



RETHINKING CURRENT SOCIAL SCIENCES: THE CASE OF HISTORICAL DISCOURSES IN THE HISTORY OF MODERNITY*

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"World-systems analysis intends to be a critique of nineteenth century social sciences..."

Immanuel Wallerstein – *Unthinking Social Science* (1991)

Since 1968, it has been apparent that the entire "system of branches of knowledge" regarding the social domain, which dated from 1870 to 1968, has entered into a total and irreversible crisis. Established in the last third of the nineteenth century, and having been deployed during the first half of the twentieth century, this particular "episteme" regarding the social domain—which conceived the latter as a sum or aggregate of spaces, segmented, distinct and even autonomous among one another; spaces that in turn corresponded to the different and equally autonomous social sciences or disciplines—was progressively questioned. It finally began showing its general epistemological limits, permanently entering into an insurmountable crisis period as a result of the impacts of the 1968 cultural revolution.¹

The general crisis of the system of social knowledge has manifested itself during the last thirty years in two ways. First, via the proliferation

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and multiplication of the *limited* projects to defend and promote a “multi,” “pluri,” “trans,” or “inter” disciplinarity within which, however, the core itself is left untouched regarding the division of social knowledge into “disciplines.” This is the foundation that should really be challenged and radically demolished. Secondly, this crisis has been reflected in the unending methodological searches and debates into the roots and historical genesis of this system of social knowledge still predominant today.²

Moreover said searches and debates easily go beyond the ambit of such a “system of social knowledge.” They encompass as well the entire dominion of the global system of knowledge and sciences in general which, in turn, began likewise three decades ago to revise the general strategies of approximation towards the world, nature, or the society which initially constituted them, as well as the very organization of their successive differentiation and specifications, under the regime of what has been called the “two” and later, the “three” diverse cultures.³

It’s a global crisis of what we could call the “episteme” of knowledge in vogue during the last one hundred and thirty years, opening up space for debate regarding the necessary and urgent general reorganization of our current sciences and branches of learning. This debate then appears in the field of social sciences as a radical revision of the foundation constructed in the second half of the nineteenth century. By cross-sectioning and autonomizing the different spheres, activities or spaces of the human-social ambit, this foundation began attributing different parts of the cross-section to the then emergent or renewed sciences of history, psychology, economics, anthropology, political science, geography, law, sociology and linguistics, among several others.

In all other respects, the revision not only inquires into the very roots and process of such progressive segmentation of the human-social ambit into different autonomous “objects” that correspond to the different contemporary social sciences. It also inquires, even more clearly, into the general conditions and more profound causes that explain the emergence of this segmented and cross-sectioned social approach, within which our current reflection is still imprisoned.

To be sufficient, the radical debate and revision of the “non-explicit premises” of construction of those very same social sciences is obliged to go back to the examination of the most general relation which has existed and

exists among the social sciences and their ultimate general foundation. This would be the very project of capitalistic bourgeois modernity, the precise modernity which has unfolded for the last five centuries as the most general and determinant framework of the very activity of the social sciences, whose successive historical modalities we are trying to understand and explain.

In this fashion, and as a simple contribution to a collective effort which is still underway today, we would like to review how the different fundamental *historical discourses* of modernity itself were thus constituted and evolved. These discourses within history, which in the course of accompanying, and to some extent expressing, the vital curve of bourgeois modernity, also provide us with more general clues to comprehend the corresponding evolutionary curves of the system of social knowledge as well as of the system of knowledge and sciences in general. With this, we shall also have some new elements for rethinking current social sciences and the possible alternatives for their immediate future reorganization.

I.

There is extensive debate in pinpointing the birth of modernity.⁴ Following Marx’s conceptualization, we are able to date its origin in the sixteenth century by conceiving of capitalism as Braudel explained, as a “long sixteenth century” extending approximately from 1450 through 1650.⁵ It is precisely from this broad dissemination of the capitalistic manufacturing system which was occurring in Europe during this long sixteenth century, that the first characteristic forms of capitalist modes of production, as well as the different expressions of modern bourgeois society in the social, political and cultural arena, began to assert themselves as such.

