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INDUSTRIAL RESTRUCTURING AND URBAN DEVELOPMENT: AN EXAMINATION IN METROPOLITAN DETROIT

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The relationship between industrial change and urban development has been an important part of the literature of economic restructuring. Much of this literature has focused upon the Los Angeles area, which in many ways has been a laboratory for research on the topic. Given the common acceptance of the term "Postfordism" to describe recent production changes, it would seem appropriate to look at the "home" of Fordism. This paper, then, focuses upon metropolitan Detroit, looking at some broad aspects of spatial restructuring within the city. The paper (a) looks at the place of Fordist and Postfordist production in the spatial development of Detroit, and (b) considers some spatial repercussions in the 1990s.

Twentieth Century industrial development in Detroit might be divided into three periods, described as Early Fordism, Late Fordism, and Postfordism. Each of these production periods imposed its distinctive demands for urban space, which have contributed greatly in shaping the area's urban development and socioeconomic structure, (although it is cautioned that Igoducdon is just one of several parallel societal processes molding the metropolitan landscaper The relationship between industrial change and Detroit's metropolitan structure continues into the present era. One repercussion might be the further pulling apart of the metropolitan area.

Introduction

The relationship between Industrialization and Urbanization has received renewed attention in the literature of Industrial Location and Urban Systems (SCOTT 1986, 1988; ERNST and MEIER 1992). As part of the literature of Economic Restructuring, the theme has included a wide range of topics affecting cities from a global (STORPER 1992) to a local (SCOTT 1988) scale. Considerable attention has been placed upon linking these two aspects of the new order (industrialization and urbanization) within specific metropolitan regions (FAINSTEIN et al. 1986; SMITH and FEAGIN 1987). In the U.S., much work has focused upon the Los Angeles area, which has become a virtual laboratory for a group of productive urban-industrial scholars (SCOTT 1988; SOJA and MORALES et al. 1983; STORPER and WALKER 1983). To what degree Los Angeles is a prototype of the new intrametropolitan order (SOJA and SCOTT 1987) or a one-of-a-kind example, is clearly controversial (as was Chicago during the heyday of the Chicago "school"), and has promoted a great deal of intense discussion (GERTLER 1992).

The present paper focuses upon metropolitan Detroit (which would seem appropriate given the apparent universal acceptance of "Post-Fordism" as a catchword for describing recent production changes). The paper looks at some of the broader aspects of spatial restructuring taking place within the city. In doing so, this paper (a) asks a few questions about the Postfordist literature and its relationship to urbanization, (b) looks at the implications of Fordist production in spatial

development of the Detroit area, and (c) considers some of the spatial implications in the age of Postfordism.

A Comment on Postfordism and Postfordist Literature

The term Postfordism has been used both (a) as being synonymous with and/or (b) as being part of, the global economic restructuring process which has been taking place in the last few decades. At the same time, Postfordism has been considered both a response to, and a contributor to, the economic crises of the period. Postfordism, in turn, has been described in terms of two other concepts which are assumed to be, but are not necessarily interrelated. Those concepts are (1) Deindustrialization and (2) Flexible Production, each of which has achieved a "life of its own" in the restructuring literature. (Although it should be noted that some authors have considered them as sequential strategies in capitalism's response to economic crisis [SCHOENBERGER 1988]). Although no attempt will be made here to discuss the meaning and repercussions of flexible production (GERTLER 1988, 1992), it might be noted that the term has both internal and external implications. Internally, the term refers to dramatic technical and social changes in the workplace, management, and labor relations of a firm. Externally, it is related to, and incorporates, dramatic scale shifts, toward the scope of transnational corporations, the new international division of labor (NIDL) and generally the shift to a global economy.

Complicated as those terms can be in terms of the production process, they become even more difficult when an attempt is made to apply them to society as a whole (HARVEY 1988; GERTLER 1988; HARVEY and SCOTT 1989), or to the urbanization process (SCOTT 1986). In his thought-provoking paper, SCOTT suggests that the structure of production "underpins the whole pattern of the metropolis". The scope of the Postfordist idea would seem to reach its extreme when it is applied to, or at least embedded into, the even more all-encompassing topic of Postmodernism. Although this observer will not attempt to discuss the postmodern paradigm (HARVEY 1989), his reading of the descriptions of the "Postmodern city" suggest the pervading impact of Postfordist production in the structure of that city (SOJA 1989).

