The concept of "evolution" is ambiguous. Sometimes it only means those changes that have historically occurred. In other usages, it has a more teleological aspect, as in the claim that acorns evolve into oaks. In that meaning the end result is the normal outcome of a pattern inscribed in the inner structure of the "entity" under discussion. In the former sense, evolution is nothing but an empirical _post facto_ description. In the latter sense, it is a mode of stating lawlike propositions. If one adds "structural" as an adjective to "evolution," it suggests that the second sense is probably what is intended, although still not inevitably.

Hence, I suppose one cannot even begin to discuss a concrete "evolution" without enunciating an epistemological stance. Let me therefore do that. I believe that what social scientists study is the evolution of historical systems. Since these entities are both systemic (lawlike) and historical (aleatory), it follows that neither of the two meanings of evolution is satisfactory for my purposes. Rather, I believe that all historical systems do evolve in the second sense, that is, that their historical trajectories are inscribed in their structures - but only up to a point. And this point is in some sense truly a point, or almost. That is to say, since all structures have inherent contradictions (or rather are contradictory), it follows that over time, the "evolution" of the structure reaches a *point* where it is no longer possible to make necessary adjustments to the structures and so the paralyzing effects of the
contradictions will no longer be contained.

When such a point is reached, further evolution ceases to be explained by the structure; it becomes aleatory. The fluctuations are wild or at least wilder; the impact of minor inputs become major in consequence, and there is a bifurcation, resulting in a new system. But the emerging structure of this new system is *not* predictable and is in no way inscribed in the structure of the historical system out of which it is emerging and which has become inviable. It follows that there are no general rules about human evolution, or the evolution of human social structures, except perhaps at a very abstract and not very meaningful level. For example, it might perhaps be argued that there is a multimillenial trend towards more complex historical systems (though even at this vague level I would be cautious), but this tells us little about the successive structures of historical systems, and nothing at all about future ones. In any case, there is no empirical basis for any suggestion of historical progress as inevitable or even as an adequate description of past history.

This epistemological stance having been asserted, but to be sure not argued here, we can proceed to discuss what might be meant by the evolution of the modern world-system. I consider it important to distinguish three processes in the historical life of any system: its genesis; its relatively long period of normal functioning; and its demise (the result of bifurcation), which can also be thought of as the period of transition to a new historical system or systems. It is only about the period of normal functioning that it seems useful to apply the term evolution, and it is to this period that I shall restrict the discussion.

The modern world-system is by no means the only historical system that has existed; it is not even the only *world*-system. But it has been a very particular type of historical system, unlike any other that we have heretofore known. It is a world-economy, to be sure not the first ever, but the only one that survived long enough to institutionalize a capitalist mode of production, and as a result the only world-economy (indeed the only world-system) that has ever succeeded in expanding its outer boundaries to encompass the entire globe. It has transformed itself from being much *a* world to becoming the historical
It shares two features with every other historical system. It has an axial division of labor whose effective "stretch" defines its boundaries, boundaries which are flexible and can therefore expand (and contract). That is to say, the boundaries evolve. And it functions by means of a mixture of cyclical rhythms (the repetitive fluctuations which allow us to call it a system) and secular trends (the transformational vectors which allow us to call it historical).

What defines the specificity of the modern world-system, the element which makes it different from all other historical systems, is the primacy of the drive for the *endless* accumulation of capital. Of course, most historical systems accumulate capital in some way. But only the capitalist world-economy has made the accumulation of capital the prime mover. We are not talking of a "psychological" drive, although of course *some* individuals may have internalized this objective as such. The system is constructed such that there are structural pressures to accumulate capital and to accumulate it endlessly. Its panoply of institutions function in ways to significantly reward those who accumulate capital and to punish those who do not. Furthermore, the strength of these pressures has constantly increased over time, which may be termed the steady intensification of the capitalist nature of the modern world-system. However, even in earlier periods, the strength of the pressures was already sufficient to keep the system on track in the face of internal forces which sought to alter its nature or prevent its further development.

The modern world-system consists of an intricately constructed and complex set of institutions that has functioned remarkably smoothly and efficaciously over the past 500 years, given the absurdity of the _primum mobile_ and the enormity of the resistance to the system both from the understrata (who have been mightily oppressed by it) as well as by powerful segments of the upper strata who have feared loss of power and prestige from the further evolution of such a system. A major premise of the structures of knowledge that have flourished within the system is that it functions in three separate arenas: the political, the economic, and the socio-cultural. Or, otherwise stated, the states, the markets, and the civil societies are said to be ontologically autonomous, and to utilize different logics. While this is a self-serving description of the system by its clerics, and does not stand up to careful epistemological or empirical analysis, it has a certain surface resemblance to the formal structuring
of the institutional complex. We shall therefore
describe these institutional arrangements under three
main headings: production networks; the state and
interstate structures; and the geoculture -- insisting on
their total imbrication one with the other.

