From the end of the second world war to the mid-1960s, US housing underwent an unprecedented boom and the suburban owner-occupied dwellings of the postwar years opened up new markets for automobiles, home appliances and consumer products, as well as a wide range of public and private services. Now for the first time, most US households lived in suburbia rather than in central cities or rural settings and a large majority of families owned their homes. Suburban housing was idealized as the 'American dream' and for a period the 'dream' seemed both desirable and achievable for most Americans. Some groups were left out, however, as a highly segmented housing system both reflected and cut across more general patterns of class fragmentation and labour market segmentation. As housing became a crucial part of the postwar US society, it added yet another prism through which the social divisions of that society were refracted.

This paper explores housing's role in the 'Fordist' organization of the postwar US political economy. As advanced by the 'regulation' school of political economy (Aglietta, 1979; Lipietz, 1982; 1984; 1987; De Vroey, 1984), Fordism describes the parallel development of mass production and mass consumption in advanced capitalist countries. Fordist production combined the task fragmentation of 'Taylorism' with intensive mechanization and the continuous flow principles of the semiautomatic assembly line. This brought about tremendous gains in productivity and enabled the real incomes of the working class to rise without directly impinging upon capitalists' profits. The subsequent ascendance of new forms of mass consumption, revolving around automobiles, consumer durables and other standardized industrial products, permitted the realization of scale economies inherent to assembly line production and temporarily ensured

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economic expansion.\footnote{The relation between production and consumption under Fordism is very clearly pointed to by De Vroey (1984: 52): '[In the pre-Fordist stage] wage earners become integrated into the capitalist system through only one channel [production], the other channel (consumption) remained non-capitalist. The notion of Fordism refers to a double concommitant change: the first concerns technical changes in the production system... leading to the mass production of standardized commodities. The second concerns changes in... mass consumption. Reproduction of labour-power now operates predominantly through large scale consumption of capitalist commodities... In the [pre-Fordist] wage relation, wages are no more than costs for capital... [In the Fordist stage], wages are not just a cost but also an outlet for capitalist production'.} The linkage between production and consumption under the Fordist 'regime of accumulation' was facilitated by the institutional framework and underlying class relations of postwar capitalism. This 'mode of regulation' in turn provided the mechanism for channelling productivity increases into higher wages and ultimately into mass consumption.

Building upon this general model, we contend US Fordism was inextricably tied to suburbanization which enhanced consumer demand and set the preconditions for a temporary cycle of self-reinforcing growth. Recognizing, however, that the Fordist model operates at a high level of generality, we utilize housing as a focal point to illuminate the historical distinctiveness of the US experience. Four general points are necessary both to illustrate our perspective and to orient the discussion which follows.

First, housing's crucial place in US Fordism was the product of unique historical conditions. While the productivity increases of Fordist production opened up a 'space' for rising wages and mass consumption, the emergence of consumption patterns organized around suburbanization was the result of a protracted period of class formation, class conflict and attendant patterns of state intervention. This process was facilitated by housing institutions set up during the New Deal/postwar period. By extending the possibility of homeownership to large segments of the working class, this postwar housing system propelled suburbanization and housing-oriented consumption.

Secondly, neither mass production nor mass consumption were ubiquitous under US Fordism, and important segments of the working class were systematically excluded from one or both. This does not imply a juxtaposition of several 'modes of regulation' but a complex weave of social relations articulated to the Fordist production process. This paper broadens the analysis of US Fordism to capture the full complexity of the postwar period without losing sight of its central organizing principle.

Thirdly, suburbanization not only stimulated demand but was premised on the postwar system of highly segmented class relations. In contrast to the corporatist arrangements and social democratic paths charted in western Europe, US Fordism was based upon a very limited 'social contract' or 'accord' between capital and labour. Postwar spatial organization corresponded to and reflected the limits of the accord and the patterns of class fragmentation and labour
market segmentation it gave rise to.

Fourthly, US Fordism's 'suburban solution' (Walker, 1977; 1981) was not the only possible solution. In advanced capitalist nations where different constellations of political and economic forces were at work – whose domestic economies were ravaged by war, whose physical plants were destroyed, where a defence economy was not a viable option or where strong socialist or labourite parties emerged – a variety of alternatives emerged within the basic parameters set by Fordism.

This paper establishes our argument through an historical account of housing's role in US Fordism. Because of space limitations, only the years 1930 to 1965 are covered; the changing nature of housing in the current restructuring is covered in a related work (Feldman and Florida, 1988). The first section outlines the rise of the New Deal housing system. The emergence of the class accord is examined in the second section. The third section explores the role of suburbanization as a mainstay of economic growth and a partial replacement for the New Deal's social democratic direction. The fourth section examines the limit of the class accord and its relation to postwar spatial organization. The concluding section integrates this historical material into a conceptual framework for understanding the role of housing in the postwar US political economy.

I The New Deal housing system

The institutional foundations of postwar US housing were established through the housing policy experiments of the New Deal. Economic collapse devastated the mortgage finance and housing industries. Savings and loans lost $2.2 billion in deposits between 1930 and 1937. As their deposit base eroded, these institutions were unable to grant mortgages. Housing starts consequently declined from approximately 750,000 in 1928 to under 100,000 in 1933. Foreclosures reached a total of 2 million units in the late 1930s, by which time more than 5,000 savings and loans had closed (Chandler, 1970). This crisis situation created the context for a series of public policy experiments and institutional innovations aimed at bolstering the housing sector and simultaneously generating employment.

Revitalization of mortgage finance was the first area of public intervention (Florida, 1985; 1986). The Federal Home Loan Bank (FHLB) Act of 1932 established a system of regional home loan banks to provide emergency funds for mortgage lenders and ameliorate imbalances in housing credit (Stone, 1973; Starr, 1975). Under legislation passed in 1933, savings and loans were confined to making mortgage loans within a 50-mile radius and prohibited from offering checking accounts or other banking services (Semer, 1976). The Federal Savings and Loan Insurance Corporation (FSLIC), established in 1934, provided a separate deposit insurance system for mortgage lenders. These policies established a distinct source of capital for housing and underscored the emergence of
an insulated housing finance system.