It should be noted that there have been strong disagreements concerning both the universality and the timing of the Postfordist process (HUDSON 1989). Indeed, the Postfordist literature is replete with multiple possible interpretations, suggesting the need for some caution. There is no question about the importance of the structure of production upon the pattern of urban development. At the same time, the relationship between the two processes (industrialization and urbanization) is anything but linear. Postfordism needs to be considered in conjunction with other contemporary social processes which impact upon the urbanization process (DUNFORD 1990). Among others, four might be mentioned (as parallel processes influencing metropolitan structure during the Postfordist period).

First and foremost is the macro-scale impact of general economic change in the Western world as a long sustained period of boom and optimism changed to one of nongrowth, slow growth and general economic slowdown. Although this change is implied in the debates on de-industrialization, its underlying significance is often neglected, and discussions proceed as if production changes in themselves were the motors of vast changes taking place.

Second, the coming of Postfordism has been contemporary with dynamic changes taking place in the demographic structure of Western countries. The generational shift from a baby boom to a baby bust, the revolution in family composition and household size, changing life-styles, and new modes of consumption have had momentous impacts upon urban restructuring (SINCLAIR 1991). Clearly these shifts parallel developments which are commonly attributed to the Postfordist paradigm.

The most obvious urban phenomenon which has paralleled the change to a Postfordist industrial economy is the changed size and shape of the metropolis. In North American cities, the suburban sprawl of the postwar (Fordist?) period has given way to a different form of metropolitan expansion, as extended exurbanization converts unprecedented quantities of land into a quasi-urban environment. Along with this expansion, social segregation (of classes, races, lifestyles) is spread out on a vastly greater spatial scale. The demands of Postfordism contribute to these change, but do not explain the forms and processes of modern sprawl which are redefining metropolitan regions.

In sum, Postfordism, and economic restructuring in general, is one of a series of momentous social changes which are transforming contemporary metropolitan landscapes (Table 1). Somehow the spatial demands of Postfordist production fit in with those other metropolitan developments. They do not, however, control them.

In concluding this discussion, need it be mentioned that processes associated with economic restructuring, universal as they might be, operate upon a pre-existing legacy of each city's unique geography and historical development, including its traditions, modes of doing things, and specific ways of looking at things? In the following pages, a case will be made that in many ways the spatial development of Detroit was a model of Fordist production needs. But this is not only because the city housed the industry which is most associated with Fordism. Detroit's history, and the city's physical geography, enabled the forces of Fordism to evolve spatially, in almost a model-like manner. By the same token, and for similar reasons, the common categorization of Detroit in Postfordist times as an aging "Rust Belt" metropolis, is in many respects erroneous. Moreover, certain factors cited as hallmarks of the Postfordist city, are totally lacking in Detroit.

Fordism, Postfordism, and Metropolitan Detroit

The automobile industry in Detroit essentially is a product of the 20th Century. Although the issue is controversial, it is convenient to equate the advent of Fordism

Table 1 Industrial Change and Urban Development. Related Components

		Early Fordism	Late Fordism	Postfordism
Production		Mass production	Mass production	Flexible Production
	Industrial Change	expansion new factories	expansion new factories	de-industrialization plant closings
	Supplier Relations	small firms close limited commitment	small firms, close and distant limited commitment	fewer, larger firms close formalized, committed
Labor		Blue Collar (unskilled)	Blue Collar (unskilled)	White Collar/Blue Collar (skilled and unskilled)
	Tenure (blue collar)	full-time few benefits	life-time extended benefits	temporary, part-time few benefits
	Income/Class	middle income low security	middle class high security	polarization of incomes
	Labor Relations	company loyalty (non contract)	social contract	end of social contract
Contemporary Societal Changes		Industrial	Industrial	Postindustrial
	Economy	cyclical growth	sustained growth	slow growth
	Demography/ Lifestyle	population growth (immigration) large households family-oriented consumption	population growth (baby boom) large households family-oriented consumption	population decline (baby bust) small households non-family patterns of consumption
	Urban Form	city growth (medium density)	suburban sprawl (low density)	exurban "galactic" expansion (low density)
Metropolitan Development		Patterning of City Space	Carving out of Suburban Space	Carving out of Suburban and Peripheral Space
	Structure	factory districts factory "villages" elite suburbs	industrial suburban corridors white collar suburbs central city abandonment	de-industrialized suburbs new production-consumption spaces central city abandonment
	Job Creation Centers	city industrial districts	industrial suburbs	suburban business-manuf.-technol. zones
	Commuting Patterns	suburb⇨city	suburban⇨suburban	exurban⇨suburban spatial job mismatch