Following this, the same holds for the construction of the different historical discourses. Therefore, if we should analyze the evolution of historiographic discourses from a more vast and long-lasting perspective, it shouldn’t be difficult to recognize the profound mutations they suffered precisely after this long sixteenth century. Hence, when the new *bourgeois* society and the new *bourgeois* culture began to assert themselves, the two main methods of the modern bourgeois historiographic discourse were also asserted. In the first place, the course of the different philosophies of history, which—from Vico and up to Hegel, going through Condorcet, Herder or Kant, among others—became one of the recurrent forms of discursive

approximation to historical facts. Secondly, the figure of the different empirical and objective histories, which—from Mabillon on through the positivism of Leopold von Ranke—were displayed constantly as the organizing schema of historiographic results.

These two variants of historical discourse are characteristic of the first long stage of modernity, which in turn express two of the central strokes that singularize capitalist bourgeois society, distinguishing it from all the previous historical stages in the long chain of pre-capitalistic worlds and societies. Compared to all “societies that precede the existence of the capitalistic era,” characterized as they were by the predominance of projects, histories or routes which were *local, specific and particular*, capitalism has, for the first time in human history, asserted an *abstract and homogenizing universalism* that, in a general sense, corresponds to the leveling and generic universalism asserted in the economic environment with the general validity of the principle of value and its self-reproduction.

Modern capitalist society is built around the objective of the incessant appreciation or assessment of value through the process of the accumulation of capital, making possible—and even necessary—an unlimited worldwide geographic expansion of this capitalist society.⁶ Because value is always compatible with any *possible* use value, its concrete deployment knows no limits and can well extend to the entire length and breadth of the world itself, embracing under its abstract and homogenizing logic all of the goods and practical values produced in the most diverse circumstances, and therefore, all civilizations and peoples. Thus, the construction of a true network of the modern world market is undoubtedly an historical conquest of capitalism, and with it, of the material bases of a genuine and organic *universalization* of human history itself.

This is a necessarily *antithetic* and *broken* universalization, in practice imposed with the intent of leveling and subjecting all countries to one unique particular civilizing project, undoubtedly the Western European one.⁷ This nevertheless asserts itself as a gigantic step forward compared with the localism and limitations of all the previous pre-capitalist histories, histories marked by particularities regarding religion, territory, personal dependence or hierarchy.

It is in this fashion, supported by this cosmopolitanism and universalism peculiar to capitalist modernity, that the different philosophies of his-

tory referred to above were constructed. In their attempt to encompass the entire set of previous local histories in one sole panorama, these philosophies, for the first time, conceived human history as *unity*, and therefore, as organic and true world history. This history of *humanity* should be viewed as a *process*, and thus a set of developments and efforts which, though local and diverse, are to a certain extent teleologically interconnected and marching (perhaps in an unconscious manner) toward increasingly complex figures. These are equally universalistic and recurrently abstract philosophies of history, which in an attempt to build global and coherent systems for the explanation of that universal voyage will establish different blueprints for the global itinerary of the human race. Such schemes are always organized around one or a few integrating global principles—i.e. the struggle between reason and obscurantism, the alienation and progressive reconciliation of the absolute idea, the constant struggle between the eternal principles of liberty and authoritarianism, the repeated recurrence of cycles that have already been experienced, etc.—the object of which is to give meaning to the previous pre-capitalist histories in terms of a particular idea of progress, conceived as linear and unidirectional, culminating in all cases with the assertion of modern bourgeois society.⁸

In the same manner that value encompasses the entire complex and diverse world of use values, and that capitalist world history was constructed by subjecting all of these histories of pre-capitalist nations, empires, races, groups and local societies to its own logic, in this same way, the different philosophies of history of the seventeenth, eighteenth and nineteenth centuries appear as efforts to organize all human histories previously experienced according to the specific historic project of modernity.

Therefore, if the ultimate foundation of the historiographic discourses displayed under these philosophies of history is the abstract universal character of the logic of value-capital in movement, then, on the contrary, the ultimate foundation of the second variant of the modern historic discursive strategies is constituted by one of the main consequences of the *concrete actualization* of such movement and action of capital: that of the limited domination of nature by means of the development and productive exploitation of the new *experimental science*. If it is true that value can be combined with use value in order to convert it into its own carrier, this potential could only be actualized were it able to overcome the terrible imprint of *natural scarcity* that

characterizes all pre-capitalist societies.⁹ Centered on the progressive appreciation of value, capitalist society necessarily presupposes that both producers and societies as a whole have already exceeded the level of elementary self-subsistence and internal consumption which is only made possible at a certain level of development of the productivity of social labor.