While such reforms helped restore public confidence in mortgage lending institutions, government loan guarantees under the Federal Housing Administration (FHA) transformed the mortgage market. To stimulate private homeownership, it was necessary to reduce the costs of home purchase as well as to shore up the mortgage finance system. In contrast to traditional balloon loans, which carried three to five year terms, high interest rates and high downpayments, FHA-insured mortgages featured long terms, low rates, and high loan-to-value ratios. By reducing the risk of mortgage lending, government guarantees enhanced the pool of housing institutions. More important, the competitive effects of FHA loans on private institutions made the low downpayment, long-term loan the basic vehicle for housing credit (Jackson, 1980). This defrayed the costs of home purchase and made homeownership available to larger segments of the population.

The establishment of a secondary market under the Federal National Mortgage Association (FNMA) provided a mechanism for mortgage lenders to sell off loans and recycle capital, allowing them to switch over to long-term mortgages and still remain liquid. Secondary market purchases increased from around $1 million per year in the late 1930s to nearly $1 billion by the 1950s.

This inchoate mortgage finance system functioned within the broader context of the New Deal financial system which erected strict regulatory barriers around the different types of financial institutions and brought each of them under the umbrella of specific regulatory bodies (Florida, 1986). Savings associations were distinguished from other depository institutions; they were limited to housing investment and were granted tax advantages for doing so. Savings deposits became the primary source of mortgage credit and were separated from other sources of capital. An insulated housing finance system functioned to accumulate capital from savings deposits and plough that capital back into the economy as housing credit. This lessened the volatility of mortgage finance and increased the funds available to housing.

The New Deal period also saw a number of mortgage finance experiments which did not survive into the postwar period. The most important of these were attempts to create large public or private mortgage lending institutions parallel to savings and loans. The Home Owners Loan Corporation (HOLC) used the state’s financial power to underwrite a significant portion of outstanding mortgage debt. HOLC was designed to bolster the financial system and revitalize the housing market by refinancing mortgages for homeowners who were no longer able to carry them. It provided funds for the immediate payment of taxes and repairs, and rewrote mortgages at low interest rates over long terms (Semer, 1976). This essentially boiled down to an experiment in ‘socialized’ mortgage credit. During its brief period of operation (1933-35), HOLC refinanced more than 1 million mortgages, accounting for one out of every five mortgaged properties and one-sixth of the outstanding mortgage debt.

In addition, original proposals for establishing a secondary mortgage market
called for the creation of large, publically capitalized mortgage lending institutions empowered to engage in mortgage lending as well as buying and selling mortgages. These hybrid institutions were designed to increase the market for government insured loans which existing mortgage lenders were reticent to issue. However, savings and loan interests feared that ‘national mortgage associations’ would capture a sizeable share of the mortgage market and drive them out of business, political opposition prevented public subsidies for such associations (Semer, 1976; Fish, 1979). Without government leverage, private financiers proved unwilling to establish wholly private mortgage associations.

Public housing was another area of government intervention – one which meshed uneasily with the New Deal mortgage finance system. Both during and prior to the depression, support for public housing was by no means unanimous, and differences on this issue foreshadowed social cleavages in the postwar era. Prior to the depression, the AFL opposed public housing as being ‘socialistic’ (McDonnell, 1957: 68). However, some AFL affiliates, such as the Labor Housing Conference, directed by Catherine Bauer and associated with the American Federation of Hosiery Workers, strongly supported public housing and lobbied the AFL to change its position. Ultimately, the rise in grassroots pressure from tenant and worker organizations during the depression gave impetus to a shift in the AFL’s position (Heskin, 1983). Other working-class organizations, such as the CIO, after its 1935 split from the AFL, and the National Public Housing Conference, itself an offshoot of the Socialist Party’s Committee on Civic Affairs, also endorsed public housing.

According to Parson, a variety of working-class elements – women, blacks and labour – mobilized around the issue of public housing:

All three groups wanted improved and less costly housing. In addition, women wanted a form of housing that would lend itself to socialized or shared housekeeping. . . . Blacks demanded integration as a means both of access to better housing and ultimately, of sharing the wealth of the welfare state. . . . Organized labour had their sights set on public housing, as much as a stimulus for employment as a means to improve their standard of living (Parson, 1984: 7).

At the same time, opposition to public housing grew among realtor’s groups, the lumber industry and other conservative elements. But the Roosevelt administration was under pressure from bloody ‘rent riots’ and housing related unrest. Public housing provided a way to placate certain groups while stimulating housing related industries and generating jobs. After failing to obtain passage of public housing legislation in 1935 and 1936, a series of compromises finally won passage of the Wagner-Steagall Act in 1937 (Fish, 1979: 214–17). Public construction increased from less than 5000 units in 1935 to approximately 87 000 or 10% of all new construction in 1941. However, the ‘equivalent elimination’ provision (which was included as a concession to real estate interests) limited public construction to the replacement of existing units and did not allow public housing to expand the low–cost housing stock.

The housing policies established during the New Deal eventually gave rise to a
'dual' system of privately financed, single-family housing for the relatively advantaged, and central-city rental or public housing for those whom the suburban, owner-occupied market did not serve. This reflected the relative standing of different constituencies within the New Deal coalition. Organized labour and the real estate lobby realized their objectives, while blacks, women and other working-class elements did not win demands for extensive public housing, cooperative tenures and integration. This pattern was prototypical of postwar urban policy. Needing the votes of blacks and other disenfranchized groups, liberal democrats would offer concessions that were generally minimal and at times disingenuous; having no viable alternative, these groups had little choice but to accept the concessions (Bernstein, 1971; Piven and Cloward, 1977; Parson, 1984; Florida and Jonas, 1988).

