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THE ECONOMICS OF CONSUMPTION,
DAILY LIFE, AND URBAN FORM

by

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Economics has concentrated on the processes of production and virtually ignored those of consumption. It has treated the act of consumption as magic: final goods and services disappear as they arrive to the consumer, without even a wave of a cape. To be sure, certain areas of spatial economics deal with the consumer, most notably rent and central place theories, some studies in transportation, and certain recent developments in welfare economics which take into account travel or queuing time. But even here the consumer is treated in a most abstract fashion, disembodied into a demand curve or a utility function. Yet the consumption activity is the principal concern of the most widespread of economic units, the household. It is an activity that itself consumes resources, and it is internally structured in terms of a technology and the availability and relative costs of factors.

It is my contention that the economics of consumption affects all aspects of our society. My particular interest here is its effect on urban form, and to throw this relief, I shall consider some of the ways in which rising income and the rising price of household labor are likely to affect the form of cities in Europe, drawing analogies from the American experience. I shall argue that the texture of bourgeois European city life will change in some of its most characteristic aspects, somewhat in the direction of the American style. These conclusions follow from the analysis and are not, I believe, a form of cultural imperialism or sour grapes, for many of the features that will change are among the most agreeable, at least for the privileged classes.

The effect of further development in Europe that has received the most attention is the certain massive increase of automobile ownership. From this will arise strong pressures for highways and parking facilities, and for less dense settlement. The result may not parallel American suburbanization exactly, but the change of transport mode will certainly change land use patterns, probably in the direction of polycentric decentralization. However, since the effects of the automobile have already been the subject of widespread discussion,¹ I will call attention here to a less remarked effect of rising incomes before passing on to the more intriguing effects of income equalization.

The spread of automobile ownership is but one aspect of the general effect of a rising income upon a substantial income elasticity for manufactured goods (reinforced by a rise in the relative price of services), so that the material possessions of the family will increase more than proportionately to income. It must be kept in mind that the level of per capita consumption in the countries of the Common Market is only 45% that of the United States. One may therefore expect a vastly greater need for storage and power in the European home. Much more space will be required to hold an expanded wardrobe, an exploding quantity of children's toys, television, high fidelity phonographs, records, books, more furniture, sports equipment, larger refrigerators, and so forth. Most of the present housing stock of the middle classes is neither large enough nor designed to hold all of these material

¹See, for instance, M.E. Beesley and J.F. Kain, "Urban Form, Car Ownership and Public Policy: An Appraisal of Traffic in Towns," Urban Studies, November 1964, and the object of this commentary, the famed Buchanan Report, officially known as Traffic in Towns: a study of the long term problems of traffic in urban areas, Reports of the Steering Group and Working Group appointed by the Minister of Transport, London: H.M.S.O., 1963; now available in Penguin.

possessions. In addition, many of these new possessions are heavy consumers of electricity. Television, air-conditioning, electric toasters, ultrasonic ovens, clothes and dish washers and dryers, vacuum cleaners, are some of the currently available ones, and others will be invented. The present housing stock lacks the electric wiring and the plumbing equipment to cope with these.

Personal consumption standards will also rise. Families will aspire to a bedroom for each child, and perhaps to special purpose rooms such as hobby rooms, playrooms for small children, a study, and so forth. While occupancy in the United States averages 0.7 persons per room, the equivalent figures in West Germany, France, and Italy are 0.9, 1.0, and 1.1 respectively, showing a clear relation to income. Standards of consumption will also rise quantitatively and qualitatively with respect to bathrooms.

All of this argues a vastly expanded middle-class demand for housing, even if population growth is disregarded. First, the total demand for space per family will be greatly expanded for the reasons we have discussed, and therefore the total area of the existing stock will be insufficient. Second, the proportion of the population which is middle class will grow markedly. Third, the trend toward smaller families will result in an increase in the number of dwelling units for a given population. Since, because of certain indivisibilities such as bathrooms and hallways, the per capita space requirements are higher for smaller households, the metric as well as the unit demand will rise. Thus, New York City, in spite of a declining population,

faced a housing shortage in terms of the number of dwelling units as a result of decreasing household sizes.²

It seems unlikely that more than a fraction of the existing housing stock can be adapted to the emerging standards of space, power, and quality at costs competitive with those of new construction. This will be especially true if the rationalization and industrialization of housing production continues to increase productivity, making new housing relatively cheaper. By contrast, the upgrading of the existing stock must of necessity be done by artisanal techniques which will become relatively more expensive because of the rising relative cost of labor.