This level of productivity was only achieved once humans were able to *invert* the millennial and trans-secular domination of society by nature, that is once humans managed to domesticate the principal natural forces and compel them to serve instead as productive forces of the capital structure itself. The fundamental strategy and essential support lever of this domestication is precisely the new *experimental* science which also developed in a parallel fashion with the progressive growth and assertion of modernity.

This experimental science approached nature *instrumentally*,¹⁰ developing a species of knowledge guided strongly by essentially *practical* objectives, the existence of which had been known to the natural sciences for the previous four or five centuries. This knowledge attempts to construct factual truths based on experience and experimentation. By always submitting these truths to the *proof of the facts* it has built a specific notion of knowledge as something that is objective, empirical, verifiable, instrumental and useful in pragmatic and productive terms.

This new species of scientific knowledge has not only made possible the increasing domination of nature, but most importantly, it has emancipated the social realm from its subjugation to the natural environment. As Marx explained, bourgeois society is the first in human history in which the *social and historical* element dominates the natural element, a contention that becomes clearly evident in the fact that, for the first time, the city dominates the country and industry dominates agriculture. It is also apparent in the radical process of desacralization of the natural world, in the invention of a temporal framework of a primarily social character, in the total rupture of the anthropocentric limits of work processes, and in the progressive domestication and regulation of instinctive behaviors or the direct and brutal expression of immediate emotions and passions, among so many others.¹¹ This promotion of the *historic-social* element to the position of dominant element also explains the possibility of thinking the social *separately* in regard to the natural and thereby establishes space for the division between

the two “cultures”: the “exact”, “natural,” or “hard” sciences, and the social or human sciences.

The above mentioned strategy of *experimental* science, with its diverse consequences, is also reflected at the historiographic level. The second variant of the historic discourses asserted in the first stage of modernity was an empirical and objective history, which, in its attempt to reproduce the model of the experimental natural sciences within the social domain, attempted to develop a history focused on critique of sources and the rigorous screening of written documents and diverse testimonies. This history sought the uncontested truths of historic occurrences—finely dated and chronologically arranged—which, submitted to the internal and external critique of the documents, could be used for reasserting national identity and values. These were, of course, advantageous for the education of a citizenry and for the justification and legitimization of existing dominant powers.

This was an objective and empirically focused history that approached the historian’s work as that of a judge—in as much as both (based as they are on confrontation and critique regarding testimonies) attempt to establish an objective and irrefutable truth regarding facts¹²—which ultimately led to the progressive dissolution of ancient legendary, mythical and religious histories that were, little by little, totally abandoned in favor of “real” history.

This history, by discriminating and separating the literary or fictional sources and elements, in the face of the strictly historical and “objective” sources or elements, also attempted to overcome historical *anachronism*, forbidding the mixture of elements from different periods, and asserting the absolute validity—also within history—of the new modern bourgeois Newtonian notion of time. This time was unidirectional, unique, irreversible, continuous, and progressive, establishing the precise chronology, succession, and progression of the diverse historical occurrences, phenomena, epochs, and realities.¹³

These are the models for the development of historiographic discourses, probably reproduced in other fields and domains of social thought during these same three centuries, corresponding to the foundations of the project of modernity itself, accompanying it throughout these three centuries which constitute the *ascending* branch of its specific curve of global life.

II.

If, from this same point of view, we now analyze the fate of these two modern variants of the discourse on history, we can observe that the nineteenth century represents for both, within the ambit of *European* culture, a pinnacle. With the Hegelian philosophy of history, modern bourgeois thought reached its highest possible peak, developing global and *totalizing* models for all of human history. As such, the celebrated *Lessons on the Philosophy of World History*¹⁴ represent the most successful model of the philosophy of history (conceived *a priori* as the product of the “genius” of a great thinker) “utilizing” historical facts to legitimize their validity. As simple “illustration” of the validity of the general principles that organize said philosophies (principles always supposedly universal, eternal and void of temporality) the lessons construct a system of universal explanation.

