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Globalization and the “Spatial Fix”

Macro-economists, even those with interests in development, have a weak grasp of how to handle the production of space in their theories and models. The best they can usually do, is to see the world as partitioned into geographical entities (hence the importance of the state in their analyses and policies) each undergoing some kind of temporal process of development. The target of their thinking is how to understand different temporal trajectories (why and how national economies develop in the way they do and how to theorize and model these developments) and perhaps intervene so as to promote a healthier or more beneficial (usually defined as more profitable) pathway of development within that territorial entity.

This style of thinking, never wholly satisfactory, has become somewhat of a liability in the face of the complex processes lumped together under the umbrella term of “globalization”. If, for example, the state has become less relevant as a coherent and all-powerful entity in political-economic affairs (as many now maintain) then some other way to handle space has to be defined. And there are indeed some serious attempts within economics to confront that difficulty. Paul Krugman, for example, is attempting to build what is called a “new economic geography” which focuses on how selforganizing spatial principles of economic activity play an important role in political-economic life and how the principles of comparative geographical advantage might better be theorized both in terms of regional development and international trade. Jeffrey Sachs, on the other hand, wishes us to focus on regional complexes (defined in terms of some mix of environmental and cultural endowments) rather than states as more significant entities within which to understand how development occurs (the tropical regions differ from temperate with respect to endowments and environmental conditions and a state such as Brazil should be partitioned, he argues, between a “technology rich” and better endowed south and a “technology poor” and environmentally and culturally impoverished north). The material processes at work under contemporary conditions of globalization have, it seems, provoked some kind of conceptual shift among at least a subset of economists (thus do shifts in the economic basis demand conceptual and ideological shifts, as Marx long ago observed).

For geographers like myself, however, the production, reproduction and reconfiguration of space have always been central to understanding the political economy of

capitalism. For us, the contemporary form of globalization is nothing more than yet another round in the capitalist production and reconstruction of space. It entails a further diminution in the friction of distance (what Marx referred to as “the annihilation of space through time” as a fundamental law of capitalist development) through yet another round of innovation in the technologies of transport and communications. It consequently entails a geographical restructuring of capitalist activity (deindustrialization here and reindustrialization there, for example) across the face of planet earth, the production of new forms of uneven geographical development, a recalibration and even recentering of global power (with far greater emphasis upon the Pacific and newly industrializing countries) and a shift in the geographical scale at which capitalism is organized (symbolized by the growth of supra-state organizational forms such as the European Union and a more prominent role for institutions of global governance such as the WTO, the IMF, the G8, the UN and the like). Contemporary globalization has been, we can argue, the product of these specific geographically grounded processes. The question is not, therefore, how globalization has affected geography but how these distinctive geographical processes of the production and reconfiguration of space have created the specific conditions of contemporary globalization.

In my own work, globalization has largely been interpreted in terms of a theory of “the spatial fix”. This term (and the theory it centers) is in need of clarification, however, since different interpretations have been offered leading to confusions if not serious errors. In part the differences reflect an ambiguity of language. In English, the word “fix” has multiple meanings. One meaning, as in “the pole was fixed in the hole”, refers to something being pinned down and secured in a particular locus. The idea is that something is secured in space: it cannot be moved or modified. Another, as in “fix a problem”, is to resolve a difficulty, take care of a problem. Again, the sense is that things are made secure, but by returning things to normal functioning again (as in “he fixed the car’s engine so that it ran smoothly”). This second meaning has a metaphorical derivative, as in “the drug addict needs a fix”, in which it is the burning desire to relieve a chronic or pervasive problem that is the focus of meaning. Once the “fix” is found or achieved then the problem is resolved and the desire evaporates. But, as in the case of the drug addict, it is implied that the resolution is temporary rather than permanent, since the craving soon returns. It is sometimes said, for example, that “technological fixes” have counteracted the Malthusian dilemma of population growth outrunning resources. The implication is that continuous technological progress and rising productivity are necessary conditions to prevent the dismal Malthusian scenario of mass starvation and social disruption becoming a reality.

It was primarily in this last sense that I first deployed the term “spatial fix” to describe capitalism’s insatiable drive to resolve its inner crisis tendencies by geographical expansion and geographical restructuring. The parallel with the idea of a “technological fix” was deliberate. Capitalism, we might say, is addicted to geographical expansion much as it is addicted to technological change and endless expansion through economic growth. Globa-

lization is the contemporary version of capitalism's long-standing and never-ending search for a spatial fix to its crisis tendencies. Since there is a long history to these spatial fixes, there is a deep continuity (as I and many others have insisted) in the production of space under capitalist social relations and imperatives. There is, from this perspective, nothing particularly new or surprising about globalization since it has been going on since at least 1492 if not before.