Beyond housing, New Deal transportation programmes also paved the way for postwar suburbanization. Prior to the 1930s, the federal government either ignored urban transportation or was expressly prohibited from providing it by legislation such as the Federal Aid Road Act of 1916. Under the aegis of job generation, the Emergency Relief and Construction Act of 1932 and the Hayden-Cartwright Act of 1936 provided federal funding for urban transportation for the first time in history. The latter act also foreshadowed postwar legislation by expressly prohibiting use of taxes on motor vehicles for anything but highways. More than $2 billion in federal aid to highways was provided between 1932 and 1940. By the start of the second world war, federal policy had set the precedent for more extensive federal involvement in urban highway construction.

In sum, the institutional innovations that formed the New Deal housing system did not emerge as part of comprehensive strategy to 'solve' the housing and mortgage finance crises of the depression. Crafted in the void left by economic collapse, they emerged sporadically, in response to particular situations and political conflicts. It was only later, in the context of the postwar economic expansion, that this set of policy experiments and institutional innovations would come together to comprise a viable housing system.

II The class accord and the decline of New Deal social democracy

The immediate postwar era was a period of political economic experimentation and transition. For a time during the mid- to late 1940s, pressure from labour and progressive forces, as well as the prospects for a relapse into depression, caused certain capitalist elements and a fraction of the Democratic Party to consider marrying public macroeconomic management with extensive social spending and full employment (Collins, 1981). This approach had much in common with the corporatist/social-democratic models of western Europe.
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(Schmitter, 1975; Panitch, 1977; Przeworski, 1980; Epsing-Anderson and Friedland, 1982; Weir and Skocpol, 1985). According to Gourevitch’s (1984: 144–15) research on comparative responses to the depression, all the elements of the western European social democratic model were contained ‘in the Second New Deal: [including] . . . open foreign economic policy, full employment fiscal policy, social insurance transfer payments, trade union rights in collective bargaining, high wages and stable monetary policy’.

The impulse for social democracy continued into the immediate postwar era. This alternative found perhaps its fullest expression in Roosevelt’s ‘Economic Bill of Rights’ and the aborted Full Employment Act which called for the use of public spending to ensure full employment (Bailey, 1950; Graham, 1976: 88–89; Wolfe, 1981; Collins, 1981). As Weir and Skocpol (1985: 146) suggest, ‘this bill proposed that government spending make up the shortfall between private investment and full employment. It envisaged a substantial and permanent role for the federal government in the economy’. Faced with a crumbling democratic coalition and competition from Henry Wallace’s Progressive Party, Truman ran on a ‘Fair Deal’ platform of resurrected New Deal reforms in 1948: full employment, public housing, national health insurance, updating of other New Deal social legislation and the civil rights plank from the 1944 Democratic Party platform (Markowitz 1973: 267–97).

The demise of American social democracy was also reflected in the transformation of public housing into urban renewal. Public housing and public infrastructure development were more or less standard components of full employment fiscal policy. The basic idea was to have government guarantee employment by filling the gaps left by private investment through subsidized infrastructure development and public housing. The connection between public housing and full employment was clearly evidenced in a 1941 report entitled Urban redevelopment and housing: a plan for postwar which suggested the use of public housing as part of a programme to rebuild cities, generate vital reforms in the housing sector and lead in part toward full employment (Gelfand, 1975: 119–21).

The turn away from such a comprehensive programme was not simply the result of a narrowly delimited political battle pitting real estate, building and

‘In 1935 Ralph Flanders, Morris Leeds, Lincoln Filene and Henry Dennison, all charter members of the BAC [Business Advisory Council] embarked on an inquiry into the root of capitalism’s debacle that led them to an essentially Keynesian analysis of the American economy and to a clear formulation of fiscal policy. . . . They employed Harvard economist John Kenneth Galbraith to “ghost” their manuscript. The resulting programme which was published in 1938 under the title Toward full employment was based on a Keynesian view of the economy’ (Collins, 1978: 377–78). Collins also provides evidence that this report set the context for much of the legislation that constituted the ‘Second New Deal’ and the early full employment bill under the Roosevelt administration, and that such legislation had the tacit backing of key elements in the Business Advisory Council and the Committee for Economic Development (CED).
banking interests against 'public housers' and 'reformers' (Foard and Fefferman, 1966; Gelfand, 1975; Mollenkopf, 1976; 1983). A series of interrelated structural factors – US international hegemony, the shift from 'social' to 'military' Keynesianism, the limited social contract between capital and labour, and an emerging suburban dynamic formed the objective conditions within which movement away from social democratic policy was possible. Much like the demise of the Full Employment Act, the 1949 Housing Act, when compared to the New Deal before it, marked what Wolfe (1981: 88) refers to as 'the end of twentieth-century reform, not its beginning'.

The demise of American social democracy was intimately bound up with the rise of US hegemony in international finance and trade. Under the Bretton Woods system, the dollar became the international currency, and institutions like the World Bank and the International Monetary Fund (IMF) were set up (Block, 1977; Parboni, 1981). The General Agreement on Tariffs and Trade (GATT) established a relatively open international trading regime. Foreign aid under the Marshall Plan expanded foreign markets for US industrial products (Van der Pijl, 1984).