Source Robert Sinclair, 1994

with the second decade of the Century (Ford's renowned Highland Park plant was constructed in 1914). If, as the literature suggests, the coming of the Postfordist era is the late 1960s and early 1970s, the year 1970 might be considered a convenient dividing line between the two eras. However, from the urbanization standpoint, World War II and its aftermath had such a revolutionary impact upon metropolitan Detroit, that it is almost necessary to divide the Fordist period into two periods - prewar and postwar. This paper therefore considers three periods, termed early Fordism, late Fordism, and Postfordism (Table 1).

Some Relevant Background

Detroit at the turn of the Century was a well-established industrial and (commercial city of some 280,000 people, with an economy and development closely oriented to the Detroit River. A few simple geographical realities is important in understanding the city's later spatial development (SINCLAIR 1972). Most obvious is the trend of the Great Lakes waterways in this area. Detroit lies north of those waterways, and north of Canada, ensuring that the city's growth was to the north and west, away from the mainstream of the American industrial belt, and ensuring that the city's expansion is not interrupted by the expansion of competing urban areas. The image of unlimited space to the north has ingrained itself in the psyche of Detroit's people, and in the locational decisions of its institutions. A second reality is the early development of the area's transport system. From the establishment of early Indian trails through the forests, Detroit's transport pattern, the area's spatial development, and as will be seen, the pattern of social space, has been dictated by a series of arteries, radiating from the riverfront (today's downtown) into the hinterland of Southern Michigan. A third reality is the location of the City of Detroit's northern political boundary, which was firmly established early in the 19th Century along what is now known as Eight-Mile Road. As will be seen, the location of this line has had a profound effect upon the area's political and social development.

The Early Fordist Period

The salient aspects of the early Fordist period are well-known. The period saw the inauguration of mass production, the creation of a vast middle-class market for automobiles, and the gradual emergence of three giant corporations, which dominated the automobile industry and its markets. Within two decades, Detroit's economic structure changed from a balance of diversified industries and services to the most specialized industrial economy in the country. The labor needs of the industry were satiated by a massive flow of immigrants, largely from Eastern Europe, which transformed the ethnic geography of the city.

From the beginning, the spatial needs of the growing automobile industry dictated, rather than adjusted to, the spatial development of the city. Two main factors

underlay the spatial pattern, namely (a) rail facilities and (b) open space adjacent to the built-up area. Although earlier industries were scattered throughout the city, the first large automobile plants were established along the main railroad lines which surrounded and penetrated the central part of the city. There was a concentration on the city's east side where the largest plants were established. In time, the new factories shifted to the northern outskirts of the city (Highland Park and Hamtramck), and later to the southwest, where the Ford Rouge plant was established in what later became East Dearborn.

The location of factories initiated urban development. In the period of early Fordism, "factory towns" developed. Because the labor needs were fed by the chain migration of immigrants, these "factory towns" were also "ethnic villages", each with their livelihood and loyalties dictated by the factory which brought about their existence. The Dodge Main plant in Hamtramck, and the steel mills in downriver Detroit became synonymous with the Polish and Hungarian districts respectively. Although the corporate-labor "social contract" was unheard of at this stage, in its place was a kind of company dependence and loyalty which dominated the social relations of the city.

The managerial and professional workforce settled in quite different residential areas. During the early period, white collar workers located in special residential districts on the East riverfront and to the northern edges of the city. Later these white collar districts concentrated to the north and northwest of the city, and in a few high-income residential suburbs. These suburbs were founded along the radial arteries leading outward from the city, particularly to the northwest, and along the east riverfront. Their location had a profound influence on the succeeding spatial development of the region.

