *Whole-Earth* and its ecological attitude. Linda Billing clarifies that this asymmetrical conflation is a projection of an ideological structure 'that draws deeply on a durable American cultural narrative of frontier pioneering and continual progress' (Billings 2007: 484).

Cosgrove can hardly be confuted when he locates the production of the global as a cultural artifact within an ideological architecture of Western dominance that emerged coextensively with the European colonization of the Americas. This ideological architecture is thus a reconfiguration of the coherent, long-term, transforming system of beliefs which James Blaut named the colonizer's model of the world (Blaut 1993). Blaut provides general principles of interaction between theories, beliefs and values, which accounts for the conformality, rather than the simple intuitive conformity, between the social needs of dominant groups, and the array of scholarly ideas and concepts deployed to make sense of the world. For Blaut, the judgment of conformality is a complex binding

process: 'the notion that beliefs are culture-bound is of course a familiar one, but the idea that this proposition applies fully to the belief systems of scholars is not really accepted … All new ideas in social science are vetted for their conformality to values, and more precisely to the value system of the elite of the society, which is not necessarily the value system of the scholars themselves' (Blaut 1993: 38). The global emerged as a construction conformal with Eurocentric diffusionism and it provided Western social theory with a self-legitimating radicalization of its theoretical power of representation. If, as Steinmetz maintains, the critique of methodologies implies 'making the epistemological stakes and disputes explicit', and even 'the philosophy of science is more than a meta-reflection on the sciences, [but] it is shaped by those sciences and by the broader sociopolitical environment', then even the global as a methodological issue is situated within complex interactions of culture and power as well as systems of beliefs (Steinmetz 2005: 1–5). As Derek Gregory points out, 'the global is not the "universal", but is itself a situated construction' (Gregory 1994: 204). And this construction consists in a historically determined colonial configuration of power, vision, representation, logic and narrative.

Diffusion, Expansion, Incorporation

From the perspective of the colonial difference, world-systems analysis elaboration of the world-system as a unit of analysis in the context of American sociology and its universalizing aspiration was not really the 'exception that confirms the rule', as Go (2014) maintains. Rather, it was culturally conformal and intellectually loyal to the global as a holistic-and-relational construction. In the realm of social theory, it offered an important antidote to Parson's ahistorical understanding of the social system. For Wallerstein, in fact, the modern world was a historical living system with multiple temporalities, its own spatial organization, its onset, development and possible end (Wallerstein 1974). It was also possible to look back at pre-modern and ancient times as the geo-historical space of coexistence of connected multiple social-political entities. Yet, as has been argued by Hobson (2012a), the unproblematic association of holism and

relationalism was profoundly Eurocentric. It implied the view that the world became global only when the West managed to incorporate the Rest within a single world-system. Modernity, as a self-expanding capitalist system, was thought to be enlarging its space by violent processes of inclusion and simultaneous peripheralization of new areas, peoples and resources. In this narrative of expansion and diffusion, the incorporating and self-expanding 'whole' (the West) is active, transformative, modern; the outside (the Rest) is passive, stagnant, traditional. In a sense, the former is the subject of history, the latter the object of history. This narrative structure persists in histories of globalization, even though the causes for this expansion vary and the space-time coordinates of diffusion dramatically change between those who think of globalization as an original phenomenon of modernity, and those who see it as a characteristic of post-1972 world configuration. Wallerstein himself restates this overwhelming logic of historical thinking when he affirms that the geography of the globalizing forces of capitalism can be deduced from the geometry of the global commodity chains. 'The historical geography of our present structure can be seen to have three principal moments. The first was the period of original creation between 1450 and 1650, during which time the modern world-system came to include primarily most of Europe (but neither the Russian Empire nor the Ottoman Empire) plus certain parts of the Americas. The second moment was the great expansion from 1750 to 1850, when primarily the Russian Empire, the Ottoman Empire, southern and parts of Southeast Asia, large parts of West Africa and the rest of the Americas were incorporated. The third and last expansion occurred in the period between 1850 and 1900, when primarily East Asia, but also various other zones in Africa, the rest of Southeast Asia, and Oceania were brought inside the division of labor. At that point, the capitalist world-economy had become truly global for the first time' (Wallerstein 1999: 21).

The geometry of global commodity chains derives from relationalism as a methodological option to think the global. As Terence K. Hopkins clearly put it 'our acting units or agencies can only be thought of as *formed*, and continually re-formed by the relations between them. Perversely, we often think of the relations as only going between the end point, the units or the acting agencies, as if the latter made the relations instead of

the relations making the units. Relations, generally, are our figures and acting agencies are our backgrounds. At certain points, in conducting the analyses, it is of course indispensable to shift about and focus on acting agencies; but I think we too often forget what we have done and fail to shift back again' (Hopkins and Wallerstein 1982: 149). To be sure, relationalism within this holistic frame of historical analysis reduces the fallacies of replicability as a mechanism of social change conceivable not at the level of the single state, but at the level of the system. Nonetheless, as Brenner remarks, 'the primary geographical units of global space are defined by the territorial boundaries of states, which in turn constitute a single, encompassing macro-territoriality, the world interstate system. The national scale is thereby blended into the global scale while the global scale is flattened into its national components. … the global and the national scales are viewed as structural analogs of a single spatial form: territoriality. Wallerstein's approach to world-systems analysis entails the replication of a territorialist model of space not only on the national scale of the territorial state but on the global scale of the world system' (Brenner 1999: 57–8).

The notion of incorporation conceals the colonial gaze and neutralizes the colonial difference by obscuring non-Western, non-capitalist agency. Incorporation expresses a function performed by the system to adapt its structures to the pressures generated by its own inner historical contradictions. The critique of the dynamics of the fall in profit rates that Marx had seen as a long-term secular trend is resolved by re-articulating in space the possibility of re-establishing highly profitable conditions for accumulation through the inclusion of colonial cheap labor and natural resources in the enlarged cycle of accumulation. Yet, incorporation, which accounts for colonialism as large-scale/long-term relation, works as a reductionist hyponym of the colonial. Incorporation overrides colonialism by reducing it to its function within capitalism. It simultaneously gives prominence to exploitation, domination and hierarchies formation, but it also neglects and mortifies the historical possibility of non-Western, postcolonial agency and the way these agencies co-produce social change in heterogeneous meta-geographies other than the core–periphery structure. Nominally, agency, as per Hopkins' claim, is subordinate to the relations that produced it. This assertion conceals the fact that the same relation, as

an object of analysis, is presumed analytically neutral and operationalized as such, whereas it is not neutral at all. The historical agency described as the dynamics of the colonial relation is implicitly coincidental with the dominant subjects, classes and groups that are located at the higher levels of power in the hierarchies that relationships inevitably design.

It could not be otherwise, as I shall argue in Chap. 7, since any theory whose narrative logic is constructed upon the axiom of the endless accumulation of capital, the spatial re-articulation of the Marxian logic of accumulation, is based upon the assumption that capitalists' contradictory agency are embodiment of the logic of capital, whereas capital, as Marx constantly repeats, is the overarching social relation. In David Harvey's words, 'Capital is not a thing but a process in which money is perpetually sent in search of more money. Capitalists—those who set this process in motion—take on many different personae' (Harvey 2010: 40). When this postulate is translated into methodology, the historically determined asymmetry of power that is intrinsic in the colonial relation but not exhaustive of its properties, capabilities and limits becomes a totalizing qualifier of the corresponding simplified function, which is expressed through the concept of incorporation as a conceptual articulation of Eurocentric diffusionism.

Asymmetries, Agencies, Relations

The adequacy of Eurocentric diffusionism and its related concept-formation protocols has been effectively confuted by the vast field of anti-Eurocentrism in many interrelated respects. The increasing legitimacy of these intellectual transformations, and the wide range of options by which it is possible to categorize the proliferation of such perspectives, cannot be disjoined by the profound reconfiguration of the distribution of world power, resources and wealth at the global scale that accompanies the decline of US hegemony, and, more generally speaking, the partial, ongoing, contradictory displacement of Europe and the West from their dominant cultural and ideological position.[3] Dissimulating it would be,

[3] This aspect of the transformations of knowledge, with particular reference to the spread of postcolonial studies has been critically analyzed by Arif Dirlik. Dirlik (1998) explains the relevance of

at best, an intellectual ingenuity equivalent to the illusion that a direct factual correlation explaining this conjunction is empirically discernible.

From a methodological point of view, the overall effects of the critique of diffusionism have been the rupture of its core presumption; the breaking of the covalent holism-and-relationalism bond; and the disentanglement of relations from the whole. Relations do produce entities, which thus do not possess any essentialist innate trait as such; thus relations, rather than inner properties, determined the emergence of capitalism and modernity as significant long-term/large-scale worldwide processes of historical and social change; nonetheless, the global as a holistic construct does not provide a strong over-determining unit of analysis to which reference has to be constantly made as the prevailing horizon of sense.

This disentanglement has disclosed divergent ways of adopting relationalism in sociological thinking. Bhambra has convincingly argued that this disentanglement is at the same time both a departure from the previous articulation of the global in the context of modernization and globalization theories, and a surreptitious reaffirmation of some of the most enduring tenets of Eurocentrism in social theory. Particularly where sociology ends up in endorsing the assumption that the transition to modernity remains predominantly a European phenomenon, an assumption buttressed by the sociological paradigms of multiple or alternative modernities (Bhambra 2007a). In order to explore the ambiguities inherent in the attempt to reformulate the methodological and theoretical approach to the conceptualization of the global as a by-product of constitutive long-term/large-scale relations, Sanjay Seth (2009a) provides a fruitful entry point. He explicitly compares the study of global modernity within Historical Sociology with postcolonial theory and its political concern with pluralizing modernities. 'One way contests the privileging of Europe by questioning, and in some cases providing an alternative to, the conventional historical narrative according to which modernity begins in Europe and then radiates outward. Since the focus is on the story to be told, this is an enterprise that conducts its battles largely on

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postcolonialism with the demise of the tripartite global order of the Cold War, and the reconfiguration of what was the divide between the First, the Second and the Third World, into the split between the Global North and the Global South. On this point see also Arrighi (2001). More recently, Mignolo (2014) has argued for a radical reconsideration of the global cartographic imagery of modernity based on the reconfiguration of hemispherical view of the world.

the terrain of the empirical, counterposing some facts against other facts, and making "hard" claims to accuracy and truth. … Postcolonial works are "thicker" histories, often based upon archival research and, partly as a result of this, usually confined to one place (Egypt, India, Latin America). Unsurprisingly, since their aim is to mobilize a non-Western history or slice thereof in order to show that the categories through which we think are not fully adequate to their task, what they lack in terms of empirical range, compared to the first group, they make up for with a wider range of theoretical referents' (Seth 2009a, b: 335).

Historical Sociology aims to explain the rise of the West, or the transition to capitalism, or the breakthrough to modernity. Here the global is understood as the result either of a dialogical exchange between East and West, with the West acting as a borrower of Eastern resource portfolios, both material and ideational (Bala 2006; Hobson 2004); or of the interconnection of geohistorical paths between more 'advanced' regions of the world economy resulting from diverse responses to cultural, institutional and social-economic civilizational needs and pressures contextually defined but interconnected on a worldwide scale (Pomeranz 2000; Bin Wong and Rosenthal 2011; Parthasarathi 2011). In these accounts, relations include non-Western agency, yet the heuristic problem of explaining societal divergence in terms of fluctuating power differentials between advanced zones of the derivative global space, limits the relevance of this agency to those dominant social groups that are located outside Europe. Only those non-Western agencies that could compete with the West on the terrain of modernization would be relevant. Only to the extent these alternatively hegemonic agencies concurred to form modernity through the conscious or unintended outcomes of their responses to the interaction between global connections, and local needs and pressures. So, the relevance of non-dominant agencies is relegated to the effects they produce in terms of pressures that exist locally, and is considered only in terms of their vertical dialectics with modernizing power, rather than their historical existence in a multiplicity of other ignored relations of social coextensiveness.

Moreover, while these explanatory/narrative approaches share a tendency to neutralize all other forms of non-dominant agency, at the same time they also sterilize the transforming potential of existing epistemologies of otherness by never questioning the heuristic apparatus derived

from the threefold conundrum of the breakthrough to modernity, the rise of the West and the transition to capitalism. As Bhambra (2014) remarks, this strategy is limited to providing new data to confute or support existing narrative structures, yet precludes the theoretical possibility of engaging with the elaboration of as yet undiscovered structures of meaning and narrative, in which qualitatively new data can be produced, elaborated and placed.