The rising middle-class demand for housing together with the demand obsolescence of much of the present housing stock should accelerate the filtering process of the housing market. I have argued elsewhere that the territorial counterpart of the filtering process of the housing market is the Burgess concentric-zone theory of metropolitan form.³ The older and depreciated housing and the lower income population are in the metropolitan center, while additions to housing stock are made in the periphery where there is land available, for the wealthier population which can afford new housing. The result is a model of an urban area that grows like a tree, by incremental rings. In the American case, the demand obsolescence of substantial portions of bourgeois housing stock have increased the supply of housing available for the working class. This, coupled with rising incomes of workers,

²Ira S. Lowry (ed.). Rental Housing in New York City, Vol. II. The Demand for Shelter, New York: New York City, Rand Institute, forthcoming.

³William Alonso. "The Historic and the Structural Theories of Urban Form: Their Implications for Urban Renewal," Land Economics, May 1964.

has resulted in rising standards of housing for them at the center, and a consequent decline of densities in the central cities. Meanwhile, the bourgeoisie spreads in the periphery in the suburban pattern.

Although some of these tendencies can be seen in many European cities, the Burgess model obviously cannot be applied directly. In many cases, for instance, it is the suburbs that are working class. But the principal objection to the application of the Burgess and filtering-process models to Europe is that they assume (as does rent theory) that supply will adapt itself to demand, and that therefore it is sufficient to predict the structure of demand since supply will follow passively. This is clearly not the case in the European situation. In many cases the supply of land and of housing have very marked internal structure and dynamics that will be reflected in the eventual outcome. Much land, although empty, is unavailable for housing for a variety of reasons: it may be held for open space in a green-belt, or it may be held by a powerful institution, such as the Church or the military, that does not respond to the market.

Perhaps more importantly, public policy, whether explicit or implicit, strongly determines the form and the quantity of the supply of housing. In some countries, it is the government's interpretation of what is wanted or what is in the public interest that determines what is to be built, with no necessary relation to the desires of families. In particular, although there may be widespread preference for single family structures, these may simply not be available except to the very rich. Under conditions of housing shortage, people take what they can get.

In the extreme, of course, the government specifies the nature and quantity of the supply, undertakes the actual construction, and institutes the procedures for allocation of dwellings on explicit bases of family size, industry and location of employment, income, membership in some organization or other, and so forth. But more commonly the supply is powerfully affected in less direct ways (often with unintended consequences) through policies and programs of taxation, subsidization, treatment of savings, financing mechanisms, criteria of eligibility based on social, economic, institutional and political considerations other than ability to pay, minimum and maximum design standards, and the provision of infrastructure, principally in the form of roads and other means of transportation.

In consequence, one cannot predict for Europe through demand projections a simple emergence of the Burgess pattern and acceleration of the filtering processes, as if an army of small entrepreneurial builders and land owners would hasten to adapt to it. The outcome is likely to take different forms in different places, and no forecast of future structure will be universally applicable. What is clear is that the changes in middle-class demand for housing will constitute a powerful force to which some form of adaptation will be necessary. Uninformed policies or ignoring the changes in demand can only lead to unpleasant and dysfunctional results, while purposeful policies based on an understanding of structure and processes may be able to choose intelligently among alternative patterns of urban development.

* * *

The effects of the equalization of the distribution of incomes are in some ways more interesting than the effects of rising incomes. A wealth of studies, both cross-sectional and time-series, have established empirically that in mature economies incomes tend to become more equal as average income rises. The reason for this, in brief, appears to be that development is a continuing integration of the economy, in which each factor finds fewer impediments to its full use. For labor impediments of social class and regional location become less significant through the weakening of the barriers of ascribed status and the availability of free education. This is reinforced by factors such as national policies of full employment and shifts within the demand for labor toward more skilled and better paying jobs. But it is not my intention here either to document or to explain the tendency toward the equalization of incomes. Rather, I want to trace some of its consequences for the economics of consumption and for urban structure.