Thus, the Fordist pattern of production had already influenced the urban structure of Detroit. Increasingly, the city's social relations and spatial patterns were dominated by the expanding needs of the automobile corporations. This was to continue, with quite different spatial patterns, in the next phase of Fordist production.

The Late Fordist Period

It was in the late Fordist period that mass production and Fordist production and management methods reached the pinnacle of productivity and maturity, and the automobile industry became the hallmark and the motor of American industrial might. Wartime demands for armaments, postwar pent-up demands for automobiles, a booming economy, rapid population growth, and the almost universal suburbanization and sprawl of American metropolitan areas brought about an unprecedented prosperity to the auto industry which was sustained throughout the 1950s and 1960s. During this period the celebrated corporate-union "social contract" was forged, which gave management a secure and almost uninterrupted control of production and gave Detroit automobile workers the highest manufacturing wages in the country, along with a middle-class standard of living and consumption seldom

found in a blue-collar work-force. At the same time, a second unwritten "contract" existed among the three automobile corporations, which paid lip service to competition for market share, but ensured that competition did not reach the stage of greatly upsetting the ongoing status quo. It was this second "contract" which later to subjected the industry to accusations of "corporate bloat", inefficiencies and overall complacency.

Like other U.S. cities, Detroit underwent the impact of postwar urban expansion processes which transformed America from an urban to a suburban society. Suburbanization in Detroit was rapid and extreme, enabled by a relatively flat land surface, a tradition of low-density single-family housing and home ownership, and a long-standing regional "psyche" which assumed that "newer" and "farther out" was "better". But for the present paper, it was the spatial pattern of Detroit's postwar suburbanization that is relevant. For the carving out of suburban space in metropolitan Detroit appeared to exemplify the operation of Fordist production and consumption principles. It would be difficult to find a situation where the relationship between industrialization and urbanization was more direct and visible.

There were two distinct aspects of postwar suburban growth in metropolitan Detroit (SINCLAIR 1972). One reflects the movement of the managerial, professional, and white collar working force of the automobile industry. Almost exclusively, this group moved outward into a series of radiating suburban sectors extending outward from the city of Detroit. Initially attracted by the well-established high income communities along the area's radial arteries and the physical amenities to the East and Northwest, these suburbs were consolidated, extended and widened. The generally high incomes of this group attracted high class shopping centers, professional and business offices, and first-class educational institutions. Continued growth was ensured by the construction of the Detroit area's main expressways. Overall, these radial corridors reflected wealth and quality:-a balanced pattern of upper and middle income residential areas; superior services and amenities; and the majority of the important service, professional, and leadership activities of metropolitan Detroit, (and of the American automobile industry). The zone received none of the industry's large investments in industrial and production facilities.

The second aspect of postwar suburbanization in Detroit was the suburbanization of production facilities, as the automobile industry sought new sites away from the congestion and outmoded facilities of the previous period. Again, the predominant needs were space, (and the ability to manipulate that space), rail facilities, and the proximity to work force. These needs were found in the undeveloped rural land lying in-between the previously mentioned sectors of radial development. In these wedges of suburban space were built the industry's new factories, which virtually transferred the industry from its fairly compact concentration in Detroit, Highland Park, Hamtramck and Dearborn, to a series of industrial corridors following the main railroads leading into the city. The establishment of major automobile plants was followed by (a) the swarming of ancillary metal and machinery industries, and (b) the

extension of residential subdivisions which caught up with and engulfed the original factories.

For the most par, the residents of this area were the second and third generation offspring of Detroit's older immigrant ethnic communities. They established themselves in the new subdivisions and Levittowns which were developed on vacant land. New suburbs were built and created. In many respects these new suburbs epitomized American postwar suburbia, cradling the "baby boom", and characterizing the consumer-oriented life-style which fulfilled the "American dream". In the Detroit area that dream could be considered part of late Fordism's "social contract". High wages, relatively steady employment, and a wide range of benefits provided a quality life-style. Though affected by urban social crises of the 1960s (SINCLAIR and THOMPSON 1978), the economic security of this zone's residents were a reflection of the general security of the period.

