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TIME-SPACE COMPRESSION AND THE POSTMODERN CONDITION

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[...] I want to suggest that we have been experiencing, these last two decades, an intense phase of time-space compression that has had a disorienting and disruptive impact upon political-economic practices, the balance of class power; as well as upon cultural and social life. While historical analogies are always dangerous, I think it no accident that postmodern sensibility evidences strong sympathies for certain of the confused political, cultural, and philosophical movements that occurred at the beginning of this century (in Vienna for example) when the sense of time-space compression was also peculiarly strong. I also note the revival of interest in geopolitical theory since around 1970, the aesthetics of place, and a revived willingness (even in social theory) to open the problem of spatiality to a general reconsideration (see, e.g., Gregory and Urry 1985, and Soja 1988).

The transition to flexible accumulation was in part accomplished through the rapid deployment of new organizational forms and new technologies in production. Though the latter may have originated in the pursuit of military superiority, their application had everything to do with bypassing the rigidities of Fordism and accelerating turnover time as a solution to the grumbling problems of Fordism-Keynesianism that erupted into open crisis in 1973. Speed-up was achieved in production by organizational shifts towards vertical disintegrating -- sub-contracting, outsourcing, etc. -- that reversed the Fordist tendency towards vertical integration and produced an increasing roundaboutness in production even in the face of increasing financial centralization. Other organizational shifts -- such as the 'just-in-time' delivery system that reduces stock inventories -- when coupled with the new technologies of electronic control, small-batch production, etc., all reduced turnover times in many sectors of production (electronics, machine tools, automobiles, construction, clothing, etc.). For the labourers this all implied an intensification (speed-up) in labour processes and an acceleration in the de-skilling and re-skilling required to meet new labour needs [...].

Accelerating turnover time in production entails parallel accelerations in exchange and consumption. Improved systems of communication and information flow, coupled with rationalizations in techniques of distribution (packaging, inventory control, containerization, market feed-back, etc.), made it possible to circulate commodities through the market system with greater speed. Electronic banking and plastic money were some of the innovations that improved the speed of the inverse flow of money. Financial services and markets (aided by computerized trading) likewise speeded up, so as to make, as the saying has it, 'twenty-four hours a very long time' in global stock markets.

Of the many developments in the arena of consumption, two stand out as being of particular importance. The mobilization of fashion in mass (as opposed to elite) markets provided a means to accelerate the pace of consumption not only in clothing, ornament, and decoration but also across a wide swathe of life-styles and recreational activities (leisure and sporting habits, pop music styles, video and children's games, and the like). A second trend was a shift away from the consumption of goods and into the consumption of services -- not only personal, business, educational, and health services, but also into entertainments, spectacles, happenings, and distractions. The 'lifetime' of such services (a visit to a museum, going to a rock concert or movie, attending lectures or health clubs), though hard to estimate, is far shorter than that of an automobile or washing machine. If there are limits to the accumulation and turnover of physical goods (even counting the famous six thousand pairs of shoes of Imelda Marcos), then it makes sense for capitalists to turn to the provision of very ephemeral services in consumption. This quest may lie at the root of the rapid capitalist penetration [...] of many sectors of cultural production from the mid-1960s onwards.

Of the innumerable consequences that have flowed from this general speed-up in the turnover times of capital, I shall focus on those that have particular bearing on post-modern ways of thinking, feeling, and doing.

The first major consequence has been to accentuate volatility and ephemerality of fashions, products, production techniques, labour processes, ideas and ideologies, values and established practices. The sense that 'all that is solid melts into air' has rarely been more pervasive (which probably accounts for the volume of writing on that theme in recent years). [...]

In the realm of commodity production, the primary effect has been to emphasize the values and virtues of instantaneity (instant and fast foods, meals, and other satisfactions) and of disposability (cups, plates, cutlery, packaging, napkins, clothing, etc.). [...] 'Compared to the life in a less rapidly changing society, more situations now flow through the channel in any given interval of time -- and this implies profound changes in human psychology' [Toffler 1970]. This transience, Toffler goes on to suggest, creates 'a temporariness in the structure of both public and personal value systems' which in turn provides a context for the 'crack-up of consensus' and the diversification of values within a fragmenting society. [...] In this regard, it is instructive to see how Toffler (pp. 326-9), at a much later moment of time-space compression, echoes the thinking of Simmel, whose ideas were shaped at a moment of similar trauma more than seventy years before. [...]