The Hegelian philosophy of history greatly overshadowed the subsequent, and by then very limited, attempts carried out by authors such as Oswald Spengler or Arnold Toynbee. By the second half of the nineteenth century, the philosophy of history entered increasingly into discredit and evident decadence as a modality for the explanation of historical realities. In this period it took refuge as a *marginal* and little-traveled line of the more vast field of philosophy in general, surviving with a peculiar longevity in a few national cultural arenas, e.g. the English milieu.

In a parallel fashion to the maximum expansion and subsequent contraction of the modern philosophic-historic discourse in the nineteenth century, a similar rise and decline of objective and empirical history discussed earlier also occurred. Here, the French Revolution played the main role. This event, which eliminated the royal and monarchic power of the old regime, also precipitated a true revolution in accessibility of information for historians by converting all of the ancient archives of Europe’s monarchies into *public* archives. This greatly democratized access to the documents, providing objectivist and empirical historians with a truly monumental mass of new primary sources.

The nineteenth century (which was not called “The Century of History” by mere coincidence)¹⁵ can be considered, in regard to erudite and objectivistic history, as the peak of the developmental curve of this history. Although this erudite and positivistic history survived through the twenti-

eth century and up to the present, over the last hundred years it has experienced virtually *no qualitative progress* worth mentioning, and has reproduced itself almost statically, subject to the same models and precepts adopted under the Germanic positivistic project of the second half of the nineteenth century.

This double peak, of both philosophical discourse and erudite discourse on history in the nineteenth century also expresses—in a complex manner, but clearly and directly—the underlying movement of capitalist modernity itself to its own historical climax, within the boundaries of the small European continent. If we once more voyage through the history of modernity using long-lasting “seven league boots,” we would see that *inside Europe*—and only *inside* this European space and *not* at the global level—this modernity reached its culmination and highest development precisely during this rich and complex nineteenth century.

Such culmination embraces in a parallel way the geographic sphere achieved by the capitalist world market encompassing the entire planet in its network as well as the cultural sphere (attained with the Encyclopedia and the Enlightenment, and the recodification of the entire system of knowledge and sciences in keeping with modern bourgeois parameters and their logic of reason).¹⁶ Without any doubt it also passes through the economic sphere, where the capitalist mode of production was consolidated with the Industrial Revolution; the social sphere that constitutes the definitive class structure of modern society, and of the diverse and many-sided world of modern civil society, and of course, through the political sphere, which sustained the French Revolution, created the finished figure of the modern state and the global space for the corresponding political relations. All of this precisely during the nineteenth century, which also, and not by chance, was to be the century of the birth and initial assertion of Karl Marx’s critical thought and global conception.

Marxism was born in the second half of the nineteenth century, and with it, the entire horizon of the vast family of expressions of *contemporary critical thought*, which, as Frederick Engels¹⁷ remarked, could only emerge at the time when bourgeois and capitalist modernity had *exhausted* its ascending cycle, displaying the entire collection of inputs, elements and contributions that together constitute its historic-civilizing heritage. This exhaustion came about with the inputs rapidly set forth above, precisely around the first

half of the nineteenth century, establishing the climax of the general vital curve of modernity itself.

Marxism became the main intellectual expression of the “bad” or negative side of modernity itself, the expression of an intrinsic and more profound denial carried by modernity within its own innards, destined to demolish and destroy itself from within in order to later overcome and transcend itself radically.

In view of the fact that Marxism is necessarily a demolishing critique of all the positive discourses of bourgeois modernity, it is only logical that within the field of history it should also have established itself as a double frontal critique, a demolisher both of the erudite modern discourse and the previous philosophic discourse on history.¹⁸ This double critique, already explicit in the early text of *The German Ideology*, intended to reassess the erudite and objectivistic history (which is “only a collection of dead facts”), a necessarily *interpretative and explanatory* history of the complex human facts, a history inquiring into the causes of historical facts and the general sense of the long voyage of the history of man. Against the Hegelian philosophy of history, and any philosophy of history developed as an *a priori* construction, only “giving free rein to the cult of speculation,” Marx defended a critical and rigorous analysis of the “demonstrable empirical facts.” This analysis, by means of a complex process of comparison, epistemological generalization and dialectical synthesis, worked out these “general abstractions” or global models of explanation and interpretation of man’s social history.