The basic effect of the equalization of incomes may be illustrated by comparing the American and the European costs of living. The money income of Americans is, of course, much higher, but comparisons of costs of living are usually inconclusive because, to generalize, in the United States things are cheap and people expensive; in Europe, people are cheap and things expensive. In other words, the price ratio of goods and services is reversed. Consequently, the styles of life or market basket differ markedly. This, of course, is a middle-class perception; for the European working class only certain types of labor are cheap, namely their women and children. But here I am focusing on the large and expanding middle class, which plays the decisive role in the shaping of urban areas.

As European incomes continue to become more equal and consequently become relatively scarce and expensive, we may expect three principal types of effects in the household: (a) the substitution of capital for labor; (b) adaptations in the organization of activities to adapt to fundamental scarcities and indivisibilities of labor; and (c) a complex pattern of internalization of certain activities within the home and externalization of others.

The definition of labor in the household is one of the murky areas of economics. After considerable debate some decades ago, current practice in national accounts holds that the work of wives, maiden aunts, and others who do not receive explicit wages is not counted, but that the work of maids and others who receive wages is counted. Whatever sense or practical value this distinction may have for macroeconomics, it is clearly not valid for understanding the microeconomics of household operation. It is perfectly clear, however, that the amount of labor available in the household is decreasing. The modern economy provides a variety of jobs which are preferable both from the point of view of wages and status to domestic occupations, and consequently labor has abandoned domestic service for other occupations. This has been countered only to a small degree by the immigration to major urban centers of poor people from poor regions and from less developed countries, but even this supply of domestics is likely to be temporary because of regional and national development in the places of origin and because of immigration policies in the countries of destination.

The modern economy has also virtually eliminated another source of labor in the household: the female relative. Various welfare and insurance programs have given greater independence to

old age and widowhood, while the availability of jobs outside the home has been coupled with a greater willingness to take them on the part of middle-class women. Widows, divorcees, and spinsters of bourgeois origins can and do work in stores, offices, and factories, primarily in white-collar jobs. They thus have a choice, which is clearly preferred, to continued dependence. Even the time of the housewife is less available, since the new attitudes and job opportunities have resulted in an extraordinary increase in the number of married women who work outside the home. In the modern economy, in brief, the outside income of the male head of household no longer can command a large hierarchical establishment of several workers inside the home, and the household is reduced to the nuclear family.

The most obvious consequence of this scarcity of domestic labor is the substitution of capital for labor, as in such household equipment as clothes washing and drying machines, dishwashers, vacuum cleaners, automatic ovens, and even such minor miracles of technology as electric shoe-shines, can openers and knife sharpeners. We have already discussed the space and energy requirements of this capitalization and their effect on the acceleration of the filtering process and metropolitan form. The freeing of the space previously occupied by servants and female relatives at first would seem to run somewhat counter. They do indeed at the level of single dwelling units. There will be many where the necessary additional space for new possessions and labor substitutes may be gained from the rooms freed by the departed domestic labor. But at the level of aggregate demand there will be undoubted increase as those who were that domestic labor will now tend to join the economic middle class and to increase their space consumption.

But other consequences seem to be less well understood. Consider the activity of shopping. Today much household shopping is done in Europe on a daily basis, on foot, visiting several small stores. Food is usually fresh but ungraded, and it must be examined and chosen with care. But the scarcity of labor makes the act of shopping an important transaction cost and this induces many important changes.

Since it is as easy to buy two as one dozen eggs, the activity of shopping is subject to great economies of scale, and there will be a tendency to economize in shopping time by making fewer shopping trips and buying larger quantities each time. This tendency to economize in shopping time will be powerfully reinforced by the indivisibility of the housewife as domestic labor. Since there are no other women in the house, and the child-care function must be covered in some way, she must arrange for some form of baby-sitting or the children must accompany the mother, making her logistics of shopping more complicated. Or, as is frequent in America, husband and wife may shop together on weekends, sharing in the care of the children. In any case, the indivisibility of the housewife when she must service both functions raises the cost of shopping and acts to reduce the number of shopping trips.