Unlike this view, postcolonial theory sees modernity in terms of a discursive formation through which the rest of the world was simultaneously subjugated and relegated to the role of Europe's binary opposed Other(s). Against this Eurocentric bias that Du Bois and Franz Fanon had first explored, both postcolonial theory and the paradigm of decoloniality affirm the reciprocal historical, social, cultural and identitarian co-formation and co-determination of binary hyperreal constructs, such as colonizer/colonized, dismantling the diffusionist logic that is implicit in center-and-periphery conceptualizations of the global. This is a dual epistemological critique: on the one hand, Seth explains, it affirms that not merely the dominant accounts offered by the social sciences, but the very concepts through which such accounts are fashioned, have genealogies which, Chakrabarty underlines, 'go deep into the intellectual and even theological traditions of Europe' (Chakrabarty 2000: 4); on the other hand, colonial subjects are able to both appropriate and transform knowledge and practices received and to produce alternative, indigenous knowledge and practices. As Kapil Raj (2013: 344) agrees, this shift in emphasis means rethinking the colonial relation by postulating that 'being colonized and having agency are not antithetical'. Achille Mbembe makes this point when he affirms that the threshold from asymmetry to annihilation is necropolitical: 'an unequal relationship is established along with the inequality of the power over life. … Because the slave's life is like a "thing", possessed by another person, the slave existence appears as a perfect figure of a shadow. In spite of the terror and the symbolic sealing off of the slave, he or she maintains alternative perspectives toward time, work, and self. … Treated as if he or she no longer existed except as a mere tool and instrument of production, the slave nevertheless is able to draw almost any object, instrument, language, or gesture into a performance and then stylize it. Breaking with uprootedness and the pure world of things of which

he or she is but a fragment, the slave is able to demonstrate the protean capabilities of the human bond through music and the very body that was supposedly possessed by another' (Mbembe 2003: 36).[4]

Postcolonial counter-histories mistrust the hegemonic construction of any master narrative as well as those universalizing understandings of the world that attempt to conceal their site of enunciation. Donna Haraway's (1988, 1990, 1991a) gender perspective on science shows the potential of the critique of the situatedness of any form of knowledge.[5] Castro-Gómez has conceptualized the geocultural nature of the geopolitics of knowledge to denounce the self-concealing epistemological strategy that Western social and historical sciences have adopted in their attempt to construct a science of society. Castro-Gómez makes explicit the 'hubris of the *point zero*', that is, 'the illusion that science can create valid knowledge about the world only if the observer situates himself on a neutral and objective platform of observation that, at the same time, cannot be observed by any other observer'. According to Fernando Coronil, this ability to hide the partiality of universalism is the hallmark of the underlying transformation and resurgence of Eurocentrism under the semblance of 'globocentrism'. The disarticulation of the image of Europe as a geohistorical construction integral to a space-time location does not imply the automatic demise of the hegemony of the discursive frame that legitimated its superiority, since 'the deterritorialization of Europe or the West has been followed by their, less visible, re-territorialization within an elusive image of the world which hides transnational financial and political networks, socially concentrated but geographically diffused' (Coronil 2000: 103).

[4] Mbembe's notion of necropolitics aims at reframing the entire understanding of what modern sovreignity is about. He clarifies that 'the ultimate expression of sovereignty resides, to a large degree, in the power and the capacity to dictate who may live and who must die' (Mbembe 2003: 11).

[5] The problem of the situatedness of knowledge owes much of its genesis to the feminist critique of science. Evelyn Fox-Keller, as a prominent physicist, was among the first scientists to radically attack modern science from a gender perspective. Among her works, see Evelyn Fox-Keller (1985, 1992). Donna Haraway (1988, 1990, 1991a, b) shares analogous premises, but her research has moved toward the theorization of hybridity. Her ground-breaking work on hybridity between male and female, animal and humans, humans and machines has been fundamental even outside academia. She even interprets herself in the Japanese computer animation movie *Ghost in the Shell 2.0* (2008).

Borders and Assemblages

Even if relations of domination are never able to completely transform asymmetries of power into absolute inanity on the colonial side of exploitation and cultural domestication, there are loci of re-emergence to be explored. For Mignolo, these spaces are borders: multiple generative epistemic territories where European universalism can be questioned (Mignolo 2007b). Whereas Western thinking presumed its own universality, decolonizing knowledge multiplies the sites of enunciation towards pluriversality, that is, the coexistence of interactive universalisms relationally constructed and historically enacted by the multiple articulation of the colonial difference, whose horizons, as Chambers and Curti (1996) register, differ yet coexist under a common sky. Mezzadra and Neilson (2013) expand the notion of border. Borders are conceived in terms of epistemological devices of connections and disconnections produced by social and historical relations (see also Chambers 2015). Yet, the very definition of this device is itself a limit, according to Balibar:

> The idea of a simple definition of what constitutes a border is, by definition, absurd: to mark out a border is precisely, to define a territory, to delimit it, and so to register the identity of that territory, or confer one upon it. Conversely, however, to define and identify in general is nothing other than to trace a border, to assign boundaries or borders (in Greek, *horos*; in Latin, *finis* or *terminus*; in German, *Grenze*, in French, *borne*). The theorist who attempts to define what border is in danger of going round in circles, as the very representation of the border is the precondition of any definition. (Balibar 2002: 76)

Mezzadra and Neilson specify that 'Insofar as it serves at once to make divisions and establishing connections, the border is an epistemological device, which is at work whenever a distinction between subject and object is established' (Mezzadra and Neilson 2013: 16). As they suggest, the determination of border relies on the dualism of subject/object as an expression of historically determined power relations.

The fact that the signification of border pertains to a more abstract level of concept formation is inferred from Balibar's passage and the

circularity of its formulation. The problem is not only that the term 'border' seems to preclude any possible definition *in se*. It is rather that the trope of the border works as an unquestionable semantic axiom to conceptualize identity and difference within the epistemological frame of modernity. This definition of the epistemological foundation of border as a device is over-determined by the theoretical frame of modernity and the significance that 'relation' acquires within this frame. For Balibar (2013), in fact, the conceptual re-elaboration of Descartes' dualism by John Locke is quintessential to the self-understanding of modernity. The transition from the ontological distinction between *res extensa* and *res cogitans* to the self-reflexive individual political and moral responsibility of individual consciousness determined the question of the relation between subject and object that would later be developed in diverging ways by Hume and Kant, *inter alia*, who nonetheless shared Locke's premises. Yet, the importance of Locke's conceptualization of consciousness lies not so much in its efficacy and influence as in the intelligibility of the logical inconsistency of its own premises. Balibar's accurate exegesis of Locke's 'invention of consciousness' shows that the theoretical attempt to build modern subjectivity upon the schismatic relation between interiority and exteriority results in insoluble aporias that haunted Locke himself. 'The limit regresses indefinitely towards a unity of contraries enigmatically indicated by Locke with the term "power". But it may also be said that the ever-renewed question of this unity is nothing more than the shadow cast by the initial theoretical distinction' (Balibar 2013: 68). The power Locke is exerting upon the creation of the cognitive border that defines the modern subject is nothing but the power to postulate, that is, to establish the non-questionable non-logical axiom of a self-legitimating axiomatic. Thus, one option for the aporetic definitional status of the border is to rethinking it by questioning this very postulate, through a single-step logical regression: if the border subverts every essentialist discourse of historical presence by opposing to it the dynamic process of its formation, than it cannot consider itself in terms of essential definitional traits, but exclusively in terms of relationship. The notion of relation, in fact, provides the condition of possibility to think the border. So it is relation at the borders of modernity that needs to be addressed.

Manuel DeLanda attempts to rethink the epistemological foundations of modernity by re-elaborating the notion of relation through Deleuze's concept of assemblage. 'The realist social ontology to be defended here is all about objective processes of assembly: a wide range of social entities, from persons to nation-states, will be treated as assemblages constructed through very specific historical processes, processes in which language plays an important but not a constitutive role' (DeLanda 2006: 3). DeLanda separates relations from totalities by distinguishing between properties and capacities of interaction. While relations are usually thought of as occurring between entities, and entities formed by relations have certain properties, assemblage theory replaces properties, as transient moments of essentialization, with the ability of those entities to produce new relations through interaction. Here a distinction is made between relations of interiority (associated with the classical notion of properties) and relations of exteriority (transformed by the introduction of the notion of 'capabilities'). 'These capacities do depend on a component's properties but cannot be reduced to them since they involve reference to the properties of other interacting entities. Relations of exteriority guarantee that assemblages may be taken apart while at the same time allowing that the interactions between parts may result in a true synthesis' (DeLanda 2006: 100). Relations of exteriority would thus produce a variety of social entities, such as the individual, state, market, international system and borders, whose historical appearance is to be understood in terms of 'the interactions between members of a collectivity may lead to the formation of more or less permanent articulations between them yielding a macro-assemblage with properties and capacities of its own. Since the processes behind the formation of these enduring articulations are themselves recurrent a population of larger assemblages will be created leading to the possibility of even larger ones emerging' (DeLanda 2006: 17). Saskja Sassen has extended this logic to conceptualize the emergence of the global as the multiscalar structuring pattern of change that connects the Middle Ages to contemporary globalization, in a complex matrix of interactions with the nation-state. She analyzes 'the centrifugal scalings of the Late Middle Ages held together by several encompassing normative orders, the centripetal scaling of the modem nation-state marked by one master normativity, and the centrifugal scalings of the global that disaggregate that master normativity into multiple partial normative orders, thereby

leaving open the questions as to its sustainability if we take history as a guide. In this regard then, the global is novel-different from earlier centrifugal scalings in that it also disaggregates normativity into specialized subassemblages' (Sassen 2011: 10). In this sense, the global as well as colonialism would be assemblages themselves, produced and co-produced by scattered conflictive logics of structuration whose operation takes place over time, and thus inevitably path dependent. Assemblage theories thus provide both an ontological foundation for social heterogeneity and a historical narrative of non-linear development that, nonetheless, constructs an inner continuum from the Middle Ages to the contemporary 'global era'. Yet it is not only the endogenous logic of cumulative causation informing such a historical narrative of the emergence of the global that needs to be closely scrutinized. Methodologically, in fact, assemblage theories reveal that the notion of relation includes the possibility that the degree of freedom of abilities to give birth to new relations is a measure of the potential transformative historical power involved in relation itself. Yet, this move is possible if, and only if, the problem of postulating the distinction between exteriority and interiority is simply transposed from the ontological level of the border to the ontological level of relation. For this reason, the definitional conundrum that Balibar set as insoluble is avoided but it remains unsolved. Why?

One of the possible answers lies in reframing the question to wonder: is the Western conceptual archive capable of questioning its own premises? It might not be accidental that the entire construction of assemblage theory reaffirms the genealogy of what Connelly has called the Western canon of sociology: Smith, Comte, Marx, Durkheim, Weber, Tönnies, Parsons and the sociological concepts of 'division of labour', 'state', 'market' and 'social cohesion'. It draws legitimation from the ethno-story it gives continuity to, without coming into conflict with the creative role of existing epistemologies of otherness. The notion of the 'global' that assemblage theories endorse remains constrained within the limits of the postmodern presumption that the West, in the guise of advanced societies or late capitalist societies, is at one and the same time the historical outpost of the crisis and the autonomous authoritative *locus* of emergence of the theory for coping with the crisis itself. Within this horizon, assemblage works as a meta-theory that implicitly over-subsumes, under the notion of social heterogeneity, either colonialism as a global hegemonic project,

or coloniality as matrix of power, or alternative epistemological resources. Heterogeneity, in the context of assemblage theory, neutralizes the pervasiveness of the colonial difference which is an inevitable by-product of global geocultural hierarchies of classification of human groups and their knowledge, produced by colonialism as a process, and by coloniality as matrix of power. Coloniality thus cannot be constructed as a recurrent expressive pattern of social heterogeneity for analytic purposes, not only because the colonial would be neutralized by being made equivalent and homologous to other assemblages, but also because the search for an ahistorical definition of relations outside the colonial translates into a chimerical quest for an epistemological foundation that proves unable to provide new premises to rethink the global outside those Eurocentric presumptions of modernity that were recognized as the limits to be overcome by assemblage theory itself. Rather than either colonialism, or coloniality, or epistemologies of otherness being assemblages among assemblages, the social heterogeneity that the notion of assemblage conceptualizes is nothing but a transient, historically determined expression of coloniality.

Theories of assemblages and borders share the geohistorical imagery of global modernity. In fact, this imagery is not one of connections, but rather one of divisiveness: an imagery of geohistorical locations to which specific cultures were integral. And while concepts such as 'border' or 'assemblage' strategically oppose divisiveness, they end up being opposed to something that perhaps has never been like that. As Doreen Massey notes, being a reaction against the fixities of state-centrism, these concepts take seriously a representation of the global that has never been actual outside the ideologies produced in the course of European colonial expansion. The space-time imagination to which both borders and assemblages belong, is one that 'having once been used to legitimate the territorialization of society/space, now is deployed in the legitimization of a response to their undoing' (Massey 2005: 62).

Connections and Circulation

The problem of reconstructing the global following the critique of Eurocentrism directly affects the relationship between how sociology is able to explore new territories and histories previously ignored and the

way these territories and histories are allowed to transform the structures of meaning and concepts sociology uses. Bhambra maintains that 'it is this process of reshaping shared narratives in light of what is presented as new data and accounting for why it is understood as new that opens up the space for further insights about historical and social processes' (Bhambra 2014: 150). A relevant part of these 'new data' are being produced by connected histories of science, as I have argued in Chaps. 2 and 3.[6] When the histories of scientific modernity are seen through the connections that made the world an integrated space, the globalization of ideas and practices no longer looks like the diffusion of knowledge irradiating from the European center to its peripheries. This shift interpolates the terms of the relationship between Europe and the colonial worlds that the global history of the transition to modern science takes for granted. An appropriate metaphor might be seeing through a bifocal lens. Usually, the global history of science focuses on the Scientific Revolution as it happened in Europe, against the background of the world as a scenario. The global scenario is European colonial expansion. According to diffusionist narratives of modern science, either ideas and discoveries were irradiated from Europe to the world, or ideas and discoveries converged on Europe and were used there to produce the breakthrough to modernity. Connected histories of science, instead, displace the European colonial expansion on the background and move to the fore other locations, experiences and space-times where exchanges, transmissions, negotiations and translations of scientific knowledges took place. Albeit these power relations were asymmetrical, because colonialism and imperialism partly over-determined the day-to-day practices and lived experiences gave birth to brand new hybrid knowledges.

Bhambra is right to underline that 'the different "facts" and "consequences" of interest to sociologists in different social and cultural contexts are mutually implicated and the selections made from the perspective of different cultural contexts cannot be so easily insulated from their explanatory consequences' (Bhambra 2014: 151). In the process of tackling new

[6] Secord (2004) effectively explains the methodological path towards the reconstruction of knowledge transfers from a connected-histories perspectives. For an explicit critical confrontation with the option of civilization from the perspective of the circulation of knowledge, see Habib and Raina (1999) and Hart (1999).

explanantes, connected histories of science actually elaborate new sets of heuristic *explanans*. These *explanans* are the notions of circulation, go-betweens and trading zones.