There are five central mechanisms by which the
network of production structures permit the endless
accumulation of capital: commodification; the
multiplicity of modes of labor control; commodity
chains; unequal exchange between core and periphery;
and the group of monopolizing non-specialized
capitalists functioning as the anti-market. Each
mechanism can be briefly summarized.

Commodification means that activities that
involve production, exchange, saving, or borrowing are
monetized and thus become market operations. It is
probably the case that virtually no historical system
for the last 10,000 years has been without
commodification of some of its activities. However,
since engaging in such operations in non-monetized
forms protects them somewhat (though not perfectly)
from appropriation for the purposes of capital
accumulation, it is eminently logical that those who
operate within the framework of a capitalist system
seek to commodify ever more operations. And since it
is also true that the spread and routinization of
commodified activities tends to diminish their
profitability, it is logical as well that monopolizing
capitalists repeatedly encourage the search for new
niches to commodify. The results we know: over time
there has been a thrust towards the commodification of
everything, a thrust which by the late twentieth
century had reached levels undreamt of in former
historical systems. To take only a particularly
aberrant example, we have entered into the era of the
commodification of childbirth.

The modern world-system makes, as everyone
reminds, more extensive use of wage-labor than did
previous historical systems. Even so, it is worth
noting that, after 500 years, wage-labor still is not
the form of remuneration of the majority of the
world's productive activities. There is a good reason
for this. A system that maintains multiple modes of
labor control (and therefore of labor remuneration)
creates inbuilt mechanisms by which the demands of
workers for increased compensation can be restrained.
It even creates mechanisms by which surpluses created
in non-commodified production can be appropriated.
That mechanism is the semiproletarian household, in
which wage-income represents a minority of the total
household income from all sources. This structure was
more or less an invention of the modern world-system, and currently is the dominant model worldwide. In such

households, the wages paid to those members engaging in wage-labor activities can be reduced below the level of household reproduction because the household supplements this income with its other income-generating activities (market-oriented production, so-called subsistence production, rents, and transfers), the totality of which bring in a greater income per hour of work than does wage-labor. Hence, employing persons located in such semiproletarian households not only reduces the wage bills of the wage-employing producers but also transfers part of the other surplus accumulated by the household to the enterprise via the subsidization of the enterprise’s below-par wages. The effort to obtain wage-employment and then ensure that such wage-employment is remunerated minimally at the level of household reproduction (the slogan was the “family wage”) has been central to the class struggle throughout the history of the modern world-system. To the degree that proletarianization has been achieved, it is in large part the outcome of this class struggle.

Commodity chains have been the entanglement of capitalist production processes from the outset. Productive activities have always been systematically linked across the whole division of labor in institutionalized channels. It is not hard to demonstrate that almost every item that is marketed by enterprises is constructed from components (which are in turn constructed from components), utilizing machinery (constructed in turn from components...) and manpower (sustained by food production constructed from components...), the totality of which are produced in geographically dispersed areas. (The so-called internationalization of capital refers to the existence of such commodity chains, except that the phrase incorrectly suggests that this is a new post-1970 or at most post-1945 phenomenon.) The existence of such chains makes it possible for different units of the chain to be structured in different ways one from the other, and differing in themselves from one point in time to another. The possible differences include the degree of geographic dispersion of the producing enterprises in the unit; the degree of overall monopolization of production; the modes of labor control utilized; the degree to which the enterprises in one unit are owned by the same firm that owns enterprises in adjoining units (vertical integration of production), thus allowing some
operations to escape from the constraints of the world market; and the degree of profitability of each unit of the commodity chain compared to other units. Such a complex structure allows endless manipulation (reorganizing the structures of different units in the chain) with the objective of increasing the overall accumulation of capital and centralizing this surplus in fewer hands.

The creation of such commodity chains is what permits us to describe the axial division of labor as a core/periphery phenomenon in which unequal exchange is a major mechanism of surplus transfer and concentration. Fundamentally, the core/periphery antinomy refers to the relation between relatively monopolized units versus relatively competitive units, which is a high profit/low profit, high wage/low wage antinomy. Largely because of the advantages of reducing transactions costs, and the need to protect the accumulated capital politically, the core/periphery antinomy became empirically a spatial phenomenon, core-like activities tending to be concentrated in a few countries and peripheral activities tending to be concentrated in most of the rest, without ever having excluded the possibility that the full range of activities could and did exist inside the boundaries of any single country that was over a certain size. Spatial distribution reflected the process; it did not cause it. Unequal exchange has been the result of the political rules of the interstate structures that made the mobility of capital and merchandise across political frontiers far easier than the mobility of labor, and thereby guaranteed the transfer of surplus value from one set of owners to another (those located in the monopolized activities in the core zones).