Larger and less frequent purchases in effect transfer some of the warehousing or inventory function from the retailer to the home, which must find space for storage and provide such equipment as a large refrigerator and freezer. Capital is thus substituted for labor (shopping) in the form of inventory, building, and equipment. In addition, the reduced frequency of trips increases the interval between purchase and consumption, and thus requires foods that can be kept longer. Typically this will mean that food at the moment of purchase embodies

more value added in the form of processing and packaging and it is thus another instance of the substitution of capital for labor.

Food that embodies considerable preparation and packaging is to a greater degree a manufactured product, and there is therefore a tendency toward brand products. This tendency is reinforced by two other factors. Brand products are standardized and graded and they therefore take a great deal less time to buy. They reduce transaction costs in the form of expenditure of effort to gain information since there is far less need to judge each piece of fruit or meat. The other factor is at least as important. The scarcity of household labor will result in a tendency to externalize many household operations for activities responsive to economies of scale. Thus there will be a strong tendency to buy foods that embody more prior preparation, in effect transferring to large-scale manufacturing establishments some of the labor earlier done in the home.⁴ Compare this to wages.

The American suburban pattern of residence and retail are one answer to these conditions. Residential densities are low, car ownership universal, and large shopping centers are widely spaced. The shopping centers provide most of the family's household needs (at a single location), permitting one-stop shopping and thus reducing travel costs for the consumer. These centers are largely self-service (for retail labor is also expensive), and they stock brand-name products

⁴Based on 1953 data, it appears that the cost of saving one hour of the housewife's time in the preparation of food was about \$0.60. Science News Letter, November 7, 1953; cited in W.F. Ogburn and M.F. Nimkoff, Technology and the Changing Family, New York: Houghton Mifflin, 1955. An unscientific but applied recent experiment placed the cost per hour saved at \$0.32 (E.J. Dapron, Jr., "How One Man Tackled His Grocery Bill," Better Homes and Gardens, July 1970).

almost exclusively. Thus they are a form of retailing which is extremely economical of the household's transaction costs. Further, they increasingly provide other services, such as child-care and cleaning and repair services, which clearly fit into the pattern we are describing. Since, in order to carry a full line, these centers are very large, each must have a large client population, so that they are spaced farther apart from each other than the smaller European markets. In other words, the retailing function passes to a higher order in a central place hierarchy.

The role of the car in this pattern is, of course, crucial. The greater distances from the wider spacing of centers make the car the fastest and most convenient form of transportation, providing door-to-door access with no waiting time. In many cases it serves as a travelling nursery and play-room. It also performs a freight-carrying function, which becomes crucial because of much heavier loads that must be carried after each shopping trip, and its door-to-door capacity is more important for the movement of goods than for the movement of people. And so the reliance on the car is the result of its convenience for child care and freight-carrying as much as a function of access for the shopper. Of course, these effects are mutually reinforcing. The car permits and encourages lower residential densities, which increase the distance from the home to the shopping center, which in turn increases the reliance on the car, and so forth.

Can there be a "European solution," different from the American one, to this chain of effects? It must provide efficient solutions to the minimizing of transaction time, and take proper account of scale, standardization, and the multiple functions of the indivisible housewife. One can conceive, for instance, of a high density residential pattern

where shopping is done directly from the home by a combination of telephone and closed-circuit television and where deliveries, because of the spatial concentration of demand, can be externalized from the family and done by the retailer.⁵ Or one can conceive of the Americanization of this aspect of European life. But one cannot conceive of the survival of the present pattern.

The preceding discussion has been determinedly mechanistic. It is probably much more pleasant to shop in the present European fashion, having a small daily outing and more human contacts. Indeed, it appears that there is a tendency among the richest Americans to return to smaller stores, to select and choose among unusual and unstandardized products, and to value being waited upon and called by name by the store personnel. But this exception confirms the rule, for it is precisely those whose income is high enough relative to that of domestic and retail labor that can afford labor-intensive techniques of shopping, just as they can afford tailormade suits and original art.⁶

A further observation is necessary on the structure of American urban areas. The suburbs have become the domain of the standardized and the predictable. This is convenient for consumers for the reasons we have discussed, and for retailers because they can apply well-defined techniques of inventory and merchandising. The efficiency of these techniques is demonstrated by the economic health of these stores in the face of an extremely low ratio of profit to total sales, which is only possible under highly predictable circumstances. But at the same time

⁵ It should be noted that a recent American experiment to provide shopping on this general basis went bankrupt in a few weeks.