Raj explains that circulation does not refer 'to "dissemination", "transmission", or "communication" of ideas; rather to the processes of encounter, power and resistance, negotiation, and reconfiguration that occur in cross-cultural interaction … Rather, the circulation of knowledge implies a double movement of going forth and coming back, which can be repeated indefinitely. In circulating, things, men and notions often transform themselves. Circulation … therefore … implies an incremental aspect and not the simple reproduction across space of already formed structures and notions' (Raj 2013: 44). Circulation designs space-times that do not overlap with the map of modernity that has Europe at its center, nor with a polycentric cartography of civilizational dialogue. The space-time processes of circulation coagulate into cross-cultural *loci* of 'contact' where exchange and negotiation occur. As Pratt proposes, contact zones are spaces of circulation and exchange where a multiplicity of actors, previously separated by geographical and historical disjunctures, intervene in the making of knowledge. Relations inevitably involve 'conditions of coercion, radical inequality, and intractable conflict' (Pratt 1992: 6) According to Pratt, the notion of 'contact' emphasizes 'the interactive, improvisational dimensions of colonial encounters so easily ignored or suppressed by diffusionist accounts of conquest and domination. A "contact" perspective emphasizes how subjects are constituted in and by their relations to each other. It treats the relations among colonizers and colonized, or travelers and "travelees", not in terms of separateness or apartheid, but in terms of copresence, interaction, interlocking understandings and practices, often within radically asymmetrical relations of power' (Pratt 1992: 6–7).

Actors such as travelees, local informants or naturalists actively participate in these cross-cultural encounters; their translation between cultures has caused new scientific knowledge to emerge. Within the contact zones, go-betweens move across colonial and cognitive borders. These borders are both physically and territorially articulated either into jurisdictional, formal and informal boundaries, or subjectively perceived and experienced as cultural difference and power differentials in the realm of

personal interaction with other actors from different geographical and historical backgrounds.

Reconstructing the Global

Notwithstanding the heuristic potential of the methodological approach of connected histories of science, I intend to use these theoretical tools to raise some issues concerning the limitations of reconstructing the global as a sociological and historical category. Connected histories of science are able to provide new data, previously ignored by sociology, in the context of new narratives, previously dismissed by historiography; at the same time, they reiterate some epistemological problems connected to the definition of space and time within the frame of modernity. The question I ask is: what space-time configuration emerges when one attempts to think circulation by conjugating the territorial definition of trading zones with the relational geographies designed by the intersubjective relation between social actors?

Massey (2005) has explored this dilemma and conceptualized the dichotomy by opposing two irreducible conceptions of space-time; we can refer to these as representational vs non-representational. Massey (1999) argues that, based on the fundamental dichotomy between subject and object that permeates both human and physical geographical constructions of space and time, which is the epistemological foundation of modernity, space-time is often conceived as a container (representational), while it is actually constantly formed and reformed by relationships (non-representational). Where is the connected histories understanding of the global located in the context of this dichotomy?

Bhambra's *Connected Sociologies* envisages a global sociology that opposes the diffusionism inherent in the Eurocentric master narrative of modernity and its partial reformulation in terms of globalization. Rather than a condition of possibility of conceptualizing large-scale/long-term processes, a global sociology has thus to be reoriented toward 'the histories of interconnection that have enabled the world to emerge as a global space' (Bhambra 2014: 155). Rather than a by-product of modernization or globalization, Bhambra thinks of the global as an 'always/already

there'. Rather than a condition of possibility for the expansion of modernity, or a condition of impossibility for the elaboration of postcolonial modernities, the 'global' can be thus reconstructed as the methodological tenet that establish the global character of historical change as an assumption, and not as a consequence.

Yet, to the extent the global as a condition is postulated, a different set of questions arises regarding the theoretical nexus between modernity and the global. Are modernity and the global coextensive or co-determined? Was the world global before the colonization of the Americas? And if some of the planetary connections of the world were already/always global, do we need to reconfigure the space-time coordinates of world histories according to a different cartography? Would it then make sense to speak of modernity, if those connections render inconsistent any narrative of 'transition to modernity'? Or, is the global an immanent perennial, *ab origine* condition for thinking history and social change? And, would this theoretical option risk translating a methodological premise into a metaphysical foundation? Or, conversely, should the limits that the ubiquity of modernity imposes on the sociological conceptualization of the global be tackled?

The global is stretched between the two irreconcilable poles of the dichotomy Massey has defined. This situation amounts to a predicament for sociological imagination when it comes to address the issue of how to imagine the global outside or beyond the configuration of knowledge production that is inherent in the acceptance of modernity as a frame. The omnipresence of modernity both as a historical-sociological and as an epistemological frame translates the polarization between representational and non-representational space-times into the polarization between two irreconcilable positions. Either history becomes global exclusively when modernity emerges, (coextensively and simultaneously, or as a consequence of European colonial expansion); or the global has to be thought of as trans-historical, always/already there, even projected into the perennial space-time of universal history. The global seems to oscillate between two discrete statuses: a by-product of social relations, or a property of what lies outside human activity. This polarization is due to the persistence of modernity, which constrains historical-sociological *explananda* within the gamut of possible configurations of space, time

and relation of modernity itself. The challenge for a global social theory thus becomes how to reconstruct the global as a category of analysis that goes beyond the frame of modernity. At the same time, reconstructing the global outside Eurocentrism means re-imagining long-term/large-scale processes as by-products of social relations existing through and within human history, and not outside it. In other words, reconstructing the global implies an investigation into the no man's land that separates the theoretical inadequacy of modernity as a frame from the elusive space-time coordinates of modernity as an era.

This challenge is solicited by the transitional (in)adequacy that the global expresses in the context of the inability of the Western conceptual archive to attune itself with the need to decolonize social theory and to expose its architecture to non-Western and post-Western histories and concepts. The predicament of the global is a privileged *locus* of terminological analysis for rethinking the grammar of sociology. Its ambiguity calls for an exploration of the limits of the sociological imagination that gird world-historical analysis.

Spivak captured this discrepancy between the vocabulary of social sciences and the reconfiguration of the post-colonial world. She wrote that the global is inevitably associated with the idea of making the world a controllable spacetime. The global suggests the ability of the subject to figure the world she/he inhabits: a figure endowed with plastic, visual and geo-historical determinants that provide the subject with the coordinates to encode a presumably intelligible non-subjective and objective alterity. Against this she proposes that

> the planet is in the species of alterity, belonging to another system; and yet we inhabit it, on loan. It is not really amenable to a neat contrast with the globe. I cannot say 'the planet, on the other hand'. When I invoke the planet, I think of the effort required to figure the (im)possibility of this underived intuition. (Spivak, 2003: 72)

The planet is thus the epistemological transfiguration of the methodological figure of the global. It interrupts the continuity between the situated Western thinking-subject that presumes to be the unique model of rationality, historically bearer of the sociological imagination, on the one hand, and the world as the reified spacetime wherein such a subject

locates long-term and large-scale historical processes of social change, on the other hand. Planetary imagination exceeds the established colonial social fabric of spacetime and makes the coordinates that define the specific, colonial situatedness unfamiliar, uncomfortable and uncertain. This destabilized condition renders the global a space contested by other, non-Western understandings of the world as a singular spacetime from alternative standpoints. The latter are diversely situated in the present hierarchy of the geopolitics of knowledge, but are nevertheless endowed with their own alternative narratives, distinctive conceptualizations and alien theoretical grammars. It follows that the global as a significant unit of analysis is irreducible to an emergent spatiotemporal envelope produced and reproduced by processes; nor is it the ultimate and overall geohistorical entity that generates processes.

The 'global' here stands as a negative limit: a horizon to theorization. As such, it traces the transient threshold from where the impossibility of unambiguous definitions imperceptibly slides into the possibility for transgressing and unthinking the Eurocentric boundaries of historical sociology. The global as methodological limit translates into the heuristics of the methodological attitude towards the global; that is, the endeavour to move beyond sociology's parochialism in disguise towards what remains outside the borders of the colonial conceptual archive of the West, and resists conceptual and terminological homogenization. This implies enlarging and democratizing the foundations of global historical sociology. But such an objective also necessitates a movement in the opposite direction, evoking a predisposition to make the conceptual grammar of sociology more permeable to multiple outside(s) and planetary other(s).

Planet-thought opens up to embrace an inexhaustible taxonomy of such names, including but not identical with the whole range of human universals: aboriginal animism as well as the spectral white mythology of postrational science. If we imagine ourselves as planetary subjects rather than global agents, planetary creatures rather than global entities, alterity remains underived from us; it is not our dialectical negation, it contains us as much as it flings us away. (Spivak, 2003: 73)

Far from being definitive or necessarily 'progressive', the predicament of the global mirrors the territory of uncertainty where the social sciences find themselves awoken from nineteenth-century positivist dream turned

into a nightmare of failed attempts to make the world fully transparent through the colonial gaze. It figures the specific condition of contemporary social theory; its transitionally adequate epistemological status of intelligibility, nevertheless able to expose current sociology to post-Eurocentric, de-centred, unexpected, and uncanny interventions that the coloniality of method makes otherwise invisible, irrelevant, and exotic. Thus, the unit of analysis migrates towards the dis-unity of planetary understandings: a route that links the impossibility of fully thinking the worlds of historical and social planetary connections and disconnections in terms of an exhaustive spacetime singularity, unto the awareness that this dis-unity is the premise for new regimes of theoretical and empirical validation grounded in geocultural pluralization as well as in the possibility for reciprocal interpellations and frictions between overlapping, but irreducible, histories, explanations and conceptualizations.

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7

‘Degenerative’ Capitalism

When modernity is considered in terms of the historical conditions for the reproduction of human life on the planet within actual social hierarchies, commodification looks like its tangible reality and the notion of capitalism appears ineluctable. In narrative terms, modernity and capitalism overlap, as their reciprocal interpellation is used to describe the space-time boundary of the world from the sixteenth century onwards. The historical force that drives capitalist modernity since its onset is considered the imperative of the endless accumulation of capital, and the crises it produces when unfolding its own logic in time and space. Today, global capitalism seems to be undergoing a radical transformation that questions existing theories based on various exegeses of those of Marx’s writings that are devoted to the rational understanding of the logic of capital. When observed from the familiar perspective elaborated in the West, the crisis that challenges existing theories of capitalism does not look much like the conjunctural dynamics of re-establishing acceptable conditions of profitability; rather it appears to be an irreversible transition towards a new ‘stage’ of capitalism. This stage would be distinctive in two respects: first, it manifests to an unprecedented degree the most detrimental effects intrinsic to the

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logic of capital: violent social polarization of power, wealth and existential expectations between social groups. Second, capitalism is said to have become global in scale as it never has before, which is a way of expressing the irrelevance of the geographical dimension of exploitation in the definition of what is external to capitalism: capitalism seems no longer to have territorial boundaries, only social and spatial borders, constantly transformed.

In the face of these theoretical challenges the adequacy of the Eurocentric assumptions that underpin most of the existing theories of global capitalism, have entered an irreversible state of crisis. In fact, theories of global capitalism, where there are wide variations in a significant number of parameters and interpretations, remain anchored to many of their nineteenth-century premises, thus to the colonial horizons within which these premises were forged.

Theories of 'postcolonial' capitalism admit that what appears to be a new configuration of capitalism, for which recent decades of neoliberalism are systematically blamed, to include violent exploitation, structural debt, state bail-outs, and the related psychosocial individual and collective problems deriving from more or less brutal, consensual or imposed forms of capitalist command over life and natural resources, is not actually new when the colonial difference is located at the center of the analysis.[1] (Mezzadra and Neilson 2013; Samaddar 2014; Sanyal 2007). Slavery, servitude, dispossession, plunder, land grabbing, privatization, assets monetization, humiliation, social insecurity, hyper-exploitation and burn-out have always been the bread and butter of capitalism in the colonial worlds. Nonetheless even theories of postcolonial capitalism fail to translate the awareness of the co-formation of colonialism and capitalism into different concepts that aspire to be more suitable for the contemporary global age than the ones social theory inherited from nineteenth-century political economy, as well as from early twentieth century theories of imperialism. In other words, theories of postcolonial capital-

[1] The attribute of 'postcolonial' would not express an ultimate stage of capitalism, rather the analytic effort to understand capitalism from postcolonial theoretical perspective that, as such, is not limited to the former colonies, but represents the global operations and configuration of capitalism.

ism do not question the kernel of what Chakrabarty names *History 1*: the axiom of the endless accumulation of capital.

The inadequacy consists in the systematic occlusion of a vast, yet under-theorized, space: the space inhabited by the most destructive, detrimental and irreversible aspects of capitalism. The methodical reliance on the axiom of the endless accumulation of capital makes it legitimate and unproblematic that the destructive aspects of capitalism are considered exclusively from the perspective of the self-fulfilling logic of capital, as if destruction would be conceivable entirely and satisfactorily within the spatialized process of the Schumpeterian creative destruction of value that is needed to re-establish profitability.[2]

For Sanyal (2007), the exteriorization of surplus-value into external, non-capitalist, 'de-capitalized' social space is functional to accumulation, and constitutes an ever-present possibility for capital to transform its means of exploitation. For Kliman (2007), the destruction of capital has to be on a large enough scale to re-establish profitability, and perform its metabolic function appropriately, following the dynamic of the tendential fall of the rate of profit. Harvey (2003, 2010), distrusts Kliman's deterministic view grounded in Newtonian physics, and underlines that crisis is intended by Marx (1972b: 120) as a 'violent fusion of disconnected factors operating independently of one another yet correlated'.[3] For Harvey, accumulation by dispossession marks the persistence of the plundering, violent exploitation and appropriation of capitalism. It is a device central to destruction of value, aimed at enabling capital to over-

[2] In his classical formulation, Schumpeter generalizes from his analysis of the business cycle in the US steel industry, to describe creative destruction as the essence of capitalism. 'The opening up of new markets, foreign or domestic, and the organizational development from the craft shop and factory to such concerns as US Steel illustrate the same process of industrial mutation—if I may use that biological term—that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one. This process of Creative Destruction is the essential fact about capitalism. It is what capitalism consists in and what every capitalist concern has got to live in' (Schumpeter 1994 [1942]: 83).