This Marxist discourse on history has been developed, recycled, deepened, debated and also deformed, vulgarized and simplified during the last hundred and fifty years, always maintaining itself *live and present* within the most diverse and heterogeneous landscapes of national historiographies all over the world to this day. On the other hand, and quite to the contrary, the two types of historiographic discourses that modernity created and promoted beginning in the seventeenth and through to the nineteenth century have either entered into a clear process of decay and exclusion, as is the case of the philosophic discourse, or they have simply come to a standstill, being limited to reproducing themselves without any essential innovation or modification, as is the case of the erudite and positivist variant of that same discourse.¹⁹

III.

This overall process has extended its influence throughout the “cultural” environment. In our opinion, it is this more general process, developed as of the second half of the nineteenth century, that *opens up the space* for the shaping of the segmented and autonomized “episteme” of contemporary social sciences.

What the different philosophies of history expressed was precisely the “universalist-abstract” side of modernity. This side, based on the equally universal and abstract logic and nature of value, asserted itself as civilizing-historic progress when confronting the localism, particularity and isolation of the different histories of pre-capitalist nations and societies. With the nineteenth century, the colonization and conquest of the entire planet carried out by capital, which brought about mainly the creation of a capitalist world market, came to an end, and with it, the progressive-historic process of historical universalization accomplished by modernity.

For this reason, as of the last third of the nineteenth century, *there were no longer any more* “Americas to be discovered” for capital. All that *was left* was a struggle, purely material and to the death, for the redistribution of the already known spaces of this same and *finite* planet called Earth. It is here that the “progressive historic function” of modernity ends, closing the cycle of its *ascending* curve of development and opening a *descending* branch of its decay, through which we have lived during the last hundred years.

However, if the process of historic universalization comes to an end and modernity’s civilizing task reaches its culmination, the bourgeoisie can no longer claim this “universalism”—even in its abstract and antithetic form—which characterized it during its ascending stage of development. Instead, this universalism transferred to the field of negative or critical thought of that same modernity.

It is precisely this transfer that explains the birth and development of contemporary social science, relegating the formerly claimed universalism to a secondary plane. These social sciences shall now be constructed as a simple virtuous cultivation of the *specialization* of the clearly delimited object of study, of the exclusive and non-transferable methods, of the unique and particular techniques, and even the language, terms, concepts and theories that only correspond to this or that well defined gambit of the social scheme.

It is a process of segmentation, specialization, particularization and autonomization of the different social sciences that at the same time turns its back on the more universalistic and global social visions. This continues cultivating and reproducing the second stroke that characterizes modernity and that we have previously evoked as the general foundation of the experimental science project. Unlike the “bourgeois universalism” that is linked to modernity’s progressive task, the project of domination and exploitation of nature through the application of the scientific-experimental approach is connected more with the repeated and growing necessity of its own and more elemental auto-reproduction. Thus, this project *cannot* be abandoned by modernity, not even during the *descending* phase of its vital cycle, which on the contrary, permanently accentuates and re-actualizes it.

It is perhaps this permanent re-actualization of the experimental approach to nature and to the world which might explain the fact that all the “new” social sciences of the last one hundred and thirty years have at some time “dreamed” of being as “rigorous”, “objective”, “exact,” and “precise”—that is to say, as “scientific”—as the natural or hard or exact sciences themselves, the model of which constitutes the more or less confessed paradigm of the entire group of new social disciplines or sciences that exist nowadays. It is a paradigm that was never reached in practice, nor could it have been and is now revealed as entirely illusory on the basis of the rethinking of these sciences, themselves mistakenly known as “exact.”²⁰

The rearrangement of reflection on social questions developed during the second half of the nineteenth century, at the same time that it consistently alienated and reduced the formerly encouraged abstract universalism, and strengthened the more “experimental” and empirical-erudite feature, which was the *dominant* line in social sciences during the last hundred and thirty years.