In summary, postwar suburban expansion in metropolitan Detroit left a distinctive social pattern. Radial growth sectors of high and middle income, housing the white-collar decisionmaking element of the automobile industry, alternate with intersectoral wedges of sprawling, blue collar industrial suburbs to create an essentially sectoral pattern. When the writer modeled this structure in 1972, he had not heard of the term Fordism. However, using more contemporary jargon, it would seem that the demands of Fordist production and consumption had molded the pattern of Detroit suburbia.

There is a third aspect to metropolitan Detroit's spatial structure. The events of the late Fordist period had a devastating impact upon the central cities, precipitating an ongoing social crisis. The postwar suburban movement of population (largely white) was accompanied by wholesale abandonment of productive facilities. For many remaining central city residents, this meant reverse commuting to suburban jobs. Although those commuters also benefited from the "Social Contract", they found it more difficult to participate in the lifestyle associated with that contract. Although the social problems in Detroit's central cities have a wide variety of causes and results (SINCLAIR and THOMPSON 1978), it is not difficult to integrate them into the Fordist paradigm.

The Postfordist Period

Although the arrival of Postfordism, like the term itself, is highly problematic, it is common to associate the period with the world economic crisis of the 1970s. Events associated with that crisis affected Detroit directly and severely, including the two oil "shocks", foreign competition (particularly from Japan), the invasion of Japanese automobile transplants, the imposition of expensive governmental environmental regulations, and the magnitude of the recession of the early 1980s. Moreover, because Detroit had few of the dynamic military, aerospace and related research industries, the city received virtually none of the lucrative defense contracts (and

guaranteed markets) which transformed the economies and Postfordist landscapes of Los Angeles and other sunbelt cities.

The response of the automobile companies varied from company to company, but it is possible to delineate three distinctive kinds, which to it degree, occurred sequentially. Each was to have an impact of the geography of metropolitan Detroit. The first was markedly Fordist in nature, utilizing the "muscle" of giant (the world's largest) corporations, to remedy the situation "immediately" by inaugurating vast new programs, requiring unprecedented investments. The introduction of the "world car" concept, the construction of several huge new "state-of-the-art" plants, the purchase of EDS information services and Hughes Aircraft by General Motors, and ironically, the announcement of the new Saturn operation reflected a characteristic Fordist approach. These investments brought a significant restructuring of the industry at a global and national scale. Today they are considered to have precipitated the financial crises of all three corporations (one of which was bailed out of bankruptcy by the U.S. government), not to mention a shake-up in corporate management. But most relevant for this paper, they also had an indirect, but significant impact upon the structure of metropolitan Detroit. For example, the EDS acquisition brought an empire of information technology and technologists to the metropolis (and for a while overwhelmed the real estate situation in certain parts of the area). The needs of the new auto plants helped expand the robotics industry in Southern Michigan. The ill-fated "world car" had the effect of increasing international technological exchange and bringing foreign (largely European) firms into the area. All became part of the spatial restructuring of the metropolitan area.

The second response fits into the rubric of "deindustrialization". Like other midwest industrial areas, the Detroit area underwent the litany of job losses, plant closings and unemployment which characterized the 1970s and 1980s (BLUESTONE and HARRISON 1982; CLARK 1986; HILL 1986). Although most attention has been paid to the situation in the auto companies themselves, the process was even more devastating to the thousands of small service "shops" which served the industry. It was in the industrial suburbs that the most severe impact of the "deindustrialization" took place, although the process exacerbated the already existing economic distress of the central cities.

The third response of the automobile industry reflects the various production and managerial changes implied in "flexible production". In various ways and in different degrees, "lean" production was introduced, involving technical and organizational changes on the factory floor. Producer-supplier relationships were also revolutionized, resulting in significantly fewer, and more committed suppliers (HOLMES 1986). Thousands of tool-and-dye "shops" were thereby eliminated, while larger and more modern (and significantly fewer) supplier plants were constructed. Thus, a major spatial reshuffling took place within the Detroit's industrial suburbs, quite apart from what was taking place among and within the major production plants.