[3] An interesting debate between Harvey and Kliman has been hosted by the web journal *New Left Project* (www.newleftproject.org/). See Kliman's intervention (www.newleftproject.org/index.php/site/article_comments/harvey_versus_marx_on_capitalisms_crises_part_1_getting_marx_wrong), and Harvey's (www.newleftproject.org/index.php/site/article_comments/capitals_naturea_response_to_andrew_kliman).

come the spatial barriers it imposes on its own development. Yet, for all of them, destruction and creation of value are complementary. Their interplay accounts for the self-contained, regenerative power of capital as social relation, and of capitalism as historical formation. This relegates the critique of capitalism to the theoretical hinterland of the logic of capital, as it was forged on the horizon of European colonial and imperial expansion; it also diverts sociological imagination from the acknowledgment of the irrecoverable loss episodically, repeatedly, constantly or ultimately experienced by a multiplicity of subjects and social groups. In so doing, *Capital* remains the fetish of fetishes, and modernity the tale of tales.

What follows is a critique of the axiom of the endless accumulation of capital (EAC henceforth), which tackles historicism and its epistemological legitimation through the mathematical notion of limit.

Questioning *History 1*, Rethinking Historicism

Chakrabarty proposes an attack on historicism and its Eurocentric constraints on the possibility of capturing the global dimension of the logic of capital in the colonial and postcolonial worlds. Chakrabarty's definition of historicism is 'a mode of thinking about history in which one assumed that any object under investigation retained a unity of conception throughout its existence and attained full expression through a process of development in secular, historical time' (Chakrabarty 2000: xv). Chibber raises the issue that Chakrabarty's definition of historicism is 'unconventional' (Chibber 2013: 209), noting that conventionally, historicism refers to something different. Chibber recalls that historicism marks the distinctive epistemological stance that since the nineteenth century has come to affirm the irreducibility of human sciences to the aspiration of the natural sciences to formulate universal laws. According to this view, human sciences necessarily call for an alternative, non-naturalist, historically bound relation of comprehension and interpretation between the knowing subject, the object of analysis and the intellectual forms devoted

to its understanding.[4,5] Chibber's objection is useful in a counterintuitive way: it can be mobilized to enrich Chakrabarty's notion of historicism with a sharper heuristic grip.

The applicability of Chakrabarty's notion of historicism can be limited to those approaches to the analysis of social processes that presume a detectable historical ontogenesis and at the same time establish both the onset of a historical and social reality, and the possibility of building adequate *ad hoc* heuristic explanatory and normative devices upon that ontogenesis. What historicism realizes is the coincidence of the historical object with its cognitive formulation. Marx's notion of the capitalist mode of production is an exemplar in this regard: the capitalist mode of production materializes the coincidence of the historical object of analysis with the notion historically produced to understand it, as if the assumption of the existence and the unity of the object, through time and space, legitimated the category of analysis that, alone, can be mobilized towards the adequate understanding of that historical reality. And, vice versa, the constant reiteration of that category recreates the historical object it evokes, every time that object is invoked. *Das Kapital* seals this coincidence.

Both Chakrabarty and Chibber move in the under-theorized space of the possible reconciliation of Marxian political economy and historical sociology with cultural and postcolonial studies. The missing link between these two sides of critical thinking worried Stuart Hall, who admitted that 'what has resulted from the abandonment of deterministic economism has been not alternative ways of thinking questions about the economic relations and their effects, as the "condition of existence" of other practices, inserting them into a "decentered" or dislocated way into our explanatory paradigms, but instead a massive, gigantic and eloquent *disavowal*. As of, since the economic in its broadest sense definitively does

[4] Chibber's deliberate attack on postcolonial theory has raised a relevant debate. Among the reactions it has generated, I consider those of Spivak (2014) and Mezzadra (2014) particularly relevant for the 'defense' of postcolonialism.

[5] References for a critical assessment of this genealogy of historicism include Hinde (2000), Iggers and Powell (1962), Gilbert (1990), and Rüsen (1985, 1990). An interesting critique of this approach has been provided by Peter Burke in his reconstruction of the intellectual path of the French school of Annales (see Burke 1990).

not, as it was once supposed to do, "determine" the real movement of history "in the last instance", it does not exist at all!' (Hall 2002: 258). Mezzadra denounces an analogous *impasse* of theory when he alerts us that 'by renouncing to a direct theoretical engagement with capitalism, many scholars working in the fields of cultural and postcolonial studies have in a way unconsciously validated the "objectivity" of its "structural" developments and laws' (Mezzadra 2011: 155). In order to cope with this *impasse*, Mezzadra asserts a strong logic of co-determination between capitalism and modernity, which translates the historical-sociological dimension into the logic of inquiry according to which capitalism would be axiomatic of modernity.[6] 'The global dominance of modern capitalism seems nevertheless more and more disentangled from any world order centered upon the primacy of Europe or the "West", emerging as the real invariable in the axiomatic of modernity' (Mezzadra 2011: 157). So, how is it possible to schematically provide a definitional outline of global capitalist modernity, which keeps together the connotative aspect of what should be thought when capital is concerned, and the dynamic aspect concerning the processes through which capital exists as historical reality through time and space? Mezzadra proposes global capitalist modernity should be thought of as the reciprocal interpellation of two assumptions. The first, derived directly from Marx, is that capital is a social relation among subjects located within a multilayered social stratification where antagonist classes, among other non-economic determinants, are discernable according to the property of the means of production. The second, drawing from Arrighi, Hopkins and Wallerstein, is that EAC is the core logic that accounts for the historical dynamic (and its limits) of global capitalist modernity. Mezzadra expresses the close connection between the two axioms as follows: 'while the first element of the definition (capital as "social relation") points to a "constitutive outside" (we could define it with Marx: "labor as not capital"), the second element

[6] It will be clear to the reader that I consider both capitalism and modernity as notions capable of being constructed as two distinct axiomatics. As such, they are conceivable via two different sets of axioms. While for Mezzadra there is a relation of derivation between the two, I am more interested in the heuristic value of the notion of axiomatic than in its applicability to presumed historical realities.

("endless accumulation of capital") has been presented as a "totalizing" norm' (Mezzadra 2011: 159).

This view of the problem has the advantage of assigning non-homogeneous theoretical values to each of the two axioms: to the extent the notion of capitalism expresses a critique of global inequalities articulated in heterogeneous co-constitutive hierarchies, the axiom of 'capital as a social relation' represents an acceptable way to think of a historically determined societal formation whose reproduction is mediated by commodities, and where both profits and social power, as well as profit *as* social power, derive from extensive, intensive, violent, capillary and ever-changing forms of human and natural exploitation. What is more problematic is the axiom of the EAC, for two reasons. First, because, as Zarembka notes, for Marx 'accumulation reproduces the capital relation on a progressive scale; more capitalists or larger capitalists at this pole, more wage workers at that', and thus it is "increase of the proletariat". Yet, for Marx, the concept of accumulation of capital remains ambiguous, perhaps as a result of inheriting the usage of the classical political economists' (Zarembka 2012: 5). Marx reproduces the definition of accumulation given by Malthus in the latter's *Principles of Political Economy* (see also Zarembka and Desai 2011). Second, and more importantly, because the logic of EAC remains the core assumption providing the narrative of global capitalist modernity with its presumed unity: the axiom of the endless accumulation of capital is the bastion of historicism; it is the explanatory-normative kernel on whose threshold even the most radical critiques of Eurocentrism stand.

Chibber agrees with Chakrabarty's distinction between *History 1*, that is, history 'posited by capital' and *History 2*, that is a plurality of stories which do not belong to capital's 'life process'. Chakrabarty is effective in creating a critical space to limit the relevance of historicism in Marx's understanding of the capitalist mode of production by reducing its domain to the universalizing logic of abstract labour. As Mezzadra (2011b) recalls, this universalizing logic is constantly in need of its 'constitutive outside' in order for capital to reproduce itself in time and space, because abstract labour is intrinsically unable to fully subsume the proliferation of differences materialized by the irreducible multiplicity of histories of labour. Chakrabarty's argument questions historicism by

designating the insurmountable external limit to capital where the global encounters the colonial to produce what is 'not-capital'.

Chibber objects to Chakrabarty that capitalism can function regardless of the forms of resistance produced by *History 2*, since not all the processes are essential to enable capital to keep on working according to its inner logic, reproduced through *History 1* (Chibber 2013: 224). For Chibber, 'Marx was, of course, the most obvious exemplar of this view. In his theory, capitalism's reproduction is interrupted, not by the obduracy of local cultures, norms, or practices, but by the very practices that are "posited" by capital. None is more central to this than accumulation itself' (Chibber 2013: 231).

It is remarkable how, notwithstanding their opposite interpretations of the role *History 2* plays in the historical making of capitalism, both Chakrabarty and Chibber converge toward the presumption of the inner immutable essence of *History 1*, whose core logic remains integral: the imperative of the endless accumulation of capital. This convergence eludes the theoretical risks of pushing to their limits the critique of Eurocentric historicism and the colonial nature of the processes of concept formation that lay at the foundation of the conceptual and terminological apparatus social sciences inherited from nineteenth-century sociology, to which Marx makes no exception. The reliance on this presumption does not fully address the consequences of the demise of diffusionism in the historical process of concept formation wherein the notion of accumulation of capital was forged. It does not assume the global and the colonial as premises to disarticulate the notion of EAC and transform it, even if this might result in a radical transfiguration of the category of capitalist modernity as we know it.

For Chakrabarty, the possibility of elaborating on the notion of capital is grounded upon the acceptance of the Enlightenment principle of formal equality. For Marx, Chakrabarty recalls, the secret of 'capital', the category, 'cannot be deciphered until the notion of human equality has acquired the fixity of a popular prejudice' (2000: 30). Yet, Chakrabarty claims, 'Marx's methodological/epistemological statements have not always successfully resisted historicist readings. There has always remained enough ambiguity in these statements to make possible the emergence of "Marxist" historical narratives' (2000: 31). Formal equality was not the only condition of possibility for Marx's notion of capital: the globalizing

force of capitalism under the semblance of European colonial expansion and tendential growth were essential to the concept formation and legitimization of the category.

The Horizon of Colonial Expansion

In a 'famous' footnote to *Capital Book I*, Marx says that 'we here take no account of export trade, by means of which a nation can change articles of luxury either into means of production or means of subsistence, and vice versa. In order to examine the object of our investigation in its integrity, free from all disturbing subsidiary circumstances, we must treat the whole world as one nation, and assume that capitalist production is everywhere established and has possessed itself of every branch of industry' (1906: 636n).[7] What relation between the national and the global is inferable from this passage? The topic has been widely debated for more than 100 years, as Gong Hoe-Gimm (2012) registers. Does this mean that for Marx, capital historically operates regardless of national borders? Or rather, does Marx's notion of capital emerge regardless of methodological nationalism?

Arrighi has no doubt about this point: for him, Marx's thinking was entirely oriented towards the global dimension of the capitalist mode of production, as opposed to Adam Smith's national horizon of wealth within the expansion of the world market. Marx, Arrighi comments, 'pursues an altogether different research program: he changes, so to say, the nature and topic of the conversation. His interlocutors are not governments-Smith's legislators - but social classes. His subject matter is not the enrichment and empowerment of nations, but the enrichment and empowerment of the possessors of capital vis-à-vis the possessors of labor power' (Arrighi 2007: 73). Arrighi continues: 'This shift in the nature and topic of the conversation has been the source of great confusion concerning Marx's implicit theory of national development. I say implicit

[7] On this point see the interesting articulation of this interpretative problem in the frame of 'uneven and combined development' by Smith (2006).

because, explicitly, Marx has no such theory. What he has is a theory of the development of capitalism on a world scale'.

Harvey points out that the way Arrighi inserts conversations between Smith and Marx is based on the distinction between 'the "territorial" and the "capitalist" logics of power. The capitalist holding money capital will wish to put it wherever profits can be had, and typically seeks to accumulate more capital. Politicians and statesmen typically seek outcomes that sustain or augment the power of their own state vis-a-vis other states' (Harvey 2003: 27). Given this distinction, Harvey asks 'how does the relative fixity and distinctive logic of territorial power fit with the fluid dynamics of capital accumulation in space and time?' (Harvey 2003: 93). Harvey concedes that Marx's theory of capital accumulation is 'reticent', because it 'is constructed under certain crucial initial assumptions that broadly match those of classical political economy. These assumptions are: freely functioning competitive markets with institutional arrangements of private property, juridical individualism, freedom of contract, and appropriate structures of law and governance guaranteed by a "facilitative" state which also secures the integrity of money as a store of value and as a medium of circulation' (Harvey 2003: 143). Harvey is right, even though he does not take the theoretical consequences of his critique to the limit that the colonial horizon put on the basis of Marx's theoretical and historical arguments—the global horizon of European colonial expansion.

