

APARTMENT COMMUNITIES:  
HYPOTHESIS FOR FUTURE HOUSING FORM.

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Abstract.

The "apartment community" of the 1960-1974 apartment boom is used to examine Gropius' 1929 hypothesis that in the period from 1920 to the Year 2000, the apartment and later a communal dwelling will overtake and succeed the single-family house as the predominant residential form in American industrial cities and urban areas, associated with evolutionary social changes. Census and economic data are used to describe two twentieth century apartment booms and to analyze their relation to sociological and related changes. An attempt is made in the light of these, to reformulate Gropius' hypothesis for systematic testing and for assessing urban housing policy.

INTRODUCTION

The purpose of this paper is to use the contemporary phenomenon of apartments and "apartment communities" as a means to examine the general validity of architect Walter Gropius' 1929 hypothesis (1) that the apartment house and later, communal forms of household dwellings, will predominate over single-family detached houses and related dwellings, in the then long-range (now medium-range) future, circa Year 2000. More specifically, our aim is to provide

a preliminary empirical and analytical basis for evaluating Gropius' hypothesis (1966) and to indicate its relevance for present and future public policy for housing and urban development. The present report is part of a larger research which examines emerging, contemporary and future urban development forms.

There is evidence that the notorious "urban crisis" in the United States is being superseded by a resurgence of cities and urban areas (Banfield, 1970: 6). In New York, foreign banks and American headquarters of foreign corporations have increased exponentially since the middle of the 1960s (Bordewich, 1979; Allman, 1978). This is being accompanied by a service industry of law, marketing, public relations, and accounting in a number of cities. For some time certain cities have experienced an increase in insurance and financial activities (Hall, 1966). Real estate investment has increased by millions of dollars in the 1970s (Bordewich, 1979a; Allman, 1978a). According to Hall (1966a) much of this began in the late 1950s.

Meanwhile, the gap between employment and unemployment has been considerably narrowed in St. Louis, Cleveland, New York, Boston, Baltimore and Detroit (Bordewich, 1979b: 43). One effect of this phenomenon of resurgence has been a shift in proportion from basic industry to service industry, from an era of blue collar jobs to a phenomenal increase in white collar employment. During the past two decades the population of this new urban employment has shown a stronger preference for apartment living than this sector of the social structure has shown in the past. Apartment construction assumed "boom" proportions during the 1960s and 1970s. Gropius may have anticipated these developments.

CONCEPTUAL FRAMEWORK.

The increased proportion of apartments in the total residential market and housing stock is indicative of a more general urban pattern. Compact/multi-unit housing structure and compact/multi-purpose/multi-use/multi-function urban design are becoming the new look and performance of cities and urban areas in the United States. This is in sharp contrast to the proliferation of single-family homes and suburbanization after World War II. The new forms range in five types: 1. residential use only; 2. residential plus a few other uses; 3. residential and many other uses; 4. non-residential and a few residential uses; 5. non-residential uses only. These run in form from the apartment complex to the special district urban development center(2). Examples of these types are given in Table 1. The "apartment community"(3) is the residential aspect of this pattern and is the use on which this paper focuses.

Table 1  
 , EXAMPLES OF TYPES OF COMPACT URBAN FORMS

Type	Examples
1. Residential use only	Forest Park, Mont Michel, Forum Club Apartments, Wildwood, The Fountains, and Queen's Tower, in Cincinnati area.
2. Residential plus a few other uses	Marina City and John Hancock Building, in Chicago.
3. Residential and many other uses	Century City in Los Angeles, Charles Center in Baltimore, Allegheny Center in Pittsburg, Crown Center in Kansas City, Prudential Center in Boston, Rockefeller Center in New York.
4. Non-residential and a few residential uses	Constitution Plaza in Hartford
5. Non-residential uses only	Fountain Square in Cincinnati and Civic Plaza in Chicago.