Inevitably, the above responses weakened the labor/corporate "social contract" which had served the industry through many decades of Fordist production. Although the transition was remarkably smooth and peaceful, considering the tense labor conflicts of previous crisis periods, there was gradual reduction, both in the benefits and privileges of that contract, and in the number and proportion of workers covered by it. (Paradoxically, many production workers who have retained their positions are working overtime at higher wages, while more and more work is done by temporary, part-time, or other categories of workers at lower wages and without the social benefits.) Although the physical and visible impact of the transition probably was less in Detroit's industrial suburbs than in many other industrial cities of the "Rust Belt" (many workers had seniority, substantial retirement benefits, medical benefits and paid up home mortgages built up during three decades of prosperity), hardship was greater than at any time since the 1930s depression. Of greater lasting importance was the collapse of a social and psychological "climate" that had prevailed over a period of more than three decades (CLARK, 1986). For younger people, the future was less secure. In essence, the framework for a whole way of life was undermined.

There is another side to the restructuring process. Detroit is a corporate city - the key decisionmaking center of a dominant and increasingly global business. The decisionmaking elite has a superior lifestyle, and the power and networking ability to continue to enhance this lifestyle. In a sense, the restructuring process strengthened Detroit's decisionmaking role and expanded this elite. Changing technologies brought new industries and technical personnel. Changing managerial arrangements brought a variety of new business services. Joint ventures and strategic alliances brought foreign firms and a foreign white collar workforce. These developments had an agglomerative effect as companies like Toyota, Nissan, Volkswagen, Mazda, Bosch and Siemens established offices and technical centers in the city. Unlike many other industrial cities, Detroit was able to strengthen its role in research, engineering, information processing, hi tech, business services and spin off consumer services. The developments brought an increase in service jobs as the number of manufacturing jobs decreased. They also brought another well-known characteristic of the restructuring process, namely increasing bipolarity of occupations and incomes. For a city renowned for its prosperous middle income society, this bipolarity brought problems and changes in the city's economic and social geography.

In discussing that geography, a re-classification of functions should be recognized. In place of the blue collar-white collar dichotomy which had dictated the spatial patterns in the Fordist period, emerged a different configuration, which recognizes that the locational needs of "advanced" manufacturing (technology, research, information, engineering etc.) merge with those of advanced business services (managerial, administrative, professional marketing, and finance). These needs contrast with those of more traditional and now diminished, manufacturing processes to provide the basis for the changed (Postfordist?) geography of Detroit.