Harvey diverges from Arrighi as he upholds Luxemburg's critique of the Marxian theory of capital accumulation, on the basis of the well-established thesis of the alleged limits of Marx's methodological nationalism. For Luxemburg, by denying the analytical relevance of exports, Marx isolated England from the world economy, transforming it into a closed national system. To be sure, as Pradella notes, Luxemburg herself 'recognizes that "if the analysis of the reproductive process actually intends not any single capitalist country, but the capitalist world market, there can be no foreign trade: all countries are 'home'" (Pradella 2013: 122). And, in fact, anyone who upholds the thesis of the relative irrelevance of methodological nationalism in Marx's analysis of capitalism could counter Luxemburg's critique with what Marx argues against Carey in Chap. 22 of *Book 1* in respect of the 'national difference of salaries'. Here, after

describing how English capitalists made profits from the construction of railways in Russia using a local labor force side by side with English working men, Marx says: 'compelled by practical necessity, they thus have had to take into account the national difference in the intensity of labour, but this has brought them no loss. Their experience shows that even if the height of wages corresponds more or less with the average intensity of labour, the relative price of labour varies generally in the inverse direction' (1906: 616). So, to what extent could the available notion of the global pertaining to Marx's horizon of thinking allow him to distance his notion of capital accumulation from those of his contemporaries? Was Marx's notion of accumulation and enlarged circulation intrinsically able to enforce the limits of the shared colonial gaze?

One way of exploring this problem is to return to the conceptual border between the national and world economies, and ask under what circumstances the 'esoteric form of the salary' relates to average social labor as expression of the organic composition of capital in England, and thus, in equivalent yet different instances in every single nation as 'home' for capital. From this perspective, Marx's reticent methodological nationalism in *Capital* does not completely exclude the possibility of thinking globally, as it emerges from the critique of the notion of labor-fund. Yet, Marx's understanding of the global is inseparable from the colonial horizon and the presumptions most European thinkers shared about the social future of the world. In fact, Marx argues against Jeremy Bentham that 'capital is not a fixed magnitude, but is a part of social wealth, elastic and constantly fluctuating with the division of fresh surplus-value into revenue and additional capital' (Marx 1906 [1867]: 667). Pradella insists on the historically bound dimension of this critique. She notes that the underlying assumption of classical political economy, according to which 'factors of production were mobile within a particular country but never crossed national boundaries, was coming every day more into conflict with the expansion of the "field of action" of British capital and the increasing international migration of workers towards Britain and between British colonies' (Pradella 2013: 123). She is right in asserting that British colonialism informed Marx's vision of capital accumulation, yet her assertion only acknowledges one side of this process of concept formation: that of the transnational character of capital. What she fails to register is that the

notion of capital accumulation emerged within the colonial horizon of tendential growth. And even though cyclical crises were acknowledged as major causes of the temporary interruption of accumulation, overcoming them re-established the tendency towards growth and expansion. This horizon constitutes a structuring epistemological assumption which, coupled with Marx's acquaintance with some basic mathematical notions about limits, gave theoretical cogency to the historicist biases inherent in the concept of EAC, as I am going to argue.

This is obvious when one considers how, in his manuscript *Value*, *Price and Profit* (1865), Marx attacked the idea that within a single nation there existed a fixed quantity of wealth in the form of the total amount of annual wage. As Marx polemically remarks, 'Citizen Weston's argument [presumes that] the amount of national production is a fixed thing, a constant quantity or magnitude, as the mathematicians would say' (Marx 2012 [1865]: 20). But this is erroneous, since 'year after year you will find that the value and mass of production increase, that the productive powers of the national labour increase, and that the amount of money necessary to circulate this increasing production continuously changes. What is true at the end of the year, and for different years compared with each other, is true for every average day of the year. The amount or magnitude of national production changes continuously' *(ibidem)*. Accumulation as self-valorization of capital was visualized by Marx as the passage from the 'circle' of simple circulation to an endless self-increasing 'spiral'. Accumulation thus presumed that growth was the condition tending to result from the dialectics of the productive forces.

The horizon of tendential growth was inseparable from the perspective of geographical expansion through colonialism and the diffusion of capitalism over the globe which was intrinsic to the colonial imagery of the transformation of the world economy into a single integrated space-time. Both for Marx and for classical political economists, the perspective of generalized growth was buttressed by evidence of the combination of a continuous expansion with a cyclical rhythm of development (hence the image of the spiral), the rate of which was understood through the dynamics of crises of over-accumulation and under-consumption. And this dynamic came with seemingly unstoppable colonization, presumably doomed to flatten the entire world. A world whose geographical

limits of exploration would be reached only with the Congress of Berlin (1884–1885), and finally completed in 1902 with the 'conquest' of the South Pole, which marked the beginning of the extinction of the terrestrial frontier to conquest from the colonizer's imagery.

If, as Pradella shows, colonialism was constitutive of Marx's critique of political economy because of the dialectical nexus between the progressive historical role of the bourgeoisie and the flaring up of anti-colonial struggles, it is also evident from the same analyses that the fates of capitalism and of colonialism were intimately connected in Marx's understanding of the historical path the capitalist mode of production was taking. This connection was simultaneously historical and cognitive. The accumulation of capital as abstract logic socially embodied corresponded to, and explained, the observable phenomenon of the coincidence of the geographical concentration of colonial wealth in England and the centralization of capital in its middle-class upper strata, produced by the underlying but counterintuitive laws governing the 'real movement of history'. Marx declared of the decades 1846–1866: 'No period of modern society is so favorable for the study of capitalist accumulation as the period of the last 20 years. It is as if this period had found Fortunatus' purse. But of all countries England again furnishes the classical example, because it holds the foremost place in the world market, because capitalist production is here alone completely developed, and lastly, because the introduction of the Free-trade millennium since 1846 has cut off the last retreat of vulgar economy' (Marx 1906 [1867]: 711).

The Conceptual Ambiguity of Accumulation

I disagree with Chibber's unproblematic understanding of accumulation as a self-evident mechanism. For Chibber, 'the agents who run firms in a fully monetized economy do not need any inducements to accumulate capital other than those generated by their structural location. … Capitalism grows as firms take their revenues after every cycle of production and plow them back into acquiring ever more capital, in order to strengthen their position in the market. Marx refers to this process as the accumulation of capital. … Wherever capitalism goes, so too does

this imperative' (Chibber 2013: 111). No doubt this view resonates with a set of observables. Yet this position is not one-sided, as it places accumulation exclusively at the level of social agency. Nevertheless the effort to understand accumulation as the intimate logic of capital contains a conceptual ambiguity which deserves deeper investigation.

Arrighi laments that 'Marx never clearly explains why capitalist agencies pursue the seemingly irrational objective of accumulating money for its own sake. Indeed his *dictum* "Accumulate, accumulate! That is Moses and the prophets", appears to be an admission that he has no rational explanation for the accumulation of money as an end in itself. Nonetheless, shortly before uttering the *dictum* he states that "the love of power is an element in the desire to get rich"' (Arrighi 2007: 75). Following on from his dissatisfaction, Arrighi asks how accumulated money translates into different kinds of power, and articulates these differences in the long run and on a large scale to connote the relational co-emergence of Europe and China as connected but reciprocally irreducible societal formations. It is remarkable how Arrighi keeps on relying on the cogency of the irrational drive to endless accumulation as the inner logic of capital, even if neither he nor Marx (as Arrighi notes) can advance any valuable hypothesis regarding the nature of this logic—an oxymoronic irrational logic. At the same time, the philosophical problem of establishing whether capitalism is rational or not is a heuristic trap. It conceals the more relevant theoretical problem of the conjectural nature of the axiom of EAC as a fundamental category of historical thinking. Arrighi foresees this intrinsic ambiguity; nonetheless, he limits himself to postulating that the social and historical existence of the logic of capital escapes any rational understanding.

In the aforementioned passage, Arrighi moves across the crucial terminological and conceptual ambivalence of the dyad money/capital. Here Arrighi talks about *money* as 'representative of the general form of wealth', whereas, it should be emphasized, in that same passage Marx is more explicitly talking of *capital* as the hidden essence of tangible social wealth in the form of money. The difference is not trivial. Not so much because of the theoretical difference between money and capital, and the different places they occupy in Marx's theory of the capitalist mode of production; rather because of the distinct ways in which social power relates

to accumulation, depending on whether the reference is to money or to capital. According to Negri's interpretation of the *Grundrisse*, money and capital are not to be fetishized as two distinct entities but understood in their connected dialectical movement (Negri 1991). Nonetheless, it is also important not to conflate money and capital ontologically, in order to explore the conceptual regions where money and capital overlap but do not coincide. It is precisely in the *Grundrisse*, in fact, that Marx affirms 'if I state, like for example Say, that capital is a *sum of values*, then I state nothing more than that *capital=exchange value*. Every sum of values is an exchange value, and every exchange value is a sum of values. I cannot get from exchange value to capital by means of mere addition. In the pure accumulation of money, as we have seen, the relation of capitalizing [*Kapitalisieren*] is not yet posited' (Marx 1993: 251).

Marx elaborates on this non-coincidence between money and capital, particularly when he comes to deal with one of the thinkers whose works he turns out to respect the most: Thomas Hodgskin and his 'proletarian critique' of renters.[8] Hodgskin attacked the legitimacy of the so-called 'social regulations' by which what he considered the natural price was 'enhanced' to form the social price. For Hodgskin, social regulations were the laws that yielded unearned income to landlords and idle capitalists. 'By his [the worker's] labour, and by nothing else, is natural price measured, but he never obtains commodities for the labour of producing them. At present, therefore, all money price is not natural but social price' (1827: 233). For Hodgskin, thus, money expressed a form of social control over labor that did not correspond to the existing historical reality. As such, it is a social convention: 'a pure subjective illusion which conceals the deceit and the interests of the ruling classes'. Marx objects that:

> Hodgskin says that the effects of a certain social form of labour are ascribed to objects, to the products of labour; the relationship itself is imagined to exist in *material* form. We have already seen that this is a characteristic of labour based on commodity production, or exchange-value and this *quid pro quo* is revealed in the commodity, in money … to a still higher degree in capital, in their personification, their independence in respect of labour.

[8] Marx confronts Hodgskin's theories both in preliminary studies of the theories of values and in *Capital*.

> They would cease to have these effects if they were to cease to confront labour in their *alienated form. The capitalist*, as capitalist, is simply the personification of capital, that creation of labour endowed with its own will and personality which stands in opposition to labour. (Marx quoted in Pilling 1980: 134)

At this point, we need to conceive the threshold of abstraction that accumulation inhabits before we can connote accumulation as a concept. This threshold connects and separates two levels. One is the level of money as expression of power held by the owners of the means of production and exercised against laborers; it consists in money as a dominant subjectivity which subordinates laborers' lives to the domain of capital. The other is the level of capital as social relation between classes, consisting in a form of power historically determined, where a specific historical agent is but the embodiment and personification of that specific form of power, as 'the necessity for his own transitory existence implied in the transitory necessity for the capitalist mode of production' (Marx 1906 [1867]: 649).

Thus, accumulation is not entirely reducible to one of these two levels, but, at the same time, it cannot be conceived other than within their entanglement. As Marx contests to Hodgskin, 'in the same way English socialists say "we need capital, but not the capitalists". But if one eliminates the capitalists, the means of production cease to be capital' (Marx quoted in Hudis 2012: 143). This threshold of abstraction constitutes the ambiguous zone where the notion of accumulation of capital is mobilized to legitimate the epistemological foundations of the historicist narrative of historical capitalism. This space is somehow subtracted either from the realm of social agency, or from the realm of pure transcendental logic, to nourish the assumption that something conceivable as a historical unity lives in, within, through, and, to a certain degree, beyond space and time.

It is within this zone that the notion of EAC places its aspiration to produce adequate narratives of historical capitalism. EAC is presumed not merely as a conscious activity embedded in the social reproduction of power hierarchies, or as a subjective desire that expresses a class interest. Rather, it is the prevailing totalizing norm under capitalism as a histori-

cal formation, among other competing yet recessive or marginal logics of social organization. As Wallerstein defines it:

> A system is capitalist if the primary dynamic of social activity is the endless accumulation of capital. This is sometimes called the law of value. Not everyone, of course, is necessarily motivated to engage in such endless accumulation, and indeed only a few are able to do so successfully. But a system is capitalist if those who do engage in such activity tend to prevail in the middle run over those who follow other dynamics. The endless accumulation of capital requires in turn the ever-increasing commodification of everything, and a capitalist world-economy should show a continuous trend in this direction, which the modern world-system surely does. (Wallerstein 1999a: 20)

But if capitalism is a historical formation, that is, one with a time-bound existence, the endless accumulation is not conceived as an eternal driver of human beings. As Harvey (2014) agrees, it is not merely greed, thus innate and perennial because ultimately 'human'. It follows that it must be unthinkable outside the awareness of its limitations in historical time. So, what are the limits of the endless accumulation as the prevailing logic that connotes capitalism as a historical formation?

The Heuristics of Limit

Drawing on Braudel, and echoing Gianbattista Vico's notion of historical time, Wallerstein maintains that capitalism involves both secular trends and cyclical rhythms, that is, what Arrighi critically defines as 'structural invariance'. For Wallerstein, the structural invariance of historical capitalism would be doomed to encounter insurmountable historical limits and an irreversible crisis. These limits would be posited by the global extension of capitalism itself: once the system reached the entire globe at the turn of the nineteenth century, it entered a path that by the 1970s had led it to be unable to re-establish acceptable conditions of profitability through proletarization and quasi-monopoly in leading productive industries rather than through financialization, since no new territories and unpaid labor force can be incorporated as privileged means of devaluing the cost of labour at the global aggregate level.