As we know, this dominant line coexisted all the time nonetheless with various and very diverse expressions of resistance, open critique and rejection. For example, multiple authors and a multiplicity of intellectual trends of thought, beyond that fragmented and specialized “disciplinary episteme,” defended, sponsored, and even implemented visions that were always more global, comprehensive, and more uni-disciplinary. Thus, from Freud to Carlo Ginzburg, and from Wittgenstein to Immanuel Wallerstein, and passing through Claude Levi-Strauss, Norbert Elias, Marc Bloch, Walter Benjamin,

Fernand Braudel or Michel Foucault, among so many other thinkers, there were always authors—and with them sometimes intellectual trends—that have *not* respected the standard episteme, passing freely and critically among the different human social-historical disciplines.

In the double movement that these different “sectorialized” social sciences displayed there were those that, according to the nature of their particular “object of study,” formed attitudes either “imperialistic,” or “deterministic” with respect to the remaining social sciences. Thus, the sectorialized social sciences, even though they occupied themselves with investigating more “vast” objects (such as history, sociology, or anthropology, whose respective concern is the study of human past, of societies, or of man himself) always displayed “imperialistic” tendencies in attempting to encompass the entire group of social sciences under *their* domain or field. They did this without renouncing their defined social “space” and their singular “specialized” focus, which in any case was claimed as articulator of the set and as dominant over all the other sciences, necessarily conceived under this scheme as “auxiliary” sciences.

The segmented social sciences always claimed diverse and multiple “determinisms” where the dominant motor or essential determinant of human processes was always *their* particular object of study. In this way, the divided social sciences nevertheless maintained a minimum remnant of the old, and now almost eliminated, universalistic vocation.

Finally, and as a third form of rebellion against this divided episteme, multiple and very heterogeneous versions were developed of what we could call the diverse Marxisms of the twentieth century. Although some of these “Marxists” or “Marxisms” succumbed to the effect of this episteme, characterizing themselves as “Marxist” sociologists, historians, philosophers, economists, geographers, etc., many of them claimed the profound and inevitably *globalizing and universalistic critical perspective* which characterized the most genuine foundation and heritage of original Marxism.

This dominant line of the fragmented-specialized episteme of social knowledge asserted itself among all of these converging lines of opposition, which it undoubtedly managed to subordinate and control without ever eliminating completely. This then defined a permanent tension within the development of the social sciences over the last thirteen decades, a tension which surfaced and was liberated, with all of its consequences, following the 1968 Cultural Revolution.²¹

For the past thirty years we have been involved in a complex process of reorganization of the entire system of scientific branches of knowledge, both of the so-called natural sciences, and of the social sciences and humanities. To further speed this process, it might be useful to try to *recover*, and at the same time *transcend* in a new synthesis and within a radically new scheme, the positive aspects of abstract universalism as well as those of experimental particularism, achieving a true improvement or *Aufhebung* of both approaches in the Hegelian sense. Is it possible to attempt this synthesis? By recovering the global and universalistic visions of the last four or five centuries, this synthesis would attempt to provide them with a foundation derived from the concrete experience of that detailed and meticulous recognition of what is multiple, different and singular, and of the possible coexistence of many logics and of diversity, in order to advance the construction of a new *concrete universality* of an also necessarily distinct and renovated system of human knowledge.

In our opinion, it is precisely this line of an original, and as yet unknown, perspective of a *concrete universal science* that is clearly delineated and outlined in the act itself of the birth of contemporary critical thought, in the emergence of original Marxism—a project that represents the “last of the universal Encyclopedisms” but also the most rigorous and erudite of the intellectual efforts at a truly nuanced and concrete comprehension of reality. This critical Marxist project, after the death of its founding craftsman, traveled multiple and complex paths, always stalking among the spaces in the *non-dominant* lines of social thought in the last hundred and fifty years, surviving in those rich, innovative and heretical works of the genuinely critical authors we have mentioned above.

In any case, it is our opinion that it is a line of intellectual exploration that, beyond its specific cultural affiliations, is worth the effort of development by social researchers and scientists, a group each time more dissatisfied and discontented with the current system of knowledge that still dominates.

ENDNOTES

¹ In regard to this, cf. Immanuel Wallerstein et al., *Open the Social Sciences*, Stanford University Press, Stanford, 1996.