Finally, the market is essential to the operations of a commodified production system. But since the more truly free (and not merely nominally free) the market, the greater the competition (and therefore the more difficult it is to attain significant profit levels), those who are great accumulators of capital represent (in Braudel's magnificent phrase) the *anti-market*, utilizing their political strength to ensure that unrestrained competition never becomes the norm. Since however monopolies are always under political assault and any given quasi-monopoly has a rather short half-life (probably circa thirty years), great accumulators of capital must remain non-specialized, and engage in all kinds of operations simultaneously: production, commerce, finance, transport, information. This enables them to jump ship (that is, shift the emphasis in their investment commitments) repeatedly, in search
of maintaining high overall levels of profit. Jumping
ship not only has sectoral implications but
geographical ones as well.

The shift of investments has tended to occur
primarily within the framework of the Kondratiev
cycles, which are the consequence of the exhaustion of
the ability to monopolize leading sectors of
production, and consequently of decline of worldwide

profit levels. The periods of contraction (B-phases)
see relocations of industrial production, and thus
opportunities for a few (but only ever a very few)
semiperipheral states (those with a fairly even
mixture of core-like and peripheral activities) to
improve their relative position at the expense of
other states. They also tend to see shifts of in-
vestment allocation from industrial to financial
sectors. They see the search for innovative sources of
monopolized activities. They have often involved, after
a while, some reallocation of world income to stimulate
overall demand, while simultaneously expanding the
boundaries of the world-system into new zones in
search of very low-cost labor to compensate for the
redistribution. In short, they have tended to juggle
the world's economic geography while reproducing the
same basic structure.

The possibility of the endless accumulation of
capital has depended upon the ability of the great
accumulators not merely to concentrate the surplus-value,
but to defend its concentration both against
predators and against the demands of the workers that
have produced it. The state and interstate structures
are at one and the same time a rampart for the great
accumulators and a continuing danger. The state can be
the primary predator; no predator was ever as
efficacious historically as an emperor atop a
redistributive structure. Anything that would
reproduce such a political structure with the
increased technological efficiencies of the modern
world would be a nemesis to the endless accumulation
of capital. The great accumulators are thus notably
wary of stateness (the rhetoric about _laissez -faire_).
Yet on the other hand, never has workplace bargaining
power been greater than in the modern world -system,
and never have monopolies been easier to crack than in
modern times, which has meant that the great
accumulators desperately needed political defense not
only against the working classes but against their
competitors (Frederic Lane's "protection rent").
Balancing such contradictory constraints has been a
tricky game from the beginning. The optimal mode has been found to be that formed by the creation of a network of so-called sovereign states (in fact sharply graded in political strength) operating within a loose, but meaningful, interstate system, in which hegemonic powers periodically and temporarily create regimes of interstate order that seek to maximize the possibilities of the endless accumulation of capital.

Creating strong states in the core offers many advantages to monopolizing capitalists. It establishes a strong refuge for their property. It creates a political structure capable of advancing their interests in the world-system. Its higher level of taxation is simply a protection cost, eminently reasonable. Eventually, by making the strong state a liberal state as well, a high degree of internal order is ensured at relatively low cost. Furthermore, strong states in the core can work to ensure that states in the periphery do not become strong enough to interfere with the process of the worldwide accumulation of capital.

To be sure, it is not as simple as this, for two reasons. On the one hand, there is not a single homogeneous group of monopolizing capitalists, but rather a group caught in the contradiction of having class interests that unite them and individual interests that divide them profoundly. And on the other hand, the world's working strata are not simple objects of manipulation by dominant forces, but active agents of resistance. Both these complications account for a considerable part of the political history of the modern world-system.

Inter-capitalist competition has two immediate impacts on the state and interstate structures. First, any kind of political mechanism that aids the maintenance of any particular monopolizing effort represents for its non-beneficiaries an obstacle that they will seek to overcome. They constantly organize to overcome such obstacles: for example, calls for more _laissez-faire_ within states; opposition to protectionism in the strongest states, and calls for it in the others; geographical transfer of production sites, with its consequent impact on the financial and social strength of given states. This story is usually recounted under the heading of the history of macroeconomic structures.