But, as so often happens, the plunge into the maelstrom of ephemerality has provoked an explosion of opposed sentiments and tendencies. To begin with, all sorts of technical means arise to guard against future shocks. Firms sub-contract or resort to flexible hiring practices to discount the potential unemployment costs of future market shifts. Futures markets in everything, from corn and pork bellies to currencies and government debt, coupled with the 'securitization' of all kinds of temporary and floating debts, illustrate techniques for discounting the future into the present. Insurance hedges of all kinds against future volatility become much more widely available.

Deeper questions of meaning and interpretation also arise. The greater the ephemerality, the more pressing the need to discover or manufacture some kind of eternal truth that might lie therein. The religious revival, that has become much stronger since the late sixties, and the search for authenticity and authority in politics (with all of its accoutrements of nationalism and localism and admiration for those charismatic and 'protean' individuals with their Nietzschean 'will to power') are cases in point. The revival of interest in basic institutions (such as the family and community), and the search for historical roots are all signs of a search for more secure moorings and longer-lasting values in a shifting world. [...]

The spatial adjustments have been no less traumatic. The satellite communications systems deployed since the early 1970s have rendered the unit cost and time of communication invariant with respect to distance. It costs the same to communicate over 500 miles as it does over 5,000 via satellite. Air freight rates on commodities have likewise come down dramatically, while containerization has reduced the cost of bulk sea and road transport. It is now possible for a large multinational corporation like Texas Instruments to operate plants with simultaneous decision-making with respect to financial, market, input costs, quality control, and labour process conditions in more than fifty different locations across the globe (Dicken 1986: 110-13). Mass television ownership coupled with satellite communication makes it possible to experience a rush of images from different spaces almost simultaneously, collapsing the world's spaces into a series of images on a television screen. The whole world can watch the Olympic Games, the World Cup, the fall of a dictator, a political summit, a deadly tragedy ... while mass tourism, films made in spectacular locations, make a wide range of simulated or vicarious experiences of what the world contains available to many people. The image of places and spaces becomes as open to production and ephemeral use as any other.

We have, in short, witnessed another fierce round in that process of annihilation of space through time that has always lain at the centre of capitalism's dynamic [...]. Marshall McLuhan described how he thought the 'global village' had now become a communications reality in the mid-1960s:

After three thousand years of explosion, by means of fragmentary and mechanical technologies, the Western World is imploding. During the mechanical ages we had extended our bodies in space. Today, after more than a century of electronic technology, we have extended our central nervous system itself in a global embrace, abolishing both space and time as far as our planet is concerned.

In recent years a whole spate of writing has taken this idea on board and tried to explore, as for example Virilio (1980) does in his *Esthétique de la disparition*, the cultural consequences of the supposed disappearance of time and space as materialized and tangible dimensions to social life.

But the collapse of spatial barriers does not mean that the significance of space is decreasing. Not for the first time in capitalism's history, we find the evidence pointing to the converse thesis. Heightened competition under conditions of crisis has coerced capitalists into paying much closer attention to relative locational advantages, precisely because diminishing spatial barriers give capitalists the power to exploit minute spatial differentiations to good effect. Small differences in what the space contains in the way of labour supplies, resources, infrastructures, and the like become of increased significance. Superior command over space becomes an even more important weapon in class struggle. It becomes one of the means to enforce speed-up and the redefinition of skills on recalcitrant work forces. Geographical mobility and decentralization are used against a union power which traditionally concentrated in the factories of mass production. Capital flight, deindustrialization of some regions, and the industrialization of others, the destruction of traditional working-class communities as power bases in class struggle, become leitmotifs of spatial transformation under more flexible conditions of accumulation (Martin and Rowthorn 1986; Bluestone and Harrison 1982; Harrison and Bluestone 1988).