² As representative examples of this search, see Boaventura De Sousa Santos, *Introducao a uma ciência posmoderna*. Ed. Afrontamento, Porto, 1990 and *Toward a new common sense*, Ed. Routledge, New York, 1995. Pauline Rosenau, “Modern and post-modern science: some contrasts” in *Review*, XV, 1 Winter 1992. Isabelle Stengers, *L'invention des sciences modernes*, Ed. La Découverte, Paris, 1993, and “Les ‘nouvelles sciences’ modèles ou défi?” en *Review*, XV, 1, Winter 1992. Immanuel Wallerstein, *Unthinthing Social Science*, Polity Press, Cambridge, 1991; “The Annales school: the war on two fronts” in *Annals of Scholarship*, I, 3, Summer 1980, “The challenge of maturity: whither social science?” in *Review*, XV, 1, Winter 1982; and “History in search of science” in *Review*, vol XIX, no. 1, Winter 1996; and Carlos Antonio Aguirre Rojas, “La larga duración in illo tempore et nunc” in the book *Segundas Jornadas Braudelianas*, Instituto Mora, Mexico, 1996.

³ Concerning this point, see the now classic book by Ilya Prigogine and Isabelle Stengers, *La nueva alianza. Metamorfosis de la ciencia*, Alianza Editorial, Madrid, 1997. Also to be consulted are Ilya Prigogine, *El fin de las certidumbres*, Andrés Bello, Santiago de Chile, 1996, *Temps à devenir. À propos de l'histoire du temps*, Fides, Quebec, 1994; and “The laws of chaos” in *Review*, XIX, 1, Winter 1996; Isabelle Stengers, *L'invention des sciences modernes*, op. cit.; Wolf Lepenies *Las tres culturas*, Fondo de Cultura Economica, Mexico, 1994 and Georges Balandier, *El desorden, la teoría del caos y las ciencias sociales*, Gedisa, Barcelona, 1993.

⁴ In regard to this matter, Marx is very clear when he states in *Capital* that “the era of capital dates from the sixteenth century.” We agree with this position, which is also that of Immanuel Wallerstein in *The Modern World-System I*, Academic Press, New York & London, 1974. Concerning this debate, see also Wallerstein, “The west, capitalism and the modern world-system” in *Review*, XV, 4, Fall 1992. For a different position, cf. Fernand Braudel, *Civilización material, economía y capitalismo. Siglos XV-XVIII*, Alianza Editorial, Madrid, 1984. We have attempted to explicitate this Braudelian position in Carlos Antonio Aguirre Rojas, *Braudel y las ciencias humanas*, Montesinos, Barcelona, 1996 and in “La visión braudeliennne du capitalisme antérieur à la Revolution Industrielle” in *Review*, XXI, 1, Winter 1999.

⁵ Cf. Fernand Braudel, “Expansion européenne et capitalisme (1450–1650) in the book *Les écrits de Fernand Braudel. Les ambitions de l'histoire*, Editions de Fallois, Paris, 1997.

⁶ Something that Marx explained clearly in several of his texts, for example, *Capital. Crítica de la economía política*, 8 toms, Siglo XXI, México, 1975–1981, or in his *Elementos fundamentales para la crítica de la economía política (Grundrisse)*, 3 volumes, Siglo XXI, México, 1971–1976. See also Wallerstein, *Historical Capitalism*, Verso, London, 1983 and *The Modern World-System I*, cit.

⁷ This antithetic and limited character has been very sharply captured, especially by authors belonging to the Frankfurt School. By way of simple examples, cf. the essay by Theodor Adorno, “Progreso” in the book *Consignas*, Amorrortu Editores, Buenos Aires, n.d., and Theodor Adorno and Max Horkheimer, *Dialéctica del Iluminismo*, Sudamericana, Buenos Aires, 1969.

⁸. A radical critique of such a simplistic idea of progress can be seen in Walter Benjamin, "Tesis de filosofía de la historia" in *Discursos interrumpidos*, Planeta-De Agostoni, Barcelona, 1994.

⁹. The author who has best studied this problem and its implications is Jean-Paul Sartre, in his *Crítica de la razón dialéctica*, Lozada, Buenos Aires, 1970. Also see Carlos Antonio Aguirre Rojas, "Economía, escasez y sesgo productivista" in the *Boletín de Antropología Americana*, num. 21, México, 1990.