What are the cognitive aspects of this theoretical inadequacy? For Wallerstein, as for Marx, the limits to accumulation are internal to capital itself. Arrighi agrees that capitalism evolves through the drift of the inner contradictions of capital, but for him these contradictions produce structural heterogeneity and transform the structures of capitalism whenever its crises require it. It is worth noting that in order to understand the transformations of global capitalism against the grain of the reconfiguration of world economic and political power that is witnessing the emergence (or resurgence) of East Asia, Arrighi convincingly maintains that structural invariance has to be dismissed. For Arrighi (2006: 214) 'the idea still dominant in world-system analysis of a quantitatively expanding but structurally invariant world capitalist system must be abandoned, especially Kondratieff cycles, hegemonic cycles, and logistics as empirical manifestations of such a structural invariance'. Arrighi maintains that the globalization of historical capitalism must instead be represented as involving fundamental structural transformations of the spatial networks in which the system of accumulation is embedded. How does this theoretical shift from invariance to heterogeneity affect the axiom of EAC? My answer is: paradoxically, by potentiating it.

Once cut off from the rigidities of structural invariance, but simultaneously confirmed as *the* foundational logic for thinking capital historically, the axiom of the EAC is even less vulnerable to criticism, as its adequacy tends almost to coincide with the adequacy of the very notion of capitalism as analytical frame. In other words, since Arrighi exposes the explanatory limits of the rationality of endless accumulation of capital while apodictically asserting its explanatory-normative significance by postulating its validity, he renders any traces of the inner Eurocentric limits of this notion invisible. Conversely, Wallerstein's flaws in prediction are directly inferable from his Marxian premises, so their inadequacy is a measure of the possibility they offer of providing an Ariadne's thread towards the heart of Chakrabarty's *History 1*. As a consequence, the question becomes: what is the rationale behind Wallerstein's notion of the tendency of capitalism to move towards its own limits of accumulation?

Wallerstein articulates his theory of the crisis through the mathematical concept of asymptote.

> What characterizes a social system is the fact that life within it is largely self-contained, and that the dynamics of its development are largely internal. I admit I cannot quantify it. Probably no one ever will be able to do so, as the definition is based on a counterfactual hypothesis: if the system, for any reason, were to be cut off from all external forces (which virtually never happens), the definition implies that the system would continue to function substantially in the same manner. Perhaps we should think of self-containment as a theoretical absolute, a sort of social vacuum, rarely visible and even more implausible to create artificially, but still and all a socially-real asymptote, the distance from which is somehow measurable. (Wallerstein 1976: 229)

This approach to the problem of approximating the limits of capitalist development through the translation of historical processes into measurable incremental transitions turns out to be an epistemological problem. It implies the acknowledgment of the intrinsic irreducibility of social change to quantifiable variables, even though the mathematical understanding of recurrent patterns of change is considered an acceptable projection of historical phenomena, when these are understood only as tendencies endowed with some orderable empirical evidence. Gershenkron uncovered this heuristic logic of conceptualization by maintaining that 'in our thinking about processes of change the speed at which the transformation takes place—i.e. its rate of change—often occupies a central place. Yet, the rate of change is a mathematical concept. It is not surprising therefore that, whenever continuity of historical events is spoken of, the mathematical concept of continuity clearly or intuitively is likely to be present in the speaker's mind' (Gershenkron 1968: 196). More recently, Bonneuil (2010) has restated the methodological rootedness of this interpretative logic, the adequacy of which does not concern us here. What is more relevant is that this same heuristic approach is what Marx intends when he investigates, for example, the contradictory pressure of capital on the cost of labor: 'if the labourers could live on air they could not be bought at any price. The zero of their cost is therefore a limit in a mathematical sense, always beyond reach, although we can always approximate more and more nearly to it. The constant tendency of capital is to force the cost of labour back towards this zero.' (Marx 1906 [1867]: 657) For Marx, the notion of limit is inte-

gral to the epistemological horizon of tendency connoted as continuity in time. Continuity, Marx thought, is complementary with discontinuity as their interplay expresses the dynamic of the capitalist crisis intrinsic in the contradictory logic of capital: continuity and discontinuity pertain to the logic according to which the development of the inner potential of a process is inscribed in the premises of the process itself. Not only because both 'tendency-as-continuity' and 'potential-into-actual' are consistent with the Aristotelian frame of Marxian categories of thought. Rather, because Marx, and Wallerstein after him, conceives the problem of the limits of capital explicitly as the mathematical notion that expresses the elusive dimension of the quantification of social reality.

Marx's acquaintance with mathematics in his late writings of the period 1878–1882 about infinitesimal calculus confirms the historicism that permeates his understanding of the capitalist mode of production. In *Capital*, continuity as logic of historical thinking is taken for granted as it incorporates discontinuity in the form of crisis of accumulation. In Marx's *Mathematical Manuscripts*, continuity/discontinuity constitutes the epistemological foundation of the laws of the 'real movement of history' as perennial motion between the infinitesimal, that is the totalizing tendency toward commodification of everything, and the infinite, that is the totalizing tendency towards the endless accumulation of capital. Marx recognizes that the most important epistemological innovation introduced by the infinitesimal calculus consists in the possibility of conceptualizing not simply the quantitative variation of a magnitude in time, rather the rate of variation of a magnitude through time (Kennedy 1977; Marx 1983 [1968]; Ponzio 2005; Smolinski 1973; Struik 1948). In this regard, Lombardo Radice affirms that 'Marx gave so much attention and so much effort in the last years of his life to the foundations of differential calculus because he found in it a decisive argument against a metaphysical interpretation of the dialectical law of the negation of the negation' (Radice 1972: 73). Carchedi echoes Radice when he clarifies that through the critique of differential calculus and the development of his own method of differentiation, 'the focus is on the ontological nature of the infinitesimal. In studying differential calculus Marx was seeking

support for, and material for the further development of, his method of social analysis.' (Carchedi 2008: 217)

To provide a more solid basis for the method he had expounded in *Capital*, and aware of his own limited mastery of the foundations on which he had built his theoretical architecture, Marx ends up criticizing Leibniz and Newton for not having investigated the algebraic foundation of infinitesimal calculus (Gerdes 1985; Marx 1983 [1968]). The philosophical content of the differential quotient in the light of Hegel's notion of movement as 'existing contradiction' can be expressed in the simple classical physical terms of motion as the two positions x and x_1 (or x and x + dx) of a moving body in time (Swing and Rella 2006). The second position x_1 is successive in time and relates to the first x because it is nothing but the continuous change of the same magnitude from the first position x to the second x_1, where dx expresses the distance travelled. Thus, these two spatial determinations are, in the more general sense of 'states', quantitatively different but formally 'equal', that is, comparable.[9] Yet, as Swing and Rella point out, here lies a contradiction: is this 'changing state' a contradiction in terms?

How can the same entity equal itself and at the same time exist in two distinct statuses? To answer this question, Marx moves from finding Newton and Leibniz both guilty of having conceived the approximation of a variable to its limit as if, by reaching an infinitesimally small quantity close to zero, this quantity could be simply made to disappear from the equations of the derivative. For Marx, it is erroneous to conceive an infinitesimally small quantity as ontologically irrelevant. It will not escape the careful reader of *Capital* that, in the process, Marx is correcting his own understanding of infinitesimals as he had expressed it when he maintained that 'in the flood of production all the capital originally advanced becomes a vanishing quantity (*magnitudo evanescens*, in the mathematical sense)' (Marx 1906 [1867]: 644). And in fact, by investigating and developing a method of derivation, Marx attempts to ground his notion of

[9] See an excerpt in English from Swing and Rella (2006) at http://ricardo.ecn.wfu.edu/~cottrell/OPE/archive/0604/0022.html, date accessed 26 July 2015.

limits to capital on what he thinks of as the most solid epistemological basis available: infinitesimal calculus.

Carchedi clearly explains Marx's method of derivation: 'x_0 is first increased to x_1 (i.e., by dx) and then x_1 is reduced to x_0 so that x_1 does not disappear but is reduced to its minimum limit value, x_0. Thus, dx, rather than being *at the same time zero and not zero*, is *first* a real number and *then* is posited equal to zero' (Carchedi 2008: 23). If one replaces the general symbol of the variable magnitude x with M (capital) and shifts from infinitesimal (dx) to infinite (Δx) in the Marxian formula of accumulation M-C-M′, ΔM corresponds to M that has been increased by a quantity given by M′-M. Carchedi asserts that this is the theorization of a temporal, real process. What does Carchedi mean by 'the theorization of a real process'? In order to grasp the relation between Marx's infinitesimal calculus and Marx's own understanding of the historical articulation of the logic of capital, Carchedi (2008: 423) goes deeper into the differences between Newton and Leibniz, on the one hand, and Marx on the other hand. For the former, 'motion is the result of a (small) quantity (dx) added to x, which is a constant', while for Marx, the increase or decrease in the variable magnitude does not come from something external to the variable itself, rather from the variable itself, so that 'its growth is not separated from it'. According to Marx, 'x_0 can grow to x_1 only because x + dx is inherent in x as one of its potentialities'. When applied to Marx's formula M-C-M′, this acquaintance with mathematical continuous functions restates that accumulation corresponds to the process of self-valorization of capital through time and space, and the variation of x is the mathematical expression of the variation of capital ΔM.

The coalescence of historicism and the underlying epistemological assumption of the necessity to think of social phenomena in terms of continuity/discontinuity is the result of the ontological hypostatization of redundancy produced by the reciprocal interpellation of the standpoint of the European colonial expansion, on the one hand, and the mathematical knowledge Marx mastered within that coeval horizon, on the other hand. Foucault qualifies this coalescence as the 'epistemic of a period'. That is 'not the sum of its knowledge, nor

the general style of its research, but the deviation, the distances, the oppositions, the differences, the relations of its multiple scientific discourses: the epistemic is not a sort of grand underlying theory, it is a space of dispersion, it is an open field of relationships and no doubt indefinitely describable … it is a simultaneous play of specific remanences' (Foucault 1972: 228). Within this dispersed scientific frame, where new trends in natural science and mathematics that he was not aware of emerging, Marx conceived the problem of the limits of capital as a mathematical notion. And while physics, biology and chemistry all provided the metaphorical apparatus for *Capital,* as well as algebra the applicative frame of Marx's economic modeling, the mathematical understanding of limits provides neither a mere suggestive imagery of visualization nor, on the contrary, a mere device of calculation and algebraic computation and modeling; rather a privileged language of thought to conceive the accumulation of capital as a tendency describing a historical continuity that expresses, at the phenomenal level, the hidden nature of capital as social relation (McQuarie 1978; Mirowski 1989; Simpson 2012; Wardell 1979). Given this coalescence and the limits it imposes on contemporary understandings of capitalism, the question arises: it possible to rethink the logic of capital outside these Eurocentric assumptions?

The axiom of EAC, the colonial as well as mathematical underpinnings of which I have attempted to disarticulate, can be terminologically and conceptually displaced through a derivative process of concept formation that leads to the elaboration of the notion of *discrete destruction of use-value*. In a nutshell, this implies a threefold shift: the continuity/discontinuity involved in the connotation of endlessness associated with accumulation, is questioned through the adoption of a 'discrete' space-time frame. Moreover, accumulation shows its opposite, that is, 'destruction', once it is deprived of the creative dimension automatically associated with it. Finally, when the colonial difference is introduced, the theoretical focus can be shifted from value *per se* to the threshold, constantly formed and reformed, that separates and connects the transformation of use-values into exchange-value.

The Discrete

Charchedi mobilizes his interpretation of the *Mathematical Manuscripts* to radicalize the divergences between social theorists in the debate over the so-called transformation problem. Simply put, it is the problem of how value gets transformed into prices, and the way the market intervenes in regulating prices across the different productive sectors.[10] Carchedi sides with what he refers to as a dynamic model of capitalism based on the idea that capitalism is in perennial crisis and remains in non-equilibrium through the succession of economic cycles. He opposes any static interpretative model of capitalist development based on the idea that it is possible to conceive the logic of capital in its simultaneous dimension, thus tending to the condition of equilibrium. From these two opposed logics, two space-time articulations are inferable. The former implies that the development of capitalism through time englobed the rest of the world, even though the transition to capitalism was due, since its onset, to global networks of connection and exchange. The latter implies that the global dimension of capitalism has to be thought of as a logical premise, rather than as the historical by-product of long-term/large-scale processes of social change. The former view is diffusionist, as it assumes the centrality of the European origins of capitalism. The latter is 'globocentric' as it assumes the theoretical existence of an external perspective over the planetary dimension of capitalism that would enable a hypothetical observer to conceive both the simultaneity and the globality of capitalism. When the terms of the question are put in this way, there is nothing to choose between these two equally problematic views, which I have analyzed in Chap. 6. Things change radically, however, if one considers the logic of capital in a discrete space-time setting.

Thinking in terms of discrete time suspends the necessity of continuity that is associated with historicism for analytical purposes. Deepankar Basu (2011) has provided a seminal understanding of Marx's circuit of capital in a discrete time setting. Basu proposes an interpretative schema of the logic of capital aimed at producing an alternative to Foley's explanation

[10] For an overview of the vast debate about the different outcomes of the controversy regarding the so-called transformation problem, see Freeman and Carchedi (1996).

of the dynamic of accumulation, in a continuous time-frame. The difference between a discrete and a continuous space-time can be thought of as the possibility of neither conceiving accumulation in terms of a single instance diachronically evolving through time (and space) *ad infinitum,* nor of limiting it to the ahistorical abstraction of instantaneous simultaneity (of a spatial totality). Rather, the logic of capital in a discrete space-time frame is conceivable in terms of dispersed and scattered coexisting multiple finite spacetime lags. In order to conceptualize the spacetime dimension associable with Basu's discrete time setting, I suggest constructing it as a discrete topological space. The attribution of 'topological' connotes a non-metric space, that is, a space where the connection between objects and events is conceivable regardless of the notion of distance. Thus, in a discrete space-time frame, the logic of capital is theorized as analyzable regardless of any necessary relation of causal determination with previous time or contiguous space. It means disentangling causality from space-time contiguity. It follows that the destructive aspects of the logic of capital are not necessarily tied to their pre-existing conditions of operation and space-time fixes. Capitalism does not look like the materialization through space and time of a unitary social logic endowed with the granitic coherence of a Moloch—a Moloch endlessly accumulating and always consistent with a univocal rationality creating its own history. Rather, a discrete space-time setting allows for the conceptualization of an equally relevant concrete abstraction conceiving the non-linear, scattered, distributed, even random processes of extraction, exploitation, and destruction.