As spatial barriers diminish so we become much more sensitized to what the world's spaces contain. Flexible accumulation typically exploits a wide range of seemingly contingent geographical circumstances, and reconstitutes them as structured internal elements of its own encompassing logic. For example, geographical differentiations in the mode and strengths of labour control together with variations in the quality as well as the quantity of labour power assume a much greater significance in corporate locational strategies. New industrial ensembles arise, sometimes out of almost nothing (as the various silicon valleys and glens) but more often on the basis of some pre-existing mix of skills and resources. The 'Third Italy' (Emilia-Romagna) builds upon a peculiar mix of co-operative entrepreneurialism, artisan labour, and local communist administrations anxious to generate employment, and inserts its clothing products with incredible success into a highly competitive world economy. Flanders attracts outside capital on the basis of a dispersed, flexible, and reasonably skilled labour supply with a deep hostility to unionism and socialism. Los Angeles imports the highly successful patriarchal labour systems of South-East Asia through mass immigration, while the celebrated paternalistic labour control system of the Japanese and Taiwanese is imported into California and South Wales. The story in each case is different, making it appear as if the uniqueness of this or that geographical circumstance matters more than ever before. Yet it does so, ironically, only because of the collapse of spatial barriers.

While labour control is always central, there are many other aspects of geographical organization that have risen to a new prominence under conditions of more flexible accumulation. The need for accurate information and speedy communication has emphasized the role of so-called 'world cities' in the financial and corporate system (centres equipped with teleports, airports, fixed communication links, as well as a wide array of financial, legal, business, and infrastructural services). The diminution of spatial barriers results in the reaffirmation and realignment of hierarchy within what is now a global urban system. The local availability of material resources of special qualities, or even at marginally lower costs, starts to be ever more important, as do local variations in market taste that are today more easily exploited under conditions of small-batch production and flexible design. Local differences in entrepreneurial ability, venture capital, scientific and technical know-how, social attitudes, also enter in, while the local networks of influence and power, the accumulation strategies of local ruling elites (as opposed to nation-state policies) also become more deeply implicated in the regime of flexible accumulation.

But this then raises another dimension to the changing role of spatiality in contemporary society. If capitalists become increasingly sensitive to the spatially differentiated qualities of which the world's geography is composed, then it is possible for the peoples and powers that command those spaces to alter them in such a way as to be more rather than less attractive to highly mobile capital. Local ruling elites can, for example, implement strategies of local labor control, of skill enhancement, of infrastructural provision, of tax policy, state regulation, and so on, in order to attract development within their particular space. The qualities of place stand thereby to be emphasized in the midst of the increasing abstractions of space. The active production of places with special qualities becomes an important stake in spatial competition between localities, cities, regions, and nations. Corporatist forms of governance can flourish in such spaces, and themselves take on entrepreneurial roles in the production of favourable business climates and other special qualities. And it is in this context that we can better situate the striving [...] for cities to forge a distinctive image and to create an atmosphere of place and tradition that will act as a lure to both capital and people 'of the right sort' (i.e. wealthy and influential). Heightened inter-place competition should lead to the production of more variegated spaces within the increasing homogeneity of international exchange. But to the degree that this competition opens up cities to systems of accumulation, it ends up producing what Boyer (1988) calls a 'recursive' and 'serial' monotony, 'producing from already known patterns or molds places almost identical in ambience from city to city: New York's South Street Seaport, Boston's Quincy Market, Baltimore's Harbor Place.'

We thus approach the central paradox: the less important the spatial barriers, the greater the sensitivity of capital to the variations of place within space, and the greater the incentive for places to be differentiated in ways attractive to capital. The result has been the production of fragmentation, insecurity, and ephemeral uneven development within a highly unified global space economy of capital flows. The historic tension within capitalism between centralization and decentralization is now being worked out in new ways. Extraordinary decentralization and proliferation of industrial production ends up putting Benetton or Laura Ashley products in almost every serially produced shopping mall in the advanced capitalist world. Plainly, the new round of time-space compression is fraught with as many dangers as it offers possibilities for survival of particular places or for a solution to the overaccumulation problem.
[...]