Military Keynesianism gradually emerged as a partial replacement for direct macroeconomic management. Between 1949 and 1953 for example, defence expenditures increased from $13 billion, approximately 10% of the federal budget, to more than $50 billion or 65% of federal outlays. During the broader postwar period the US became a 'permanent war economy' (Melman, 1974) with outlays of more than $675 billion (in 1983 dollars) going to defence (Cohen and Rogers, 1983). While the multiplier effects of military spending were not as large as those of public works, they nonetheless substituted for full employment policy by accounting for more than 25% of GNP. The realization that government could manage the economy indirectly through defence expenditures, limited social spending and incremental variations in tax and monetary policy led key capitalist elements of the New Deal's original Keynesian coalition to rethink their commitment to social democratic macroeconomic policy.3

Taken together, US hegemony and military Keynesianism created a unique option for US Fordism. This was reflected in the postwar class accord (Bowles, 1982; Bowles and Gintis, 1982; Sabel, 1982; Piore and Sabel, 1984). Because of

3 Representatives of multinational corporations and large financial institutions withdrew their support by the mid- to late 1940s. This is clearly illustrated in the CED's landmark study, Monetary and fiscal policy for greater economic stability, which outlined a much more circumscribed role for government intervention in the economy than the BAC sponsored Toward full employment or early drafts of the Full Employment bill. Bailey (1950) documents the opposition of organizations such as the National Association of Manufacturers and the US Chamber of Commerce to full employment legislation. Burch (1980) provides evidence of a much more critical shift within the CED on this issue. While there is no definitive study of government-business relations in the development of postwar economic policy, the following sources provide reasonable overviews: Burch (1980; 1983), Collins (1978; 1981) and McQuaid (1976: 1078; 1982).
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their dominance in international markets, large corporations were able to accept the demands of workers for stable employment, pay raises linked to productivity increases and secure tenure. They also began to stabilize their own employment patterns by implementing job ladders, granting benefit packages, and using overtime and subcontracting instead of hirings and layoffs to adjust output. Given these material benefits, unions accepted capitalist perogatives over enterprise decision-making, did not question management's control over the labour process, and channelled their efforts toward improving the standard of living of their members (Bowles et al., 1986).

A 1948 wage agreement between General Motors and the United Auto Workers reflected the dynamics of the accord. It linked wage increases to a formula based upon the national rate of productivity increases plus the increase in the consumer price index (Naples, 1986). This model spread throughout the economy via pattern bargaining and government employment practices. The 1950 'Treaty of Detroit' between GM and the UAW pledged the union to refrain from strikes in return for a continuation of the cost of living escalator plus improvements in fringe benefits. Such agreements were possible because large corporations in oligopolistic sectors were able to pass on increased labour costs in the form of higher prices. The indexing of wages to productivity increases in unionized industries also functioned to create an absolute bottom or 'wage floor' for non-unionized workers. Changes in this wage floor were to some extent reflected in incremental increases of the minimum wage over the postwar period (Gordon et al., 1982).

The class accord thus created a set of correspondences between the productivity increases of Fordist production, overall wage levels and consumption. A productivity-wage-consumption nexus provided the structural undergirding for US Fordism. More than any other single factor, the accord became the cornerstone of the postwar order simultaneously reflecting and lending structure to its myriad components.

Postwar US Fordism was framed by a related set of political constraints. The Smith Conally Act of 1943 authorized federal takeovers of strike torn industries and prohibited direct political activity by unions. The surge in labour unrest (i.e., the strike wave of 1946) coming immediately after the war convinced both multinational capital and the state of the need to restrain labour. The Taft Hartley Act of 1947 outlawed sympathy strikes, supportive boycotts and wildcat strikes and reinforced the Smith Conally Act's ban on political contributions by unions. This limited effective union activity to industry-wide collective bargaining and enhanced the relative position of capital over labour (Aronowitz, 1973; Davis, 1986; Green, 1980). Under the Truman administration's loyalty programme and the McCarren Act of 1950, it was possible to expel suspected 'communists' from trade unions, government positions and political parties – a process that accelerated under 'McCarthysim' (Theoharis, 1971; Freeland, 1972; Cochran, 1977). These factors led to a diminution of rank and file initiative and a rise in the power of the trade union bureaucracy. Given highly constrained
options, a substantial portion of the working class was willing to trade both accountability and security for increased material benefits.

The elimination of left-wing elements from the labour movement, Democratic Party and other political organizations was fundamental to US Fordism. This enabled the US to avoid fully blown social democratic or corporatist arrangements, thereby limiting the macroeconomic role of the state to underwriting the conditions of privately based economic growth and to mitigating the extreme distributional inequities produced by the market (O'Connor, 1973; Lindblom, 1977; Jessop, 1982). Occurring within the context of American hegemony, rapid economic expansion and the unravelling of progressive political coalitions, the class accord made it possible to abandon full employment fiscal policy and the New Deal's more social democratic direction.

III Suburbanization as a solution

Suburbanization functioned within this context as a mechanism to channel effective demand and thus to complete the productivity-wage-consumption circuit of US Fordism. Here some background is useful. The postwar housing boom was premised upon debt. This was facilitated by a tremendous growth in savings which provided the initial pool of capital to underwrite suburbanization. During the second world war and the Korean war, troops overseas had little to purchase, while domestic consumption was constrained by rationing and the unavailability of goods. Between 1940 and 1960, total savings increased from $32 to $109.1 billion, while deposits held by savings and loans, the primary housing lenders, increased from $4.2 to $57.9 billion.

With a burgeoning deposit base and federally circumscribed investment outlets, savings and loans began to experiment with the new federally backed mortgages which defrayed the cost of homeownership and opened the housing market to a sizeable portion of the working class. As a result, residential mortgage debt increased from $17.7 billion to $208.7 billion between 1946 and 1965, and comprised the largest component of the increase in total debt which soared from $397 billion to $1.2 trillion. Housing starts averaged approximately 1.5 million units annually over the immediate postwar period, as homeownership was extended to more than 60% of the American population.4

The success of the New Deal financial system at mobilizing resources, providing mortgage and related forms of consumer credit, and stimulating consumption enabled policy-makers to turn away from 'socialized' mechanisms

4 Suburbanization was also fuelled by changes in the home construction industry. Prior to the war, this industry had almost entirely consisted of small builders. After the war, large builders such as Levitt, who had grown under wartime contracts, were able to bring the costs of new home construction down by adopting mass production techniques at the building site. Moreover, large developers were better able to act as intermediaries and link prospective buyers to mortgage dollars. See Checkoway (1980).
for delivering mortgage credit and from the direct provision of public housing. Indeed, the number of public units completed peaked at roughly 60,000 units in 1952 and fell off to an average of approximately 20,000 units annually between 1955 and 1965.