While these disparate meanings of "to fix" appear contradictory, they are all internally related by the idea that something (a thing, a problem, a craving) can be pinned down and secured. In my own use of the term, the contradictory meanings can be played out to reveal something important about the geographical dynamics of capitalism and the crisis tendencies that attach thereto. In particular, I use it to focus on the particular problem of "fixity" (in the first sense of being secured in place) versus motion and mobility of capital. I note, for example, that capitalism has to fix space (in immovable structures of transport and communication nets, as well as in built environments of factories, roads, houses, water supplies, and other physical infrastructures) in order to overcome space (achieve a liberty of movement through low transport and communication costs). This leads to one of the central contradictions of capital: that it has to build a fixed space (or "landscape") necessary for its own functioning at a certain point in its history only to have to destroy that space (and devalue much of the capital invested therein) at a later point in order to make way for a new "spatial fix" (openings for fresh accumulation in new spaces and territories) at a later point in its history.

The idea of "the spatial fix" initially came out of attempts to reconstruct Marx's theory of the geography of capitalist accumulation. In the first essay on this topic, published in *Antipode* in 1975, I showed that Marx's fragmentary writings on the geography of capitalist accumulation could be consolidated into a reasonably consistent account that depicted the spatial as well as the temporal dynamics of capitalism. I later sought to deepen the argument through an examination of the relation between Hegel's views on imperialism, von Thünen's arguments concerning the frontier wage (a precursor to key formulations on marginal pricing in neoclassical economics) and Marx's arguments on colonialism (most particularly the peculiarity of closing the first volume of *Capital* with a chapter on colonial land policies). It was in this article, entitled "The Spatial Fix: Hegel, von Thunen and Marx" that I first used the term "spatial fix" directly. It was later deployed as a fundamental concept in *The Limits to Capital* (1982) and in a summary essay on "The Geopolitics of Capitalism" (1985). (These earlier essays will all appear shortly in a volume entitled *Spaces of Capital: Towards a Critical Geography* to be published by Edinburgh University Press and Routledge (USA)).

The primary result of these enquiries was to show that (a) capitalism could not survive without being geographically expansionary (and perpetually seeking out "spatial fixes" for its problems), (b) that major innovations in transport and communication technologies were necessary conditions for that expansion to occur (hence the emphasis in capitalism's

evolution on technologies that facilitated speed up and the progressive diminution of spatial barriers to movement of commodities, people, information and ideas over space) and (c) its modes of geographical expansion depended crucially upon whether it was the search for markets, fresh labor powers, resources (raw materials) or fresh opportunities to invest in new production facilities that was chiefly at stake.

On this latter point there is a strong connection between how the overaccumulation of capital (the central indicator of crisis in Marx's theory) is manifest and how the spatial fix gets pursued. Overaccumulation, in its most virulent form (as occurred in the 1930s, for example) is registered as surpluses of labor and capital side by side with seemingly no way to put them together in productive, i.e. "profitable" as opposed to socially useful ways. If the crisis cannot be resolved, then the result is massive devaluation of both capital and labor (bankruptcies, idle factories and machines, unsold commodities, and unemployed laborers). Devaluation can sometimes lead to physical destruction (surplus commodities get burned and laborers die of starvation) and even war (the whole sequence of events that occurred in the 1930s and 1940s came close to such a scenario). But there are ways to stave off such an outcome. In practice, most crisis phases combine selective devaluations with strategies to alleviate the difficulties. One such strategy is to seek out some "spatial fix" to the problem. If, for example, a crisis of localized overaccumulation occurs within a particular region or territory then the export of capital and labor surpluses to some new territory to start up new production would make most sense (as, for example, in the migration of both labor and capital across the Atlantic from Britain to North America in the crisis years of the nineteenth century). If, on the other hand, overaccumulation is chiefly registered as lack of effective demand for commodities then opening up new markets in non-capitalist territories appears the best strategy (the China market has been a favorite "imagined" goal for North American capital whenever it has run into difficulties for a century or more, hence the current commercial interest in the USA for integrating China into the WTO). Surpluses of capital and shortages of labor (or rigidity in labor markets because of political and institutional barriers) can be "fixed" either by the movement of capital to areas of labor surpluses and/or weak labor organization (hence North American capital moving into the maquilas along the Mexican border) or importation of cheap labor (as with guest worker programs in Europe) into centers of capitalist development. Surpluses of wage labor and shortages of capital often generate strong migratory currents (legal and illegal, as with the movement of Mexicans into the USA).