None of these shifts in the experience of space and time would make the sense or have the impact they do without a radical shift in the manner in which value gets represented as money. Though long dominant, money has never been a clear or unambiguous representation of value, and on occasion it becomes so muddled as to become itself a major source of insecurity and uncertainty. Under the terms of the postwar settlement, the question of world money was put on a fairly stable basis. The US dollar became the medium of world trade, technically backed by a fixed convertibility into gold, and backed politically and economically by the overwhelming power of the US productive apparatus. The space of the US production system became, in effect, the guarantor of international value. But [...] one of the signals of the breakdown of the Fordist-Keynesian system was the breakdown of the Bretton Woods agreement, of convertibility of US dollars to gold, and the shift to a global system of floating exchange rates. The breakdown in part occurred because of the shifting dimensionalities of space and time generated out of capital accumulation. Rising indebtedness (particularly within the United States), and fiercer international competition from the reconstructed spaces of the world economy under conditions of growing accumulation, had much to do with undermining the power of the US economy to operate as an exclusive guarantor of world money.

The effects have been legion. The question of how value should now get represented, what form money should take, and the meaning that can be put upon the various forms of money available to us, has never been far from the surface of recent concerns. Since 1973, money has been 'de-materialized' in the sense that it no longer has a formal or tangible link to precious metals (though the latter have continued to play a role as one potential form of money among many others), or for that matter to any other tangible commodity. Nor does it rely exclusively upon productive activity within a particular space. The world has come to rely, for the first time in its history, upon immaterial forms of money -- i.e. money of account assessed quantitatively in numbers of some designated currency (dollars, yen, Deutschmarks, sterling, etc.). Exchange rates between the different

currencies of the world have also been extremely volatile. Fortunes could be lost or made simply by holding the right currency during the right phases. The question of which currency I hold is directly linked to which place I put my faith in. That may have something to do with the competitive economic position and power of different national systems. That power, given the flexibility of accumulation over space, is itself a rapidly shifting magnitude. The effect is to render the spaces that underpin the determination of value as unstable as value itself. This problem is compounded by the way that speculative shifts bypass actual economic power and performance, and then trigger self-fulfilling expectations. The de-linking of the financial system from active production and from any material monetary base calls into question the reliability of the basic mechanism whereby value is supposed to be represented.

[...]

The breakdown of money as a secure means of representing value has itself created a crisis of representation in advanced capitalism. It has also been reinforced by, and added its very considerable weight to, the problems of time-space compression which we earlier identified. The rapidity with which currency markets fluctuate across the world's spaces, the extraordinary power of money capital flow in what is now a global stock and financial market, and the volatility of what the purchasing power of money might represent, define, as it were, a high point of that highly problematic intersection of money, time, and space as interlocking elements of social power in the political economy of postmodernity.

It is, furthermore, not hard to see how all of this might create a more general crisis of representation. The central value system, to which capitalism has always appealed to validate and gauge its actions, is dematerialized and shifting, time horizons are collapsing, and it is hard to tell exactly what space we are in when it comes to assessing causes and effects, meanings or values. The intriguing exhibition at the Pompidou Centre in 1985 on 'The Immaterial' (an exhibition for which none other than Lyotard acted as one of the consultants) was perhaps a mirror image of the dissolution of the material representations of value under conditions of more flexible accumulation, and of the confusions as to what it might mean to say, with Paul Virilio, that time and space have disappeared as meaningful dimensions to human thought and action.

There are, I would submit, more tangible and material ways than this to go about assessing the significance of space and time for the condition of postmodernity. It should be possible to consider how, for example, the changing experience of space, time, and money has formed a distinctive material basis for the rise of distinctive systems of interpretation and representation [...]. If we view culture as that complex of signs and significations (including language) that mesh into codes of transmission of social values and meanings, then we can at least begin upon the task of unravelling its complexities under present-day conditions by recognizing that money and commodities are themselves the primary bearers of cultural codes. Since money and commodities are entirely bound up with the circulation of capital, it follows that cultural forms are firmly rooted in the daily circulation process of capital. [...]