¹⁰. Cf. Prigogine and Stengers, *La nueva alianza*, op. cit.

¹¹. Very few authors have theorized the main consequences of that long-lasting mutation. On this theme, cf. Norbert Elias, *El proceso de la civilización*, Fondo de Cultura Económica, México, 1989 and *Sobre el tiempo*, Fondo de Cultura Económica, Madrid, 1989, Lewis Mumford, *Técnica y civilización*, Alianza Editorial, Madrid, 1982, Mircea Eliade, *Lo sagrado y lo profano*, Ed. Labor, Barcelona, 1992, Bolívar Echeverría, "Modernidad y capitalismo: quince tesis" in *Review*, XIV, 4, Fall, 1991, and Carlos Antonio Aguirre Rojas, "Between Marx and Braudel Making History, Knowing History" in *Review*, XV, 2, Spring, 1992

¹². This interesting line of comparison has been developed by Carlo Ginzburg in several of his works, for example in *El juez y el historiador*, Anaya-Muchnik, Barcelona, 1993, "Provas e possibilidades a margem de 'Il ritorno de Martin Guerre' de Natalie Zemon Davis" y "O inquisidor como antropólogo: uma analogia e as suas implicacoes," both in the book, *Amico-história e outros ensaios*, Difel, Lisboa, 1991 y "Aristotele, la storia, la prova" en *Quaderni Storici*, no. 85, year 29, fascicle 1, April, 1994.

¹³. For an interesting development of these problems, see Reinhart Koselleck, *Futuro Pasado. Para una semántica de los tiempos históricos*, Paidós, Barcelona, 1993.

¹⁴. Cf. G.W.F. Hegel, *Lecciones sobre la filosofía de la historia universal*, Revista de Occidente, Madrid, 1974.

¹⁵. On this matter, see the essay by Henri Pirenne, "What are historians trying to do?" in *Methods in social science*, University of Chicago Press, Chicago, 1937 and also Carlos Antonio Aguirre Rojas, "Tesis sobre el itinerario de la historiografía del siglo XX. Una visión desde la larga duración," *Pro-historia*, núm. 2, Rosario, 1998

¹⁶. Cf. Carlo Ginzburg's brilliant essay, "Indicios. Raíces de un paradigma de inferencias indiciales" in *Mitos, emblemas, indicios*, Gedisa, Barcelona, 1994; Adorno and Horkheimer, *Dialéctica del iluminismo*, op. cit. and Michel Foucault, "Qué es la crítica? Crítica y Aufklärung" in *Daimon, Revista de Filosofía*, num 11, 1995.

¹⁷. In his renowned text *Socialismo utópico y Socialismo científico*, Progreso, Moscú, 1970.

¹⁸. In regard to these issues, see the works of Bolívar Echeverría, "Discurso de la revolución, discurso crítico" in *Cuadernos Políticos*, num. 10, México, 1976, *Las ilusiones de la modernidad*, Co-edition UNAM-El Equilibriste, México, 1995 and *Valor de Uso y Utopía*, Siglo XXI, Mexico, 1998.

¹⁹. On this point, see Carlos Antonio Aguirre Rojas, "Between Marx and Braudel: making history, knowing history" op. cit., and also *Los Annales y la historiografía francesa*, Quinto Sol, México, 1996; and *Braudel a Debate*, Co-edition Fondo Editorial Tropykos-Fondo Editorial Buría, Caracas, 1998.

²⁰. Regarding this problem, see the works of Prigogine and Stengers cited in notes 2 and 3.

²¹. Cf. Immanuel Wallerstein "1968: Revolution in the World-System," in *Geopolitics & Geoculture*, Cambridge University Press, Cambridge, 1991; Fernand Braudel, "Renacimiento, Reforma, 1968: revoluciones culturales de larga duración" in *La Jornada Semanal*, num. 226, México, October 1993; Francois Dosse, "Mai 68: les effets de l'histoire sur l'Histoire" in *Cahiers de LLHTP*, no. 11, Paris, 1989; Carlos Antonio Aguirre Rojas, "1968: la gran ruptura" in *La Jornada Semanal*, num. 225, October, 1993 and "Los efectos de 1968 sobre la historiografía occidental" in *La Vasija*, num. 3, México, 1998.