The impulse of expansion in any or all of these modes can be interpreted in Hegelian terms as each being a specific manifestation of a general relation between an "inner dialectic" of crisis formation manifest as overaccumulation within a space (most virulently as surpluses of capital and labor side by side) and an "outer dialectic" of geographical (spatial) release of these surpluses. This was roughly how Hegel envisioned it in *The Philosophy of Right*. The effect is to allow capital accumulation on a world scale to

continue its problematic temporal trajectory through continuous and sometimes disruptive geographical adjustments and reconfigurations. But the effect is also to project and replicate the contradictions of capital onto an ever-broadening geographical terrain. Closer analysis also show how a whole series of contradictions arise within the production of space. These need to be unravelled. Not only are the contradictions of capitalism worked through and embedded in the production of the geographical landscape, but these contradictions can and manifestly have at certain historical points been the locus of political-economic earthquakes that have shaken the prospects for further capital accumulation to their very core. We now turn to consider how this typically happens.

There are two dimensions to the problem that require separate treatment. Both, incidentally, track back to the complicated meanings of the word “fix”. The first concerns the difficulties posed by the circulation of fixed capital and the contradictions that attach thereto. The second deals more broadly with the whole problem of the territorial structures, spatial forms and uneven geographical development of capital accumulation. The category of fixed capital in Marxian theory refers to capital that is embedded in some asset or thing (such as machinery) which is not directly or even indirectly consumed in production (as are raw materials or energy inputs) but which gets used up (and worn out) over several production cycles. The lifetime of the fixed capital determines the rate at which it is used up (amortized) and the rate its value (e.g. that embodied in the machine) has to be transferred to the final product (e.g. the shirt). The lifetime is not only determined by rates of physical deterioration. Physically viable machinery can be replaced by new or less costly machines so that obsolescence through technological change plays a key role. Obsolescence can destroy the value remaining in existing fixed capital well before its physical lifetime is up (I still have an old Remington typewriter in my study, though I never use it). The devaluation of fixed capital is a serious problem for capitalists. It locates a potential crisis point for capital accumulation (hence the connection between business cycles and cycles of fixed capital investment and the importance of real-estate crashes in triggering crises, as, for example, in 1973). Note that the term “fixed” in this case refers to the way capital is locked up and committed to a particular physical form for a certain time-period. But a distinction must be drawn between fixed capital that is mobile and that which is not. Some fixed capital is embedded in the land (primarily in the form of the built environment or more broadly as ‘second nature’) and therefore fixed in place. This capital is “fixed” in a double sense (tied up in a particular object like a machine and pinned down in place). There is a relationship between the two forms. Aircrafts (a highly mobile form of fixed capital) require investments in immobile airport facilities if they are to function. The dialectic between fixity and motion then comes into play even within the category of fixed capital. While jumbo-jets can in principle fly anywhere, in practice they are confined to landing at fixed sites. In order for the capital invested in airport facilities to be realised, aircraft must fly in and out fully laden. In order for the capital invested in the aircraft to be paid off, the airports must encourage as much traffic as possible which means

that the places they serve must be attractive sites for the convergence of commodities, people, ideas, information, cultural activities, and the like. Plainly there are multiple opportunities here for mismatches, localised crises (perhaps building into regional and even global crises) as well as abundant opportunities to absorb surplus capital in mutually reinforcing structures of investment (airlines need airports and vice versa). Much of what we call “globalization” has been produced through innumerable symbiotic and mutually reinforcing activities of this kind (airline expansion and airport building). The “spatial fix” (in the sense of geographical expansion to resolve problems of overaccumulation) is in part achieved through fixing investments spatially, embedding them in the land, to create an entirely new landscape (of airports and of cities, for example) for capital accumulation. Finance capital and its derivative forms of “fictitious capital” have a vital role to play in reallocating investments across space and time (an important topic in itself which I must lay aside since it would take too long to elaborate upon here, but see my *Limits to Capital*, particularly chapters 8, 9 and 10). Suffice it to remark that the much vaunted hypermobility of finance and fictitious capital exists in a dialectical relation with, among other things, fixed capital investments of both the mobile and immobile sort. On the immobile front, the infrastructures of urbanization are crucial, both as foci of investment to absorb surpluses of capital and labor (providing localized/regional forms of the “spatial fix” as through the dynamics of suburbanization or the building of airport complexes) and as the necessary fixed capital of an immobile sort to facilitate spatial movement and the temporal dynamics of continued capital accumulation.