The annihilation of space through time has radically changed the commodity mix that enters into daily reproduction. Innumerable local food systems have been reorganized through their incorporation into global commodity exchange. French cheeses, for example, virtually unavailable except in a few gourmet stores in large cities in 1970, are now widely sold across the United States. And if this is thought a somewhat elite example, the case of beer consumption suggests that the internationalization of a product, that traditional location theory always taught should be highly market-oriented, is now complete. Baltimore was essentially a one-beer town (locally brewed) in 1970, but first the regional beers from places like Milwaukee and Denver, and then Canadian and Mexican beers followed by European, Australian, Chinese, Polish, etc. beers became cheaper. Formerly exotic foods became commonplace while popular local delicacies (in the Baltimore case, blue crabs and oysters) that were once relatively inexpensive jumped in price as they too became integrated into long-distance trading.

The market place has always been a 'emporium of styles' (to quote Raban's phrase) but the food market, just to take one example, now looks very different from what it was twenty years ago. Kenyan haricot beans,

Californian celery and avocados, North African potatoes, Canadian apples, and Chilean grapes all sit side by side in a British supermarket. This variety also makes for a proliferation of culinary styles, even among the relatively poor. Such styles have always migrated, of course, usually following the migration streams of different groups before diffusing slowly through urban cultures. The new waves of immigrants (such as the Vietnamese, Koreans, Filipinos, Central Americans, etc. that have added to the older groups of Japanese, Chinese, Chicanos, and all the European ethnic groups that have also found their culinary heritage can be revived for fun and profit) make a typical United States city such as New York, Los Angeles, or San Francisco (where the last census showed the majority of the population to be made up of minorities) as much an emporium of culinary styles as it is an emporium of the world's commodities. But here, too, there has been an acceleration, because culinary styles have moved faster than the immigration streams. It did not take a large French immigration to the United States to send the croissant rapidly spreading across America to challenge the traditional doughnut, nor did it take a large immigration of Americans to Europe to bring fast-food hamburgers to nearly all medium-sized European cities. Chinese takeaways, Italian pizza-parlours (run by a US chain), Middle Eastern falafel stalls, Japanese sushi bars . . . the list is now endless in the Western world.

The whole world's cuisine is now assembled in one place in almost exactly the same way that the world's geographical complexity is nightly reduced to a series of images on a static television screen. This same phenomenon is exploited in entertainment palaces like Epcott and Disneyworld; it becomes possible, as the US commercials put it, 'to experience the Old World for a day without actually having to go there'. The general implication is that through the experience of everything from food, to culinary habits, music, television, entertainment, and cinema, it is now possible to experience the world's geography vicariously, as a simulacrum. The interweaving of simulacra in daily life brings together different worlds (of commodities) in the same space and time. But it does so in such a way as to conceal almost perfectly any trace of origin, of the labour processes that produced them, or of the social relations implicated in their production. [...]

There seem to be two divergent sociological effects of all of this in daily thought and action. The first suggests taking advantage of all the divergent possibilities [...] and cultivating a whole series of simulacra as milieux of escape, fantasy, and distraction:

All around us -- on advertisement hoardings, bookshelves, record covers, television screens -- these miniature escape fantasies present themselves. This, it seems, is how we are destined to live, as split personalities in which the private life is disturbed by the promise of escape routes to another reality. (Cohen and Taylor 1978, quoted in McHale 1987: 38)

[...]

But it is exactly at this point that we encounter the opposite reaction that can best be summed up as the search for personal or collective identity, the search for secure moorings in a shifting world. Place-identity, in this collage of superimposed spatial images that implode in upon us, becomes an important issue, because everyone occupies a space of individuation (a body, a room, a home, a shaping community, a nation), and how we individuate ourselves shapes identity. Furthermore, if no one 'knows their place' in this shifting collage world, then how can a secure social order be fashioned or sustained?

There are two elements within this problem that deserve close consideration. First, the capacity of most social movements to command place better than space puts a strong emphasis upon the potential connection between place and social identity. This is manifest in political action. The defensiveness of municipal socialism, the insistence on working-class community, the localization of the fight against capital, become central features of working-class struggle within an overall patterning of uneven geographical development. The consequent dilemmas of socialist or working-class movements in the face of a universalizing capitalism are shared by other oppositional groups -- racial minorities, colonized peoples, women, etc. -- who are relatively empowered to organize in place but disempowered when it comes to organizing over space. In clinging, often a necessity, to a place-bound identity, however, such oppositional movements become a part of the very fragmentation which a mobile capitalism and flexible accumulation can feed upon. 'Regional resistances', the struggle for local autonomy, place-bound organization may be excellent bases for political action but they

cannot bear the burden of radical historical change alone. 'Think globally and act locally' was the revolutionary slogan of the 1960s. It bears repeating.