Related to suburbanization, the automobile industry provided a major source of effective demand under postwar Fordism. Aided by government purchases and five-year depreciation on newly constructed plants, the automobile industry experienced tremendous growth during the second world war. Anticipating a postwar deflation, Congress passed the Federal Aid Highway Act of 1944 which continued New Deal innovations in highway legislation by earmarking 25% of its funds for urban areas. Twelve years later, the Federal Aid Highway Act of 1956 also allocated 25% of its funds to urban areas with another 45% set aside for primary (interurban) highways and 30% for secondary, mostly rural roads (Taebel and Cornehls, 1977). The 1956 act also continued the tradition of the Hayden-Cartwright Act by establishing a Highway Trust Fund whose monies came from a dedicated gasoline tax and other taxes on highway-related expenditures and could only be spent on highways. The act did, however, go beyond earlier ones in that the ratio of federal monies to local matching funds was raised to the unprecedented level of nine to one. In just the five-year period between 1955 and 1960 federal highway expenditures increased from $636 million to $2,978 million (in current dollars).

The shift from mass transit to the private auto was further accelerated by the Transportation Act of 1958 which made it easier to discontinue urban commuter services. By 1963, Federal aid to highways had risen to 36% of all federal grants from 20% in 1948 (Maxwell and Aronson, 1977: 48). More than 350,000 miles of federally aided highways were constructed between 1950 and 1965. Publicly financed highway construction had a stimulative effect on auto consumption. Indicative of this, annual new car registrations shot up from typical rates below 55 per 1000 adults during the 1950s to roughly 70 per 1000 adults throughout most of the 1960s; total miles travelled by automobile increased fourfold, from approximately 1 billion during the depression to more than 4 billion by 1964.

Prompted by significant state intervention in the areas of housing and transportation, suburbanization fuelled Fordist mass consumption. In another but related area, public support to higher education expanded dramatically in the immediate postwar period. This expansion was tied to a host of programmes, many of them defence related: the 1944 ‘GI Bill of Rights’, state initiated programmes in heavily populated states like New York and California and the 1958 National Defense Education Act. The expansion of higher education was encouraged by the increased importance of science-based industries and R and D to the postwar economy and the need for a skilled managerial strata to oversee the far-flung operations of large corporations. As a consequence, the proportion of 18 to 21 year olds enrolled in postsecondary educational institutions rose from under 20% immediately after the second world war to over 50% by the 1970s. Still, one should not make too much of the educational function of these policies. Colleges helped corporations screen prospective employees in terms of innate intelligence, prior education, class background and other traits that have little to do with the educational content of postsecondary studies. In
1941 and 1961, consumer expenditures for housing and automobiles more than tripled, increasing from $718 to $2513 per household as measured in constant dollars (US Bureau of Census, 1976). This is further illustrated in a simple index we have developed which compares consumer expenditures for housing and transportation to total consumer spending over the period 1929 to 1965. The ratio of housing—transport to total expenditures dropped precipitously during the depression, falling from 0.387 in 1929 to 0.360 in 1935 and 0.290 by 1945. It then began to rise rather rapidly, moving to nearly equal the 1929 figure in 1950 (0.381), to 0.419 in 1955 and 0.424 by 1965 (US Bureau of Census, 1976). This represented a cumulative gain of 3.7 percentage points over the entire period (1929–65) and a substantial 13.4 percentage points for the immediate postwar period (1945–65).

Suburbanization thus helped 'solve' the structural problem of the depression because it provided a way to absorb the scale economies inherent to Fordist mass production. As Harvey (1986: 207) cogently points out, suburbanization 'meant the mobilization of effective demand through the total restructuring of space so as to make the consumption of the products of the auto, oil, rubber and construction industries a necessity rather than a luxury'. The postwar housing system was an integral component of US Fordism's 'mode of regulation' since it provided an important mechanism through which production and consumption were integrated and the productivity-wage-consumption circuit completed. Suburbanization thus performed a macroeconomic function similar to the social democratic 'solutions' charted in western Europe, especially considered in tandem with military Keynesianism (Marcuse, 1982; Fainstein and Fainstein, 1978; Headey, 1978). However, as Davis (1984: 11) clearly suggests, the American path was historically unique: 'the systematic triumph of an extreme model of privatized mass consumption over the vaguely social-democratic concepts of public housing, mass transit and national planning suggested by wartime New Dealers'. Simply put, the privileged position of the US in the global economy, the limited social bases of the accord, the disenfranchisement of progressive political elements and the rise of suburbanization provided the structural preconditions for the emasculation of New Deal social programmes, particularly public housing.

IV Spatial organization under US Fordism

US Fordism was characterized by a complex pattern of sociospatial fragmentation. Here, it must be emphasized that the postwar accord was never formal, the addition to this, the expansion of postsecondary education kept millions of baby boom students out of the labour market and served as a holding tank without which unemployment would have been a much more severe problem. Perhaps most important, mass higher education became a necessity for intergenerational mobility and provided another source of effective demand, moving the postwar economy further in the direction of privatized mass consumption. See Bowles and Gintis (1976) and Davis (1984).
population did not neatly divide into just two classes, and both capital and labour remained internally fragmented by the terms of the accord and its dynamics. The accord extended to multinational capital, corporate managers (‘the new middle class’), and unionized primary sector workers. A variety of groups including medium-sized business with domestic orientations, small business, non-unionized secondary sector workers, minorities and others were more marginal. Surrounding the ‘core’ of the American political economy stood its ‘periphery’ and a labour market characterized by irregular employment, poor working conditions, low pay and few benefits (Edwards, 1979; Gordon et al., 1982).