⁶ Similar exceptions are the very poor, who are underemployed, and hippies and other neo-bohemians who have considerable free time.

the center of the metropolis has become the domain of the less predictable and the unusual. Large downtown stores carry an even broader range of products than their suburban cousins and, although each item may be standardized, the very range of offerings permits innovation and variety in the consumption activity. Conversely, it is also downtown that the small shops reappear, and offer the unusual, the specialized, and labor-intensive goods and services. The center specializes in serving special populations, such ethnic groups or culture groups as artists and homosexuals, and, of course, the very rich who can afford the unusual and the expensively labor-intensive. It also caters to the standardized suburbanite on those occasions when he searches for the unusual, for presents or large purchases. Since in mass society each of these types of demand is relatively small, and unsuited for large-scale production and distribution, they are served at the unique central location, the highest level of the central place hierarchy. Often some element of this demand achieves a wider market. Then it is standardized and mass produced, and becomes available at the centers of lower order. Women's fashions are a continuing prime example of this process.

Thus, the unstandardized and the labor-intensive, which had disappeared from local neighborhoods, reappear and become intensified at the center,⁷ and in the metropolitan pattern there emerges a sharper distinction and complementarity between center and periphery.

The interrelation of economic development, the relative worth of human time, and the structure of cities is illustrated, albeit in a

⁷ See the classic R. Vernon, The Changing Economic Function of the Central City, New York: Committee for Economic Development, 1959, and the new information in D.L. Birch, The Economic Future of City and Suburb, New York: Committee for Economic Development, 1970.

somewhat negative way, by the custom of the long lunch hour in South America and much of Europe. In the late 1960's President Frei of Chile tried very hard to eliminate this practice in that country. Although many workers spend the midday break sociably near their jobs, the general practice is to return home for lunch. Among other consequences this doubles commuting time, raises private and public costs, and subjects cities to four rush hours. President Frei's attempt was totally unsuccessful, and this was attributed to Chilean national character and to their affection for their customs. These undoubtedly were important, but it might be argued that the preconditions for the reform were lacking. The survival of the custom was made possible by the inequality of incomes and the different worth of the time of different people. As this inequality diminishes, the double commute is likely to disappear.

The scarcity of labor in the home means that the housewife has no adult companionship in the home other than her husband, and that she is more tied down to the home because of her housekeeping duties and the care of children. At the same time, that most traditional of ascribed status and role distinctions, the inferiority of women, is weakened by education, changing attitudes, and expanding employment opportunities; the status of women approaches that of men. In consequence the wife expects and demands the companionship of her husband, and resents a situation which places her in isolation during most of her working day. If her husband does return home for lunch, his visit is much shortened by his rush hour travel, and imposes on her the time cost of preparing another meal.

The question, then, is whether the deeply ingrained midday break will be able to resist this consequence of the scarcity of domestic

labor. If it cannot, then the double commute will disappear in the interests of increasing the husband's time in the home. Since the elimination of the double commute will about halve the cost of distance between home and job both in terms of time and money, we may expect that the cheapening of commuting per mile will lead to increased demand for it. In other words, as travel becomes dramatically cheaper and easier, the household will consider more distant locations for their amenities and lower land costs.⁸ The certain consequence will be accelerated suburbanization, and this will combine powerfully with the increased housing demand discussed earlier. One may well anticipate an overall reduction of urban densities, a decline in the population of the central districts and an outward move toward outlying districts. In brief, one may anticipate rapid suburbanization.