In *Capital*, Marx provides hints of the discrete space-time dimension of the logic of capital that does not necessarily imply the connotation of endlessness that is associated with accumulation. He argues that accumulation in the capitalist mode of production does not infringe existing laws of commodities production and exchange, but actually derives from their application to the appropriation of commodified labor. 'It does not alter matters any, if simple reproduction is replaced by reproduction on an enlarged scale, by accumulation.' (Marx 1906 [1867]: 642) Marx draws from Sismondi the logic of reasoning by each 'isolated transaction', where, in a finite period of time, the worker acquires a new title to their portion of the total wealth every time they sell their labor, while 'the

others (the capitalists) have already acquired, by work done originally, a permanent right to their share' (Sismondi quoted in Marx 1906 [1867]: 642). The crucial *caveat* Marx adds is that 'the matter assumes an entirely different aspect when we look upon capitalist production in the uninterrupted flow of its reproduction, and when we consider the capitalist class as a whole and its antagonist, the working class, instead of the individual capitalist and the individual labourer' (Marx 1906 [1867]: 642). This passage eloquently expresses the interplay of two axioms of the endless accumulation of capital and capital as social relation. Thus, it is the 'uninterrupted flow', expressing the continuity in time and space of the endless accumulation of capital, that comes to be suspended in a discrete space-time frame, while, at the same time, the definition of capital as a social relation can be held firm: simply put, a constitutive social relation between those who possess the means of production and those who do not. Marx continues to explain that the relations between buyers and sellers (of labor) 'cease on the day when the term stipulated in the contract they concluded expires. If the transaction is repeated, it is repeated as the result of a new agreement which has nothing to do with the previous one and which only by chance brings the same seller together again with the same buyer.' Then Marx generalizes this condition by maintaining that 'each act of exchange by itself, apart from any connection with the act of exchange preceding it and that following it. … However long a series of periodical reproductions and preceding accumulations the capital functioning to-day may have passed through, it always preserves its original virginity' (Marx 1906 [1867]: 643).

As far as capital as social relation is concerned, the logic of capital is made up essentially of both these two articulations: the former is the discrete space-time of the logic of capital experienced on the labor side of the fundamental contradiction between labor and capital, and the latter is continuity/discontinuity of the logic of accumulation on the side of capitalists. Yet, it would be erroneous to associate the notion of discrete space-time only with one side of capital as social relation. Rather, it is intimately connected with the structure of power in capitalist society. The discrete space-time is coterminous with the discretionality of capitalist command, and is integral to the continuity given to capital as social relation by the reiterated enactment of the social relation of production.

As Marx suggests when he follows up with the constitutive nexus between commodities production and accumulation, 'so long as the laws of exchange are observed in every single act of exchange the mode of appropriation can be completely revolutionized without in any way affecting the property rights which correspond to commodity production'. This is because 'these same rights remain in force both at the outset, when the product belongs to its producer, who, exchanging equivalent for equivalent, can enrich himself only by his own labour, and also in the period of capitalism, when social wealth becomes to an ever-increasing degree the property of those who are in a position to appropriate continually and ever afresh the unpaid labour of others' (Marx 1906 [1867]: 643).

The discrete space-time of the logic of capital is largely under-theorized, mainly for two epistemological reasons and the social history from which they are derived. First, because the discrete was outside the horizon of formalization, rather than comprehension, of Marx, a horizon that was developed instead within the scientific frame of continuity/discontinuity, as well as remaining beyond the horizon of the Marx-inspired social theories that followed. Second, because the heuristic questions that emerge once coloniality is thought of as coextensive with modernity, conversely remain relegated to the supposedly original moment of the emergence of the capitalist mode of production, in a diffusionist and historicist mindset.

Destruction

Harvey maintains that the most depredatory, violent and aggressive forms of accumulation are neither the heritage of the first 'stages' of capitalism, nor the articulations of peripheral capitalism, or residual non-efficient mechanisms of exploitation. Rather, they are immanent, ever-present, essential aspects of the entire logic of the accumulation of capital. Accumulation by dispossession is central to the management of crisis, when capital needs to reorganize its space-time articulation, materialized into what Harvey names spatio-temporal 'fix'. 'Some social expenditures (such as public education or a health-care system) also become territorialized and rendered geographically immobile through state commitments.

The spatio-temporal "fix", on the other hand, is a metaphor for a particular kind of solution to capitalist crises through temporal deferral and geographical expansion.' (Harvey 2003: 115) The dynamic aspect of the spatial fix is analyzed in terms of the moment of the spatial and temporal reconfiguration of the condition of accumulation. 'The vast quantities of capital fixed in place act as a drag upon the capacity to realize a spatial fix elsewhere. If capital does move out, then it leaves behind a trail of devastation and devaluation; the de-industrializations experienced in the heartlands of capitalism in the 1970s and 1980s are cases in point. If capital does not or cannot move then over-accumulated capital stands to be devalued directly through the onset of a deflationary recession or depression.' (Harvey 2003: 116) Harvey spatializes the logic of creative destruction, where discontinuity represented by crisis is linked to the continuity of the alleged normal functioning of capitalism through several, and overlapping, schemes of dependence.

Yet, by introducing the colonial difference, both historically and epistemologically, the notion of crisis changes in emphasis. Coloniality conveys two major insights when deployed to understand global capitalism. The first consists in the geopolitical understanding of knowledge production, applied to the theories of capitalism: when and where capitalism has been observed working according to its presumed prototypical form— Europe and the West—coincided with the *locus* of enunciation of the theories of capitalism, which remain trapped in the postmodern presumption that the West is both the place where the crisis of capitalism shows its defining features, and consequently, the intellectual privileged space where capitalism can be properly and universally understood. No characterizations of crisis as pertaining to late, advanced, post-industrial, cognitive capitalism, can escape this Eurocentric presumption. This parochialism is nothing but a diminished reality of the logic of capital. Second, coloniality conceptualizes a multilayered matrix of colonial power that translates anthropological difference into naturalized social hierarchies; it expresses the classist, racialized, gendered biases of the social stratification in capitalism. It follows that there is a vast, heterogeneous, and reconfigurable articulation of social diversity made up of transient tropes from which the logic of capital can be understood and capitalist crisis experienced, thus theorized.

How does the notion of capitalist crisis impact possible alternative understandings of capitalist destruction? Let's tackle this point first by addressing the dilemma Marx leaves open in *Capital*, concerning the role of unproductive consumption, then by rethinking the way unproductive consumption is extended to include the role of war in capitalism provided by twentieth-century theories of imperialism.

Marx was aware that the circuit of the accumulation of capital could not be completed and generate profit without the inefficiency represented by unproductive consumption, that is, consumption that is oriented neither towards investment for profit by capitalists, nor towards subsistence for workers. While the schema of the realization of capital presupposed the abstraction of a society made up only of two antagonist classes, with the owners of the means of production orienting their consumption to investment, while the workers consumed for their subsistence, capitalism worked by destroying part of the value generated through unproductive consumption. Marx justified this circumstance by introducing a temporal dimension that alluded to a status of exception he could not avoid taking into consideration, as he conceded that this situation was the 'current state of things'. Yet, this circumstance is not eliminable; it is not a pathologic transient configuration, rather an ever-present precondition of accumulation. By the 1920s, in the wake of war and financial breakdowns, theories of imperialism attempted to provide a Marxist understanding of imperialism and connect it to the explanation of capitalism's tendencies to crisis. In this context, Henryk Grossman (1992 [1929]) extended the understanding of unproductive consumption as a category, and provided crucial insights into the role it plays in capitalism. Grossman considered unproductive consumption not simply as the consumption of luxury goods investigated by Veblen in terms of conspicuous consumption. Its significance is assessed in the context of Marx's reproduction schemes. As Callinicos recalls, Grossman wanted to show that 'capitalism has an immanent tendency to breakdown because the investment required by a rising organic composition of capital in an expanding economy would eventually consume all the surplus-value, leaving nothing for the personal consumption of the capitalists' (Callinicos 2009: 60). The heuristic horizon of the demise of capitalism through irreversible crisis that Grossman shared with his contemporaries motivated him to

analyze those counter-tendencies that were able to delay the collapse of capitalism, the observable effects of which were the slowing down of the rate of accumulation, and the devaluation and destruction of accumulated value. Grossmann reached two conclusions. The first is that 'parasitism becomes a method of prolonging the life of capitalism'. The second, which provided the foundations for later theories of the 'permanent war economy', is that 'military expenditure is a form of unproductive consumption, inasmuch as the goods and services it purchases are not used directly or indirectly to produce new commodities. Hence, by diverting surplus-value from investment in the production of means of production or means of consumption and thereby reducing the rate of accumulation, it postpones the breakdown of capitalism.' (Callinicos 2009: 61)

It was against their ability to accurately predict the when and how of the demise of capitalism, that the analytical adequacy of theories of capitalist crisis have been judged. Of the variants that consider the inner logic of historical capitalism as ultimately self-destroying in the long run or the theories that regard it as self-perpetuating in the long run, neither can escape a certain degree of both historicism and under-determination. They are historicist since they concede the ability of capitalism as an entity to reproduce itself through time, even though this time can largely vary in extent. They are under-determined in the face of the indeterminacy intrinsic in the acceptable evidence of the questions they ask: as far as capitalism is concerned, its demise can only be predicted rather than experienced, thus their status of validity oscillates between the individuation of patterns of continuity (including discontinuity), and the prophetic imagined horizons of demise or perpetuation, starting from the presumption that a correct diagnosis of the limits of these patterns can show the intrinsic mechanism of functioning of capitalism. This under-determination imposes a finalist interpretation of the transformations of capitalism, and it lies behind assertions such as 'crisis serves the purposes of re-establishing profitability', or 'structural crisis marks the transition to a different social organization and historical formation'. Yet, if one suspends the cogency of this finalistic horizon, the destructiveness that belongs to the logic of capital can be reconstructed with a relative theoretical autonomy from the overwhelming presence of the valorization of capital reproduced by most of the theories of capitalist crisis.

To the extent that explanatory logic of the theories of capitalist crisis is restricted to the inner logic of capital accumulation and its historical outcomes, their heuristic power is reduced. They are unable to investigate destruction outside the horizon of accumulation, that is, dissociated from devaluation.

War is exemplificative of this limited theoretical understanding. To the extent that war is conceived as unproductive consumption useful for maintaining a certain degree of aggregated demand, it remains a strategy of devaluation on the same level as other strategies of compensating market inefficiency. To the extent, conversely, that war is fully addressed as essential to the completion of the circuit of accumulation of capital, and thus integral to the logic of capital, destruction becomes fully conceivable as an end in itself. Destruction *per se* is the under-theorized space of the logic of capital. The reverse side of accumulation, even of accumulation by dispossession, becomes visible—not the side that is limited to the movement of accumulation that serves to integrate the process of value extraction, or reintegrates the process of accumulation as self-valorization of capital; but the side that shows the destructive nature of any process of valorization of not yet valorized use-values. To 'Accumulation for accumulation's sake, production for production's sake', there is a corresponding 'destruction for destruction's sake'!

Of Use-Value

The process of transformation of use-value into exchange-value implied in the axiom of capital as social relation can be thus reformulated by displacing from the center of the analysis the self-valorization of capital operating once use-values are transformed into exchange-value, and making room for the conceptualization of the reiterative dimension of the alienation of use-value in the capitalist form of value. What historicism and diffusionism had relegated to the 'not yet' or the 'no more' of capitalist development, thus becomes the possible generative theoretical *locus* for a different theory of capitalism.

While analytically, Marx's theory of value is constructed within the research tradition of political economy, conceptually it is conceived

entirely in terms of the problematic of how it is possible to dialectically move from quality, to quantity, to measure (Yanovaskaya and Kol'man 1931; Kol'man 1971 [1931a], 1971 [1931b]). Measure, that is, the general category to which the concept of value belongs, corresponds to the synthetic moment in the dialectics of the 'real movement' that is necessary in order for commodification to occur under capitalist conditions (Damsma 2011). This move is quantification. Value in general is the expression of the dialectics between the quantity (thesis) on the one hand, whose ontological priority in Marx has its roots in the heritage of the philosophical presumption of the unity of being, and, on the other hand, quality, that is, the non-quantifiable *ex definitione* (antithesis). In his very last writing of economic content, that is, the *Notes on Adolph Wagner's Lehrbuch der politischen Ökonomie* (*Second Edition*), the drafting of which coincides with the drafting of the *Mathematical Manuscripts* in 1880, Marx contests Wagner's presentation of *Capital*: 'I do not say "the common social substance of exchange-value" is "labour", and as I deal with the form of value, i.e. the development of exchange-value, at some length in a separate section it would be curious if I were to reduce this "form" to a common social substance, "labour"' (Marx quoted in Carver 1996: 230).