Housing opportunities were similarly segmented. Relatively high quality suburban housing accrued to working-class groupings that were privy to the accord. Both the growing ranks of managerial personnel – the ‘new middle class’ – and unionized, primary sector workers used the housing finance system to purchase suburban homes. Owner occupancy conferred additional economic advantages to such groups in the form of tax breaks, retained equity and appreciation of home values, further exacerbating inter- and intraclass differences. Groups that were peripheral to the accord were limited to much lower quality, multifamily, inner-city rental or public housing. Residential patterns both reflected underlying class fragmentation and added a spatial dimension to it.

Moreover, predominantly white, suburban communities were themselves differentiated along class and income lines; different social strata were constrained in their possible choice of suburban residences, the different bundles of municipal services, and the local ‘social wage’ that would accrue from that choice (Tiebout, 1956). With affordable, high-quality housing increasingly located in suburbs, central city taxes rising, and central city services (especially schools) deteriorating, newer suburban areas became the province of corporate managers and professionals. Due to their employment in centrally located corporate headquarters, these groups accounted for a disproportionate amount of central city commuting and were the heaviest users of radial links in the newly built intraurban freeway system (Feldman, 1981). Having access to mortgage credit, ‘traditional’ households with white men in the primary labour market were able to move to owner-occupied homes in ‘working-class suburbs’ adjacent to suburban production sites (Berger, 1971). Suburbanization of unionized workers was further enhanced by the postwar decentralization of manufacturing, and this in turn served to make primary manufacturing jobs largely the province of white men (Feldman, 1979).

Being able to afford private schools and high-security apartments, managerial groups were much less constrained in their housing locations. Elite housing was found in exclusive suburban enclaves or in prestige central city districts. In contrast, owners of small businesses had much tighter spatial ties between workplaces and residences, and the latter were disproportionately located on the fringes of metropolitan subcentres (Feldman, 1981). Central city populations became increasingly polarized between the very rich and the very poor, while the
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Suburbs became a patchwork of political districts offering different packages of services and internally comprised of relatively homogeneous social groups.

Further complicating this picture were the twin dimensions of life cycle and family status. Young singles predominantly either lived with their parents or in centrally located rentals. As these people aged and started families, they moved to suburban locations. White men increased their income by moving up primary sector job ladders while white women dropped out of the labour market to become housewives. In later years, when their children were grown and moved out of the house, these people were able to cash in on their mortgages, through second mortgages or by moving to smaller, less expensive dwellings to meet expenses or augment retirement income.

The housing choices open to marginal groups were much more limited. The tight correspondence of race to class and labour market situation resulted in a spatial pattern permeated by racial separation. Beginning in the depression, agricultural mechanization and racial oppression pushed large numbers of blacks off southern farms into northern central city labour and housing markets; wartime employment opportunities accelerated this shift (Piven and Cloward, 1977; Funigiello, 1978). Between 1940 and 1945, the share of the black men employed in agriculture decreased from 41 to 28%, while the share of black industrial workers increased from 5.9 to 10.1% (Davis, 1980). Black migration from the south to the north continued for the next three decades. By 1982, 85% of blacks, compared to 71% of whites, lived in urban areas. During the war when labour needs were increasing, blacks gained access to primary jobs in a host of basic industries. After the war, white servicemen reentered the primary labour market and blacks were shunted off to secondary jobs. Blacks became a source of chronically underemployed, low-paid labour in peripheral manufacturing and service sector jobs, with housing choices constrained largely to older central cities.

Racial segregation was supported by public policy at both the federal and local levels. Until the mid-1960s, FHA appraisal policy reinforced racial segregation by refusing to guarantee loans in ‘mixed’ neighbourhoods (Jackson, 1980). Minority access to suburban housing was further limited by restrictive covenants and ‘exclusionary zoning’ (Danielson, 1976). By the mid-1970s, the interrelated phenomena of racial steering, neighbourhood ‘tipping’, ‘redlining’, and exclusionary zoning had resulted in differential patterns of homeownership among similarly situated black and white households. Having restricted access to credit and fearing a loss of equity, a much greater percentage of middle-income black households chose to remain renters rather than become homeowners, this having the effect of keeping many middle-income black households in central cities. The dispersal of relatively affluent populations left the only substantial rental housing market in older central cities along with a declining base of manufacturing jobs that had, at one time, constituted the ports of entry to the primary sector. Deteriorating tax bases meant that municipal services were below the standards of surrounding suburbs, and the local social wage in these areas was woefully
low. As a result, these cities became a residential 'reservation' or 'sandbox' for the urban poor, most of whom were black or members of other minority groups.

The migratory patterns of the 1950s and 1960s hastened the transformation of public housing into urban renewal. Faced with deteriorating tax bases and escalating demands for services, business and political interests in many northern cities organized coalitions aimed at revitalization of downtown areas (Mollenkopf, 1976; Salisbury, 1964; Molotch, 1976; Friedland, 1983). Largely because of the pressure of such coalitions and the related actions of real estate interests, amendments to the 1949 Housing Act allowed increasing amounts of commercial development to replace housing construction. Moreover, the high costs of land assembly in areas proximate to central business districts and the stipulation that public housing had to replace older housing meant high-density housing projects were crowded into designated urban renewal areas. For these and other reasons, public housing construction was inadequate to meet the needs of low-income, largely minority households, and it eventually became synonymous with 'undesirable' housing (Friedman, 1973). Race thus overlaid class and income to produce a pattern of residential segregation that drastically constrained the housing options of blacks or members of other minority groups.