Of course, I have based my argument not so much on the greater rationality of the compact working day with a single commute as on a projection of a form of companionate marriage based on the demand by the isolated housewife for her husband's presence in a context of increasing sexual equality. Such prediction is, of course, chancey, although it is in a style with much precedent. For instance, Scitovsky has argued that the increased capitalization of production reduces the physical density of workers, thus reducing contacts among them and increasing alienation. He points to more cohesive marriages since "one finds the instinctive desire to compensate for the loss of human contacts outside the family by seeking earlier and stronger contacts within the family."⁹ On the

⁸The nature of this tradeoff is explored more fully in W. Alonso, Location and Land Use, Cambridge: Harvard University Press, 1964.

⁹T. Scitovsky, Papers on Welfare and Growth, London: George Allen and Unwin, 1964, p. 229.

other hand, Schumpeter argued the decomposition of the bourgeois family: "To men and women in modern capitalist societies, family life and parenthood mean less than they meant before and hence are less powerful molders of behavior."¹⁰ If Schumpeter is right the midday break is likely to survive, and suburbanization will proceed more slowly.

* * *

The analysis could be continued, applying it to recreation and social life. It is easy to explain and understand the rise of television and the decline of movie attendance (which is limited almost exclusively to youth in the United States), the decline of the performing arts¹¹ and the rise of recordings and other forms of capital substitution in entertainment, the decline of the cafe and the leisurely restaurant.¹² These shifts will naturally affect the number and urban location of these functions. But it is instructive to re-examine some earlier attempts at social forecasting in this area.

A few years ago there was considerable interest in the social consequences of automation. It was thought that there would be great increases in productivity and that there would result a drastic shortening of the work week. All that spare time would be both a social problem and a social opportunity. The premise has failed to materialize and the average work week in the United States is as long as it was thirty years

¹⁰J.A. Schumpeter, Capitalism, Socialism, and Democracy, (3d ed.) New York: Harper & Row, 1950, p. 157.

¹¹See W.J. Baumol and W.G. Bowen, Performing Arts: The Economic Dilemma, New York: Twentieth Century Fund, 1966.

¹²On some of these points, see W.J. Baumol, "Macroeconomics of Unbalanced Growth: The Anatomy of Urban Crisis," American Economic Review, June 1967.

ago. Automation has not provided a quantum jump in productivity but rather a continuation of the steady rise that began with the Industrial Revolution, and workers in general have preferred to take the fruits of greater productivity in higher incomes rather than shorter hours. Further, the rediscovery of the existence of poverty and social injustice has made unfashionable such speculation about the problems of affluence.

It is interesting, however, to review briefly some of the results expected from so much idle time.¹³ Basically it was thought that people would use it to improve themselves or amuse themselves. On the improvement side, education would continue through life through formal and informal means, and there would be a profusion of literary and artistic clubs. At the same time, there would be much more extensive and informed participation in civic affairs. From this one might have hazarded a return of the neighborhood as an organic community characterized by solidarity and participation. Such neighborhoods might have more defined boundaries and more intense civic centers than the present patterns, and they would probably tend to be socially homogeneous.

Under conditions of time surplus for consumers there would be a flourishing of hobbies, sports, and second or vacation homes. The consequences for urban form would be an emphasis on open land, beaches, sports facilities, and the location of housing with an orientation toward these, either by housing developments that incorporated such facilities into the project or by new development located by a new balance of trade-offs between the pull of these amenities and the traditional pulls of jobs and other facilities. These tendencies are quite visible in much

¹³See, for instance, S. DeGrazia, Of Time, Work, and Leisure, New York: Twentieth Century Fund, 1962.

contemporary American urban development, as is the rapid growth of weekend second houses within the urban field of the metropolis.

It is curious that, although the initial premise of surplus time has not come to pass, so many elements of the predicted future are visibly taking shape. It is not only that many new housing developments include sports fields or that adult education is flourishing. More fundamentally, America today is witnessing a rebirth of localism that stresses neighborhood control and self-determination, social solidarity, and intense participation. Simultaneously, there has developed a sweeping wave of concern for the conservation of nature and against pollution, for parks, beaches and urban greenery. I shall not pretend to explain here the sources of these developments, which are many, complex, and imperfectly understood. Rather, I offer it as a cautionary tale on the difficulties of forecasting that so much of the outcome has come true that was predicted on an erroneous base. I also offer it as an illustration of the need for such forecasting in order to plan intelligently.

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