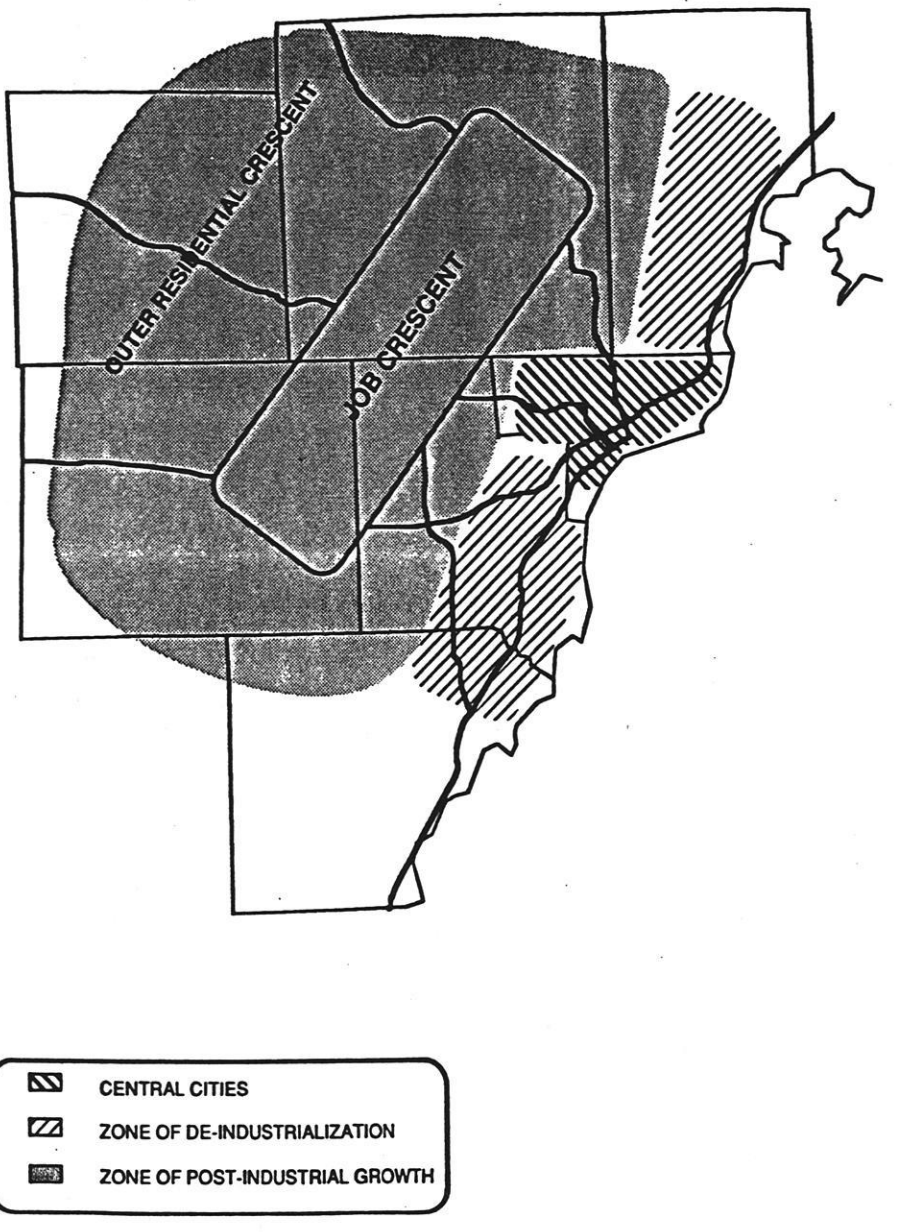
The dominant locational concern of the former (advanced business and services) was space, but not, as in the past, the space needs of large production enterprises. Rather the space needed to construct the range of facilities associated with a postindustrial complex. Within this complex, consumption was as important as production in carving out spatial patterns. Residential areas and amenities were factors in business location as well as the other way round. Striking examples were provided by the major corporations. Chrysler transferred its research and technology operations from the company's traditional corporate center in central city Highland Park to new "state-of-the-art" facilities in suburban Auburn Hills. Soon afterward, the corporation transferred its world corporate headquarters to the same location. A stated reason for the move was that "with the increasing integration of technical developments and corporate planning, this will eliminate the time wasted by executives traveling between the two facilities". Unstated, but inherently part of the decision, was the time saved by both corporate and technical personnel in getting to and from their suburban Oakland County homes. Needless to say, accommodating the needs of the new Postfordist economy requires prodigious amounts of land. For a metropolitan population which will likely increase by some 6 percent during the next fifteen years, it is predicted that 40 percent more land will be developed.

The spatial pattern of this expansion is distinctive (Figure 1). Anchored in the affluent northwest radial growth corridors which developed in the late Fordist period, (in Southern Oakland County), the complex fans out to the north and west into a broad crescent extending from the university city of Ann Arbor in the West to the (also university) cities of Rochester Hills and Auburn Hills to the North. This arc is concentrated in Oakland County, but is extending into adjacent counties of Washtenaw and Livingston. Within this arc is an array of business centers, research parks, office parks, "technopoles", edge cities, multifunctional malls, and diverse residential areas which is reminiscent of the more celebrated Orange County in Los Angeles. It is, indeed, the new "job crescent" of Southeast Michigan. Virtually none of these "postmodern" facilities and activities have been developed elsewhere in metropolitan Detroit.

Throughout this crescent is the diversity of residential types characteristic of the needs of different affluent life-styles, from the older solid residential suburbs of the automobile elite, to the new "packaged" residential communities. But most striking is the emergence of an outer "residential crescent" of low-density , exurbia surrounding the job crescent in the far reaches of Northern Oakland, Livingston, and Washtenaw counties. Convenient to the high income occupations of the "job crescent", this emerging residential area is far away from the distant Central Cities of the metropolitan area.