Spatial segmentation was further complicated by gender. The economic opportunities of women were highly constrained in the immediate postwar era. Most women were homemakers, depending for economic support for the most part on others' earnings, or in some cases transfer payments. Women who were active in the labour market were concentrated in 'women's jobs', such as clerical and sales positions in non-manufacturing sectors and relatively low paying professions like nursing, library work and precollege teaching. Low pay and lack of childcare made these options unattractive, and many women in traditional families dropped out of the labour market once they bore children. Discriminatory lending practices operated as a further constraint since mortgage lenders commonly discounted women's earnings under the assumption that women would eventually drop out of the labour market. Moreover, gender patterns varied across social groups in response to particular circumstances. The residential options facing female-headed households were far more constrained than those of traditional families, with black female-headed households facing the most limited housing options of any social group.

The physical separation of the different elements of the production process was another key aspect of US Fordism. The emergence of multidivisional (Chandler, 1962; 1977) and multilocation (Hymer, 1972; Cohen, 1981) corporations during the postwar period had dramatic effects on the spatial division of labour (Massey, 1984; Scott, 1988), resulting in the separation of production from administration and of conception, skilled work, and unskilled assembly within the production process (Lipietz, 1986). Improved transportation technologies and the availability of inexpensive land on metropolitan peripheries combined with the technological imperative toward continuous process facilities to create sizeable incentives for the decentralization of assembly-line production. Large
corporations also reduced costs through 'vertical disintegration' (Scott, 1985) by increasing purchases from small (mostly non-unionized) firms. Being unable to compete for prime locations and dependent upon their linkages to large corporations, small firms located adjacent to choice areas forming a rim between central business districts and suburban peripheries (Feldman, 1981). Overtime, rapid population dispersal made large pools of relatively inexpensive labour (e.g., non-employed housewives) available in the suburbs providing additional incentives for the decentralization of low level services like data processing (Nelson, 1985). Operating as a counterrtendency, the strong agglomeration and information economies associated with high level services meant that important financial and ancillary business services remained centrally located (Cohen, 1981). Separation and decentralization of corporate functions under the Fordist system of work organization weakened the power of labour and set in motion a dynamic of interlocality competition over business attraction (Harrison and Kanter, 1978; Goodman, 1979). This constellation of forces resulted in metropolitan spatial patterns characterized by crosscutting commutation patterns and distinguished by the increasing separation of home and work.6

In sum, a series of overlapping spatial trajectories – the splitting off of production from administration, the disjuncture of conception, skilled labour and unskilled assembly in the sphere of production, and the separation of the sites of production versus consumption – were embedded in the spatial organization of US Fordism. This was further complicated by residential patterns which were systematically segmented along class, income and racial lines. The multivariegated spatial patterns that emerged in the postwar period both resulted from and influenced the uneven pattern of social relations associated with the accord.

6 Multiple locations enabled corporations to diversify sources of labour and supplies and thereby lower costs. In smaller cities, large corporations could dominate factor markets and act as monopsonists, while spatial diversification kept factor prices down by limiting purchases in any one market; the latter was especially important in labour markets, and large firms carefully kept the size of individual branches in check to avoid inflating local wage rates. Whereas conventional accounts of postwar suburbanization stress technology, we believe social and political factors were overwhelmingly more important. For example, a 1934 NBER study (Jerome, 1934) of new manufacturing technology predicted a trend towards less land-intensive factories. It should be noted that the constellation of locational and spatial forces outlined above was very uneven during the period in question, and that our discussion is intended just to outline some of the more important forces and trends at work.

7 The emergence of a new set of cities in the Sunbelt further highlighted the separation of production and consumption in the postwar US. This was prompted by defence policy which focused a disproportionate share of military expenditures in the south and west. Prior to the 1970s, the bulk of semiautomatic assembly-line production remained concentrated in the northeast and central regions, while defence related, petroleum extracting, textile and electronics industries located in the south and west. The modern physical plant and sprawling development achieved by these 'new cities' (Watkins, 1980; Gordon, 1984) made them quintessential consumption locations for archetypal Fordist goods (i.e., automobiles) which continued to be produced in the industrial heartland (Hurley, 1959) and later overseas (Froebel et al., 1980).
giving rise to a 'territorial politics' (Katznelson, 1981; Cox and Mair, 1987) which fragmented and cut across class boundaries. Housing simultaneously fit the class system of US Fordism and added a highly segmented spatial prism through which such fragmentation was refracted. Residential segmentation thus overlaid labour market segmentation in ways that were barely recognizable as expressions of deep-seated class relations, creating the illusion of 'classlessness' and upward mobility. The fragmentation of the working class was a continuing historical process similar to the process of city building. Thus, housing and spatial segmentation were by no means an autonomous source of social cleavage simply juxtaposed over class and other lines of social demarcation. Postwar housing was very much the product of Fordist production relations even though it undermined the process of class formation based on those relations.

V Conclusion

Housing was central to the particular model of Fordism forged in the postwar US. Suburbanization provided a way to realize the scale economies inherent to Fordist mass production. This was channelled through the postwar housing system which established mechanisms for defraying the immediate costs of home purchase and thus stimulated the demand for building supplies, automobiles, and a wide variety of standardized industrial products. Suburbanization as a cornerstone of Fordist 'regulation' was a peculiarly American innovation. The privileged position of the US in the global economy and the dynamics of the postwar accord allowed it to supplant social democratic Fordism with its own unique variant.

US Fordism was premised upon an overlapping complex of working-class victories, defeats and accommodations which provided the institutional matrix of the postwar accord. This was both reflected in and reinforced by the postwar housing system which delimited the housing opportunities open to various elements of the working class. The spatial implications of this were profound: the economic advantages of suburban homeownership accrued to those who were privy to the accord, while lower quality, multifamily, central-city rental or public housing 'trickled down' to those who were not. The correspondence of postwar housing patterns to patterns of class fragmentation and labour market segmentation added another, largely spatial, dimension to class fragmentation and dealignment.