As Besnier understood, Marx's last notes on the commodity-form are significant to the extent that they provide a conceptual and terminological clarification of his theory of the value-form. Form, Marx maintains, is connoted both quantitatively and qualitatively (Marx 1972a: 186). Hans G. Ehrbar correctly points out that Marx 'shows that the form of value develops, i.e., has its own dynamic. This means it cannot be reduced to its substance. … The thing that can be reduced to a common social substance are the commodities as values. The commodities have exchange-value because they can be reduced to a common substance, but the exchange-value itself cannot be reduced to a common substance'. (Ehrbar 2010: 20) In fact, Marx advocates:

> I immediately proceed to show that in this duality of the commodity there presents itself the dual *character* of the *labour* whose product it is: of *useful* labour, i.e. the concrete modes of the labours which create use-values, and of abstract *labour*, of *labour as expenditure of labour power*, regardless of the

> 'useful' way in which it is expended (on which the presentation of the production process later depends); that in the development of the *value form of the commodity*, in the final instance its money form, and thus of *money*, the *value of* a commodity presents itself in the *use-value* of the other commodity, i.e. in its natural form; that *surplus-value* itself is derived from a 'specific' *use-value of labour power* belonging to it exclusively; that, in other words, for me use-value plays an important part quite different from its part in economics hitherto, but *nota bene* it still only comes under consideration when such a consideration stems from the analysis with regard to economic formations, not from arguing hither and thither about the concepts or words 'use-value' and 'value'. (Marx quoted in Carver 1996: 233)

The quantification of a magnitude is thus the first and the last moment of the dialectical movement through the non-quantifiable. Yet, the outset and the end of the process of quantification are not equivalent. Quantification of use-values as precondition for commodification is never a zero-sum game, because it implies a transformation that, however conceived, means that the status reached by the variable magnitude considered cannot coincide in any case with the status the variable occupied at the beginning of the movement. Even if it can assume the same numeric value, the conceptual and space-time lag separating the two moments implies the non-coincidence of what, in dialectical terms, are conceived as the thesis and the synthesis. In the *Mathematical Manuscripts*, this aspect is at the core of the problematic of the differential calculus, as we have seen. For Marx, in the process of derivation of a function, the fraction 0/0 is no longer a number. It is the symbolic representation of the process of derivation of y/x tending to 0/0, which expresses a determined, infinitesimal limit status of the general function $y=\int(x)$ (Marx 1983). With x the independent variable, and y the dependent variable, the zero in the denominator and the zero in the numerator are conceptually distinguished even though numerically equivalent. Between the two there exists a qualitative, antithetical difference, which is intrinsically unquantifiable.

Capitalism presupposes a determined form of quantification that separates use-value from their social substance and transforms it in

exchangeable values. The problem, in fact, is not quantification *per se*. Harvey remarks that use-value is determined not only qualitatively but also quantitatively. Different use-value have different measures appropriate to their physical characteristics; whatever its social form may be, wealth always consists of use-values, which in the first instance are not affected by this form (Harvey 1982: 5–9). The problem is rather the alienating dimension of the transformation of use-values into exchange-value in general, which, although common to all use-values, is analyzed in detail by Marx when he comes to define labor as use-value alienated from worker. The worker 'receives the value of his commodity, whose use-value—labor—is thereby alienated to the buyer' (Marx 1906 [1867]: 640). Alienation here means passing control over one's use-value, that is, the most essential of all human functions, to another human being. This reiterative dynamic expresses the essence of the power of capital as social relation.

Whereas alienation, as well as dispossession, alludes to the possibility of re-appropriating what has been previously alienated, or dispossessed, the destruction of use-value affirms the necessity of pre-emptively opposing the reiteration of commodification, on the basis of the awareness that any re-appropriation would imply the acceptance of irrevocable loss. The many practices and the different agendas of social movements against land grabbing, or global and local anti-eviction campaigns, to name some significant examples, feed this emphasis on use-values as analytical priority. Every single time that alienation of use-values occurs under capitalist conditions necessary for commodification, an unquantifiable value is destroyed, without any possibility of regenerative counter-movement.

'Degenerative' Capitalism

When the analytical focus shifts from the self-valorization of capital through accumulation to the reiterative process of the translation of use-values into exchange-value through commodification, both destruction and quantification appear to be at the same time tied to accumulation on the side of exchange-value, and to irrevocable loss on the side of

use-values. This ambivalence can be understood as the decolonization of Marx's theory of value through the epistemological by-product of Du Bois' notion of color line. For Du Bois 'the social sciences from the beginning were deliberately used as instruments to prove the inferiority of the majority of the people of the world, who were being used as slaves for the comfort and culture of the masters' (1944: 453), legitimating the 'deliberate and organized action in the front where race fiction is being used to prolong economic inequality and injustice in the world' (1944: 454). The color line thus creates different perspectival views about the logic of capital. If the insights of the color line are extended to the systematic conceptualization of the heterogeneous lines of demarcation that make concrete the hierarchical articulation of the colonial matrix of power, including, but not limited to class, race and gender, then as Mignolo maintains, while the theoretical challenge of the twentieth century was the problem of the color line Du Bois articulated, the theoretical challenge of the twenty-first century is the problem of the 'epistemic line'.

A different theory of capitalism is conceivable in the wake of the emergence of an under-theorized space that is not irreconcilable with existing theories of global capitalism, but provides a conceptual foundation for a different theoretical and political strategy: axiomatizing the undoable, destructive aspects of capitalism rather than fostering the Moloch of capital accumulation as overwhelming social logic: a theory that aspires to look at the lived and thought social and historical realms of the nonlinear, scattered, distributed processes of discrete destruction of use-values. Along this path, the detrimental dimensions of the logic of capital can be thought of as the crucial theoretical *explananda*, while the axiom of the discrete destruction of use-values, together with the axiom of capital as social relation, is well positioned to occupy the space of *explanans*. The way would thus be paved for the elaboration of a theory of 'degenerative capitalism'. Degeneration does not describe a tendency. Not a history necessarily inferred by the premises of any historical ontogenesis, as such, oriented towards any final stage of historical, social, or human development. Rather the probable, ever-possible, yet always revocable, condition produced by the cumulative effects of the discrete destruction of use-value.

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8

Conclusion: The Future *of* Social Theory

The relation between geopolitical and economic power, on the one hand, and the ability to impose or hegemonize concepts and narratives, on the other hand, is not easy to explain within any cause–effect, derivation or influence schema. Nonetheless, the fate of the system of knowledge about the world that has been able to naturalize the historical transitional dominance of the West is affected by ongoing transformations of world politics and of global social stratification. Compared to a few decades ago, not so many scholars would subscribe nowadays to the notion that modernity is a pure, original, superior European creation. Europe and the West alone are no longer the self-contained *locus* for the genesis of the modern. Modernity, which for more than two centuries has been the major ideological means of managing Western supremacy within the international system, is now the theoretical space of confrontation between many powers and different counter-powers seeking to establish who modernity belongs to, and what it is, was and will be. Wallerstein's endeavor to produce a social history of the epistemology of the social sciences, with its path-breaking insights as well as its limitations, grasps

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a central aspect of this story. Social theory is about the promise of understanding and predicting that it is able to show to power, where power is broadly conceived in multiple, hierarchical and shifting configurations. In other words, social theory as a whole cannot be oblivious to the fact that a consistent part of its historical legitimacy derives from the constitutive relation between the political and geopolitical dimensions of power produced by colonial expansion and what Abdel-Malek (1972) named the historical surplus-value. A historical surplus-value that the ruling groups located in the West have accumulated through cultural hegemony, as well as through violent, consensual, or fortuitous processes of appropriation of knowledge. A surplus-value whose accumulation has implied the destruction of a vast variety of cultures, epistemologies, cosmologies and practices. This surplus-value remains, together with some relative advantages in several sectors of the finance, military and hi-tech industries, a considerable reserve of power to be re-invested in order to preserve some of the privileges previously associated with global domination and colonial rule. Yet, as geopolitics change and surplus-value is transferred, redistributed, destroyed and dispersed, social theory is faced with new needs, unexpected questions and new promises to make.

Theorists like William Petty had anticipated the promise of the reliable analysis, control and prediction connected in the nineteenth century with the formation of the modern state. What had changed between Petty's *Political Medicine for Ireland* (1672) and Henri de Saint Simon's *Le Nouveau Christianisme* (1825) is the audience. The promise of social science has turned into an ambivalent construction: it speaks both to the rulers and to the ruled. For rulers, it adjures them at least to preserve their privileged status from any possible risk of scale-down, by ordering and shaping the turmoil of social change and any who appear to question those privileges; meanwhile, the combination of disproportional distribution of wealth with technological hubris amplifies *ad libitum* the ancestral gamut of likely material desires. As far as the ruled are concerned, it adjures equal wellbeing and empowerment regardless of their ascribed status; but two ways are anticipated: either they consciously accept the rules or they try to change them. In both cases, the horizon of the ruled remains designated by a chronosophy which postpones the desired improvements

to the days to come. At a glance, the ruled seem to have far more with which to reproach social theory.

What does the future of social theory look like? To approach this question, the 'modernity' of social science has to be unthought, and decolonized, once again, from the presumption that its ontogenesis is conceivable in terms of a rupture in time and a difference in space: a march away from prejudices towards progress. As Trouillot (1995) suggests, social theory can be understood from a reverse anthropological perspective. This perspective consists in rediscovering the otherness at the heart of the self of modernity; the exotic inside the West; the savage within civilization. Benetta (1978) disclosed an epistmeological path for social sciences that has remained largely unexplored. She suggested that Natural science and social sciences, taken together, have performed some of the functions that are homologous to a set of social activities which ruling elites have always considered politically crucial both to orient the process of decision making and to legitimate their power: divination. That is, making accurate predictions. To a contiguous, yet not identical imagery, other aspirations belonged. This imagery that was the 'other' than divination, Couliano (1987) has suggested, was magic, and some of those aspirations have been met by modern technology: instantaneous long-distance communication, human flight or space travel. But the task of making accurate predictions was epistemologically different from magic, since magic wanted the straightforward modification of reality, while divination consisted in a set of inductive protocols that, if correctly applied through certain standards, enabled anticipations about the future that might inform action in the present. To 'inform' fully expresses the double meaning: both providing information and acting as a formative principle for action.

This circularity between knowledge and action exists in *theory*. The pre-Socratic etymology of 'theory' tells the story of the θεΩρός: delegates chosen from among the most representative men of the city to assist at celebrations in cities other than theirs. But, most of all, they were charged with the task of interrogating oracles about the future of their own community, in order for the polity to which they belonged to act in the present. For the father of Western philology, Isidor of Seville (sixth century AD), whose *Etyomologiae* remained basically unchallenged until the col-

lapse of late medieval *scientia*, astronomers, *idromances* (interpreters of dreams by analogy and opposition), *sortilegi* (who foresaw the future by randomly opening and reading the Scriptures), *augures* and *auspices* (who charted birds' flight), astrologists, numerologists, cosmologists and mathematicians were all charged with the same task, albeit using different techniques. Outside the Euro-tropes of modernity and progress, as Armitage and Subrahmanyam (2010) define them, in every human societal formation that has left traces of its existence since the transition to the Neolithic, the social legitimacy of 'theory' has consisted in the recognition of the ability of its practitioners to act as membranes between the presumed, constructed, imagined or contrived truth and their communities. Their task is to obtain accurate knowledge and offer valuable predictions about relevant phenomena, whether knowledge, recognition or relevance, socially constructed with a wide degree of historically determined discretionality.

The promise of social theory was to reoccupy part of the space left vacant by the abandonment of divination in the realm of knowledge for political purposes. The historical reasons for this abandonment were not merely internal to the progressive development of knowledge through secularization; rather they were conjunctural, political, ideological and geopolitical. Nor can these reasons be explained exclusively in terms of the pressure for continuous technological advances imposed by capitalist accumulatio. The realm that social theory came to reoccupy was complementary to, rather than derivative of, the realm of natural sciences after the collapse of late medieval *scientia*. Social science has mimicked natural sciences to the extent that it transposed the burden of prediction onto collective, thus more controllable procedures, in the hope of containing arbitrariness through method. At the same time, social theory inherited from divination the claim of totalizing the activity of interpretation and prediction in all human affairs, from the individual unconscious to society as a whole. The political economy of behavioral big data is the latest epigone of this progeny. Social theory is equally distant both from being universal and from being understandable exclusively within 'modern' categories of its own. Its ways of establishing logical causal relations between present, past and future acquired their adequacy within a specific historical configuration of power, the dominant culture of which, at once both

liberal and Marxist, boasts of a progressive emancipative rationality as its distinctive civilizational and/or epochal feature. Modernity is the anthropological horizon set by this culture.

Robert K. Merton's notion of 'self-fulfilling prophecy' exemplifies this circularity between beliefs and the power to inform, far beyond Merton's conscious intentions; that is, despite the fact that Merton's ability to fully decode the epiphanic nature of his own intuition was mortified by the conformist sociological frame wherein he enunciated it. In the aftermath of the mid-twentieth-century Japanese nuclear holocaust, Merton meant to oppose objective analysis to self-fulfilling prophecy in order to rescue modern science from disruptive moral accusations and, simultaneously, to distinguish misleading conjectures from what the science of society had to be. It was clear to him that the fate of social science was anchored to the fate of natural science. But the research tradition he inaugurated has proved effective precisely to the extent that he sanctioned the edges of objectivity. Positivisms, Steinmetz (2005) reconstructs, have been confuted on their own premises, and their hopes of distinguishing between certainty and arbitrariness, norm and explanation, description and prescription, interpretation and performance became chimeras. Merton's prophecy as a notion has outlived Merton's sociology as a paradigm because of its inherent promiscuity. 'Prophecy' sounds dissonant when pronounced within social theory. Yet, the more dissonance is propagated, the louder the cacophony of the Western genealogy of reason is, and cacophony becomes the concrete space where other knowledge and rationalities resonate. What kind of prophecy is desirable to inform the present, belongs in the realm of politics.

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Index

G. Ascione, *Science and the Decolonization of Social Theory*,
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