The second impact is even greater. The organization of hegemonies gives distinct advantages to certain groups of monopolizing capitalists. But hegemonies are self-destructing because of their
necessarily increasing costs. When hegemonic powers decline, others seek to take their place. This is a long process, and has historically resulted in their long geopolitical struggles, each of which culminated in a "thirty years' world war," and an eventual strengthening of the interstate structures. This story is usually recounted under the heading of international relations. We can discern hegemonic cycles much longer than the Kondratiev cycles.

The active oppositional agency of oppressed strata is a constant of the modern world-system. From the outset, the pressure of urban working strata tended to push wage levels slowly upward, which periodically led to the need to seek out working strata ready to work at lower income levels. This was one of the main factors behind the repeated geographic expansion of the modern world-system, as noted previously. Nonetheless, such opposition tended to be scattered, unorganized, and lacking ideological strategy until the nineteenth century.

It was the French Revolution that catalyzed an important cultural transformation of the modern world-system. Although the origins and the trajectory of the French Revolution was in very large part the outgrowth of the Franco-British struggle for hegemony in the world-system, the most important consequence was the transformation of mentalities throughout the world-system, pointing up the long-existing anomaly that there existed no adequate geoculture to legitimate the economic and political structures of the capitalist world-economy. The anomaly was brought to an end by the fact that two themes put forward in the French Revolution gained such resonance among such large strata of the world-system that there seemed no way of "restoring" the antecedent cultural situation. These two themes were the normality of political change and the belief that sovereignty resides in the "people."

The nineteenth century was the moment of the construction of a coherent geoculture for the modern world-system. One of the major factors was the rise of organized antisystemic movements in two forms: the social movement and the national movement. Although serious formal organization did not occur until the late nineteenth century, the early stirrings of these movements prompted preparatory responses almost immediately. The two themes -- normal change and popular sovereignty -- were of course exceedingly dangerous for the political stability of the world-system, legitimating democracy. In response to these themes there emerged a trinity of ideologies, which
were really meta-strategies of political control:

...conservatism, liberalism, and radicalism/socialism. Each represented fundamentally a different mode of coping with the normality of change and popular sovereignty. By 1848, it became clear that the centrist ideology of liberal reformism (an ostensibly universalizing doctrine, but one whose application was always restricted to "deserving, civilized" persons) was the dominant one, the two other ideologies slowly turning themselves into modified versions of liberal reformism.

Liberal reformism had an appealing political strategy, which conservatives eventually realized was necessary to contain the dangerous classes in ways that would preserve the processes of the endless accumulation of capital, while radicals/socialists eventually realized that this program was the maximum their real political strength could obtain for them at that stage of the historical development of the modern world-system. The package offered by liberal reformism, and enacted for Europe/North America during the nineteenth century, had three components: the gradual according of universal suffrage; the beginnings of welfare legislation and welfare redistribution; nationalism of the core zone, with its essential component of racism/sexism. Historically, this formula was extraordinarily successful in the core, and in the twentieth century there was an attempt to apply it on a world scale. This latter attempt, initially successfully, eventually foundered on the absence of a group to pay its cost: there was no Third World for the Third World. But the mechanism was clearly in place, and discussing its foundering would bring us into the subject of the crisis of the world-system and its demise, a subject we have excluded from this analysis of evolutionary processes.

The construction of the geoculture involved legitimating the dominant political ideology in the structures of knowledge. The universalism of liberalism was given an ontological status in the moral dominance of modern science as the only rational form of analytical discourse. This involved the revival of the world university system, the creation of the modern structure of "disciplines," the application of Newtonian linear analysis and its rejection of the organizing relevance of time/space to all arenas of discourse (and specifically the social sciences), and of course the secular state and the moral neutrality of the scholar.
What had been left out of the package was democratization and equalization of reward and resources. Even though the political implications of hypothetical universality were largely nullified by the simultaneous enthronement of racism/sexisism, the logical implications of liberal theory resulted in a steady pressure for democratization, a sort of global equivalent of Oliver Twist asking for "more, please" in the orphanage.

It has been argued that the modern world-system has a structure that has been elaborated around the primacy of the endless accumulation of capital. This structure is coherent, and has operated effectively for some 500 years. It has now reached the limits of that effectiveness. It is at this point, the point where the various contradictions of the structure are no longer possible to adjust in any easy way, that we end our argument.

Notes

<1> I have tried to do this elsewhere in various places, most notably in _Unthinking Social Science: The Limits of Nineteenth-Century Paradigms_ (Cambridge: Polity Press, 1991). See also "History in Search of Science," forthcoming in _Review_.