Recent years have seen the demise of US Fordism, of the class accord which provided its undergirding, of the postwar housing system, and of the complex sociospatial patterns which it structured and which helped to reproduce it (Feldman and Florida, 1988). The dramatic redefinition of housing's role in the US economy is clearly reflected in the current polarization of 'housing versus reindustrialization' (Downs, 1980) and in related concerns regarding the breakdown of 'housing and the social compact' (Sternlieb and Hughes, 1982).
The present period can be best thought of as a one of crisis and restructuring – similar to the institution-building period of the 1930s and 1940s (Florida and Jonas, 1988). While the reorganization of the housing finance system and the redevelopment of central city housing stocks through gentrification (Smith and Williams, 1986) provide evidence of current restructuring, none of these hold out the potential for reestablishing the links between production and consumption like those brought about by postwar suburbanization. In an era of faltering US hegemony and global restructuring, fashioning the requisite experiments and innovations necessary to overcome this disjuncture and set in motion a new ‘post-Fordist’ (Florida and Kenney, 1988; Kenney and Florida, 1988; Storper and Scott, 1988) set of institutional arrangements will be difficult at best.

VI References


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Housing played a fundamental role in the development of US Fordism. Postwar suburbanization provided a way to organize demand, largely through market mechanisms, and in doing so to facilitate the parallel development of mass production and mass consumption. Prompted by New Deal innovations in housing finance, suburbanization fuelled demand for housing, automobiles, consumer durables and a wide range of private and public services. Postwar housing thus helped solve the structural problem of the Great Depression by helping to absorb the scale economies inherent to assembly-line production. Taken together with military spending, suburbanization performed a macroeconomic function similar to extensive state economic intervention in western Europe.

Postwar housing amplified the social divisions at the heart of US Fordism. The economic advantages of suburbanization accrued mainly to those who were full partners in the accord, while lower quality, multifamily, central-city rental and public housing trickled down to more marginal groups. Geographically separate or 'dual' housing markets both reflected and reinforced broader patterns of labour market segmentation and working-class fragmentation. This added a spatial dimension to postwar social cleavages creating an illusion of 'classlessness' while promoting deep divisions within the working class.

La construction de logements a joué un rôle fondamental dans le développement du Fordisme aux Etats-Unis. Après la deuxième guerre mondiale, les efforts d'aménagement de banlieues ont permis d'organiser la demande, grâce, en grande partie, à des mécanismes de marché, et de faciliter ainsi parallèlement le développement de la production et de la consommation de masse. Stimulée par les innovations du New Deal relativement au financement de la construction de logements, l'aménagement de banlieues a fait monter en flèche la demande en matière de logements, d'automobiles et de biens de consommation durables ainsi que de nombreux services des secteurs public et privé. La période de construction de logements qui a marqué l'après-guerre a constitué un facteur important pour la résolution de la crise structurelle de 1929, dans la mesure où elle a permis d'absorber les économies d'échelle inhérentes à la production à la chaîne. Ajouté aux dépenses militaires, l'aménagement de banlieues a joué un rôle macro-
économique semblable à l’intervention massive de l’État dans l’économie en Europe occidentale.
Par ailleurs, la construction de logements a amplifié les divisions sociales existant au sein du Fordisme. Les avantages économiques de l’aménagement de banlieues ont essentiellement profité aux personnes qui participaient pleinement à cet accord, alors que la construction de logements sociaux de qualité médiocre, destinés à regrouper plusieurs familles, et situés en plein centre ville ont fini par être occupés par des groupes plus marginaux. Les marchés de la construction de logements géographiquement séparés ou ‘douls’ ont à la fois reflété et renforcé les schémas plus généraux de la segmentation du marché du travail et de la fragmentation de la classe ouvrière. Ce facteur a ajouté une dimension spatiale au clivage social d’après-guerre, créant ainsi une illusion de société ‘sans classe’ tout en renforçant de profondes divisions au sein de la classe ouvrière.


La vivienda jugó un papel fundamental en el desarrollo del fordismo americano. La urbanización del extrarradio de las ciudades después de la guerra facilitó una manera de organizar la demanda, en gran medida a través de mecanismos de mercado, y, al hacerlo, de facilitar el desarrollo paralelo de la producción en masa y el consumo en masa. Inspirados por las innovaciones del New Deal en la financiación de la vivienda, la urbanización del extrarradio de las ciudades alimentaron la demanda de viviendas, automóviles, bienes de consumo duraderos, y una amplia gama de servicios privados y públicos. Por tanto, la vivienda después de la guerra ayudó a resolver el problema estructural de la Gran Depresión ayudando a absorber las economías de escala inherentes a la producción de las cadenas de montaje. Junto con el gasto militar, la urbanización del extrarradio de las ciudades llevó a cabo una función macroeconómica similar a la extensa intervención económica estatal en Europa Occidental.
La vivienda de la postguerra amplió las divisiones sociales en el corazón del fordismo americano. Las ventajas económicas de la urbanización del extrarradio de las ciudades correspondieron principalmente a los que compartían al ciento por ciento el acuerdo, mientras que la vivienda pública y la de alquiler, de baja calidad y multifamiliar, en el centro de las ciudades, pasaba poco a poco a grupos más marginados. Los mercados de viviendas geográficamente separadas, o ‘dobles’, reflejaron y reforzaron los modelos más amplios de la segmentación del mercado laboral y la fragmentación de la clase trabajadora. Ello añadió una dimensión espacial a la escisión social de la postguerra, creándose una ilusión de ‘ausencia de clases’ a la vez que se promovían profundas divisiones dentro de la clase trabajadora.