In much of my own work, I have focussed upon the production of space through urbanization as a key site where the contradictions of capital are always at work. Many of these studies focus upon the tension between the two kinds of “fixes” – that which is perpetually seeking to resolve the crisis tendencies of capitalism (overaccumulation) through the production of space (consider, as an example, the key role of suburbanization in the United States after 1945 in absorbing surpluses of capital and labor); and that version of the fix which is about the tying up and the pinning down of large amounts of capital in place through the production of fixed and immobile capital in the built environment (e.g. the highways systems needed to facilitate suburbanization). Here, the two kinds of fixes both feed off each other to stimulate symbiotic forms of accumulation (suburbs need cars and vice versa) and collide to form a potentially serious contradiction. Globalization in its present guise has entailed, among other things, the pursuit of a whole series of spatial fixes to the crisis that erupted around 1973. Capital, most would agree, has since become much more global in all of its forms of production, commerce, merchanting, and finance. It has shifted rapidly (and often with considerable volatility) from one location to another. At the same time massive amounts of capital and labor have been invested in the sorts of immobile fixed capital we see in airports, commercial centers, office complexes, highways, suburbs, container terminals, and the like. Global flows have been in part guided by such investments but at the same time these investments are

speculative developments that depend for their profitability upon a certain expansionary pattern of global flows of commodities, capital, and people. If the flows fail to materialize, then the fixed capital stands to be devalued and lost (the bankruptcy of Canary Wharf in London in the 1990s is a case in point, though, as often happens, the devaluation worked through in such a way as to provide profitable opportunities for the banks that ended up holding the physical asset). The production of space under capitalism proceeds under the shadow of this contradiction.

But there are also some more general arguments concerning the production of uneven geographical development that need to be integrated into this account. Capital is always in motion and much of that motion is spatial: commodity exchange (as opposed to the buying and selling of assets) always entails change of location and spatial movement. The market is spatialized (as Krugman now recognizes) and how that spatiality works has consequences for uneven geographical development. One of the laws of the market, for example, is that “there is nothing more unequal than the equal treatment of unequals”. The equality presupposed in market exchange produces spiraling inequalities between regions and spaces insofar as these regions and spaces possess differential endowments. The outcome is that rich regions grow richer and poor regions grow relatively poorer. The relaxation of state regulatory controls throughout the capitalist world (unevenly according to political circumstances) has produced a “neo-liberal” phase of capitalist development in which the inequalities of wealth and power have grown markedly.

But the end result of fierce competition, as Marx long ago observed, is monopoly or oligopoly as the strong drive out the weak in a Darwinian struggle for survival. While, therefore, the virtues of market competition are perpetually being extolled by the ruling classes, an astonishing trend towards monopoly and oligopoly has been taking place in all sorts of arenas, varying from mass media to airlines and even into traditional sectors such as autos. It is also said that the power of the state has been undermined when in fact the state has increasingly been restructured politically and economically as “an executive committee for the ruling class” as Marx long ago suggested. Here, too, the neoliberal phase of globalization has been characterized by a reconfiguration of state powers and the geographical concentration and centralization of political-economic powers within regional alliances of immense strength (with, of course, the USA very much leading the way). The geopolitical consequences are marked by a certain spatial fluidity but also by competitive fights between evolving territorial complexes.

The spatial fixes of recent globalization have therefore been occurring in a distinctive setting and have been shaped by the reconfiguration of institutional structures. This has entailed a transformation in spatial scale, so that global institutions like the IMF, the WTO and the World Bank have become much more powerful and significant, while supra-national arrangements such as the European Union, NAFTA and Mercosur have become more salient. The underlying addiction for spatial and technological fixes is being expressed through these rather more complex processes of uneven geographical development.

In conclusion, I want to re-emphasize the value of the geographical standpoint in understanding contemporary processes of globalization. Far too often in the literature (both popular and academic) we find places depicted as victims or victors of some ethereal process called globalization. A well-grounded historical-geographical materialism teaches us that globalization is the product of these distinctive processes of the production of space on the ground under capitalism. The question is not, therefore, what can an understanding of globalization tell us about geography but what can an understanding of geographical principles tell us about globalization, its successes and its failures, its specific forms of creative destruction, and the political discontents and resistances to which it gives rise. Above all, a better understanding of those geographical principles can surely help bring together the vast array of oppositional movements, currently geographically fragmented as well as unevenly developed, that offer hope for and aspire to some alternative.

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