The assertion of any place-bound identity has to rest at some point on the motivational power of tradition. It is difficult, however, to maintain any sense of historical continuity in the face of all the flux and ephemerality of flexible accumulation. The irony is that tradition is now often preserved by being commodified and marketed as such. The search for roots ends up at worst being produced and marketed as an image, as a simulacrum or pastiche (imitation communities constructed to evoke images of some folksy past, the fabric of traditional working-class communities being taken over by an urban gentry). The photograph, the document, the view, and the reproduction become history precisely because they are so overwhelmingly present. The problem, of course, is that none of these are immune from tampering or downright faking for present purposes. At best, historical tradition is reorganized as a museum culture, not necessarily of high modernist art, but of local history, of local production, of how things once upon a time were made, sold, consumed, and integrated into a long-lost and often romanticized daily life (one from which all trace of oppressive social relations may be expunged). Through the presentation of a partially illusory past it becomes possible to signify something of local identity and perhaps to do it profitably.

The second reaction to the internationalism of modernism lies in the search to construct place and its meanings qualitatively. Capitalist hegemony over space puts the aesthetics of place very much back on the agenda. But this, as we have seen, meshes only too well with the idea of spatial differentiations as lures for a peripatetic capital that values the option of mobility very highly. Isn't this place better than that place, not only for the operations of capital but also for living in, consuming well, and feeling secure in a shifting world? The construction of such places, the fashioning of some localized aesthetic image, allows the construction of some limited and limiting sense of identity in the midst of a collage of imploding spatialities.

The tension in these oppositions is clear enough but it is hard to appreciate their intellectual and political ramifications.

[...]

This should alert us to the acute geopolitical dangers that attach to the rapidity of time-space compression in recent years. The transition from Fordism to flexible accumulation, such as it has been, ought to imply a transition in our mental maps, political attitudes, and political institutions. But political thinking does not necessarily undergo such easy transformations, and is in any case subject to the contradictory pressures that derive from spatial integration and differentiation. There is an omnipresent danger that our mental maps will not match current realities. The serious diminution of the power of individual nation states over fiscal and monetary policies, for example, has not been matched by any parallel shift towards an internationalization of politics. Indeed, there are abundant signs that localism and nationalism have become stronger precisely because of the quest for the security that place always offers in the midst of all the shifting that flexible accumulation implies. The resurgence of geopolitics and of faith in charismatic politics (Thatcher's Falklands War, Reagan's invasion of Grenada) fits only too well with a world that is increasingly nourished intellectually and politically by a vast flux of ephemeral images.

Time-space compression always exacts its toll on our capacity to grapple with the realities unfolding around us. Under stress, for example, it becomes harder and harder to react accurately to events. [...] If 'seasoned negotiators cracked under the pressure of tense confrontations and sleepless nights, agonizing over the probable disastrous consequences of their snap judgements and hasty actions', then how much more difficult must decision-making now be? The difference this time is that there is not even time to agonize. And the problems are not confined to the realms of political and military decision-making, for the world's financial markets are on the boil in ways that make a snap judgement here, an unconsidered word there, and a gut reaction somewhere else the slip that can unravel the whole skein of fictitious capital formation and of interdependency.

The conditions of postmodern time-space compression exaggerate in many respects the dilemmas that have from time to time beset capitalist procedures of modernization in the past (1848 and the phase just before the First World War spring particularly to mind). While the economic, cultural, and political responses may not be exactly new, the range of those responses differs in certain important respects from those which have occurred before. The intensity of time-space compression in Western capitalism since the 1960s, with all of its congruent features of excessive ephemerality and fragmentation in the political and private as well as in the social realm, does seem to indicate an experiential context that makes the condition of postmodernity somewhat special. But by putting this condition into its historical context, as part of a history of successive waves of time-space compression generated out of the pressures of capital accumulation with its perpetual search to annihilate space through time and reduce turnover time, we can at least pull the condition of postmodernity into the range of a condition accessible to historical materialist analysis and interpretation. [...]

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