In those Central Cities the impact of Postfordism served to exacerbate the conditions which had developed during the Fordist period. Population decline and economic disinvestment continued. Job losses in manufacturing (in the industrial suburbs as well as Detroit itself) impacted the city even more than in the industrial suburbs. A "permanent underclass" expanded. The conditions of the Central Cities

Figure 1 Structural Model of Detroit Area 1990's



will not be described here. However, it should be noted that many developments commonly ascribed to the "restructuring" literature, did not take place in central Detroit. Most significantly, the city did not receive the flow of corporate real estate investment which has rejuvenated and brought wealth to the downtown cores of other cities undergoing the restructuring process. One consequence is that the city did not see the expansion either of high income 'gentrified' housing or of local low-income service jobs, which partially alleviated the employment situation elsewhere. Thus, the bi-polarization of the metropolitan job market has negatively affected the Central Cities in virtually every respect. The number of middle income manufacturing jobs has significantly declined. The expansion of both the high income advanced service jobs and the low-income service jobs has taken place far away from the central areas. This spatial mismatch has been exaggerated by the metropolitan area's inadequate, and often absent, public transportation system (an interesting legacy of the Fordist period).

In summary, the transition to Postfordism has significantly changed the spatial configuration of metropolitan Detroit. The three-fold framework of the Fordist period has been maintained. But the spatial dynamics of the metropolis has been transferred from the industrial corridors to the wedges of white collar suburbia. The latter have extended outward from their previous core in Southern Oakland country into a broad arc to the North and West. Within each of the three areas, a restructuring process has taken place. The system as a whole has expanded to incorporate a massive quantity of metropolitan space The accompanying model conveys a dynamic, rather than a static, condition (Figure 1).

Conclusion

This paper has attempted to relate some broad aspects of urban growth and structure to three periods of economic restructuring, commonly referred to as early Fordism, late Fordism, and Postfordism. In many respects, the developments discussed here appear to parallel those found in studies of other cities, most notably Los Angeles. At the same time, some commonly assumed characteristics, particularly in the Postfordist period, are quite lacking in Detroit. Overall, however, it would seem that the spatial developments associated with all three periods are more clear-cut, visible, and model-like in Detroit than in many other metropolitan areas. This would seem to be in keeping with the Fordist-Postfordist theme, in that they partially reflect the city's one-sided economy, as well as the dominating role of the industry's decisionmakers.

However, it is easy to ascribe more to the Fordist-Postfordist theme than is warranted. The developments described in this paper were paralleled by a series of demographic, social, and technological changes which have transformed Western society. Postfordism is part of this transformation, and not the other way round. Moreover, the nature of spatial restructuring in Detroit reflects not only the impact of

Fordism and Postfordism, but also other aspects of the city's development, such as the city's physical environment, the nature of its historical development and the distinctive mental outlook of its population.

Given these caveats, it is appropriate to point out some implications of the spatial developments which have taken place in metropolitan Detroit during the Postfordist period. Among the most important are (a) the shifting of the "core" of the metropolis to a suburban job crescent, anchored in Oakland County, (b) the development of an outer peripheral "residential crescent" serving the high income workforce of this "job belt", (c) the increasingly external orientation of this new configuration as the new suburban core becomes locked into an increasingly global economy, and as the developing residential crescent becomes integrated into a more extended and westerly regional system. These developments are taking place outside of and away from both the older industrial suburbs and the Central Cities. Within those last-named areas, different kinds of spatial adjustments are taking place, both positive and negative. Whatever the adjustments, they are more isolated and involve declining interaction with the growing outlying suburban core. The ultimate course of Postfordist restructuring might well be a further functional and social separation of the metropolitan area.

Postscript

In the last few years, there is some indication that many of the conditions which contributed to and resulted from, the nature of structural change and of Postfordism (as well as the prodigious and controversial literature on the topic), have changed substantially. In much of the midwest manufacturing belt, there are signs of economic readjustment and stability, suggesting that the course of deindustrial decline might have run its course. As has been seen, the government-subsidized prosperity of many sunbelt cities (and some Eastern cities such as Boston), which dominated the early literature on the restructured metropolis, has been undermined by dramatic cutbacks in defense spending. Of particular relevance to the present paper, the image of the U.S. automobile industry has changed from that of complacency and inefficiency to one of greater competitiveness, which some say is "leading the country out of recession". It has even been suggested that the industry is reverting from a pattern of structural change back to that of cyclical change. It is too early to assess the accuracy of these observations, and their potential impact upon metropolitan structure. To the degree that they are valid, however, it would seem that these trends would serve to enhance and extend the emerging spatial structure of metropolitan Detroit that has been described above.

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