A high proportion of the new apartments built during the past twenty years are "communities" compared to those built in great numbers some sixty years ago. The new apartments may be a complex of structures or a single building, low or high rise. What they have in common are physical design and social encouragements for common sets of activities and relationships, mostly on-site, in addition to the privacy of their respective household unit: club houses, swimming pools, saunas, tennis courts, golf courses, organized social activities and athletic programs, including softball and volley ball teams. These housing developments may be mixed in social composition, but often they are homogeneous as to age, race, family formation status, and lifestyle.

#### THE GROPIUS HYPOTHESIS

In the late 1920s Gropius formulated the concept of a "progressive" socio-physical evolution of residential form in industrial cities and urban regions in the long range period of about 1920-2000 (4). Society would move from large, family households towards institutions which would focus increasingly on the individual, and later would develop more communal forms transcending the individual.

Data available on the changing social structure of Western nations following World War I had for Gropius clear implications for changes needed in the planning and design of housing, and in related city plans and urban site design. In the light of census data and formal social studies, he saw that the unit size and form of the minimal dwelling *that was being provided in some jurisdictions, was out of step with social and technological changes and their relations to the family, marital status and lifestyle.*

The framework for his view was that "Recognition of the evolutionary development of man's biological and sociolo-

gical life processes must lead to a definition of the task at hand (of adapting policies for the design and production of housing) (Gropius, 1966a: 9). Gropius was greatly influenced by the German sociologist F. Muller-Lyer, whose earlier studies concluded in 1912 that the history and foreseeable future of human society could be reduced to four major "legal eras": 1. Kinship and tribal law; 2. The family and family law; 3. The individual and individual law; and 4. The future era of cooperation and communal law (Gropius, 1966b) (5). Gropius concluded that in the 1920s Western nations already had entered the third era and would be in the fourth by the end of the twentieth century. He based this in part on contemporary official population and demographic data. For example, the German census bureau reported that the number of divorces in that country had increased from 9,000 in 1900 to 36,449 in 1927 in a population whose increase in that period proportionally was much smaller (Gropius, 1966c). He correlated such information with physicians' reports from the same country on a statistical increase in the number of abortions, and with the logically related item that in 1927, forty-six percent of all housing units in Germany had only one-to-three rooms.

These facts indicated the growing societal focus on the welfare and preferences of the individual, to some extent, and, with the invention of the elevator and advances in electrical engineering, the technological capability to cater to them. Further, they signaled that the demise of the larger, extended family and the "feudal master household" had been succeeded by the stronger kind of individualism we are now experiencing. Gropius characterized these latter phases as "egotistical individualism". They would in turn be succeeded by "social individualism", expressed in communal form, "which transcends the individual".(6)

Given some of his observations and his acceptance of Muller-Lyer's evolutionary categories, Gropius hypothesized: the shift from egotistical individualism to social individualism requires and will be accompanied by a corresponding shift from predominance of the single-family house based on consanguine relationships, to the compact, multi-unit, small minimal dwelling, and eventually a new centralized master household, with mostly non-consanguine, non-marital relationships. The apartment community, as described above, physically and socially, is regarded here as being in a zone of transition between Gropius' "egotistical individualism" and "social individualism" and correspondingly, between Muller-Lyer's "individual" and "communal" legal eras.

In this connection and because of its possible significance for assessing social-physical fit of housing policy, we examine Gropius' hypothesis in the light of empirical evidence on apartments and apartment communities. In short, do data on apartments and apartment communities, and related demographic data, indicate a confirmation of Gropius' idea of socio-physical evolution of residential form in industrial cities and urban regions, circa 1920-2000 ?

#### METHOD, DATA AND FINDINGS

To look at the relationship between the incidence of apartment unit production over time, and the production of single-family units, we used census data for the period beginning just after World War I to the mid-1970s. This permitted us to overlap the period of Gropius' observations and also allowed us an empirical period of 'hindsight' which was largely the same as this prospective period of 'foresight'.

For special aspects of both the present study and the larger research, we have used results of studies by the U.S.

Department of Housing and Urban Development, as well as the Urban Land Institute. For information on the geographic distribution, market, 'character' and 'style' of apartment developments in specific metropolitan areas, apartment guides and brochures--published by local chambers of commerce or apartment owners' and managers' associations--were very useful. Sunday newspaper real estate advertisements were helpful also, for similar information.

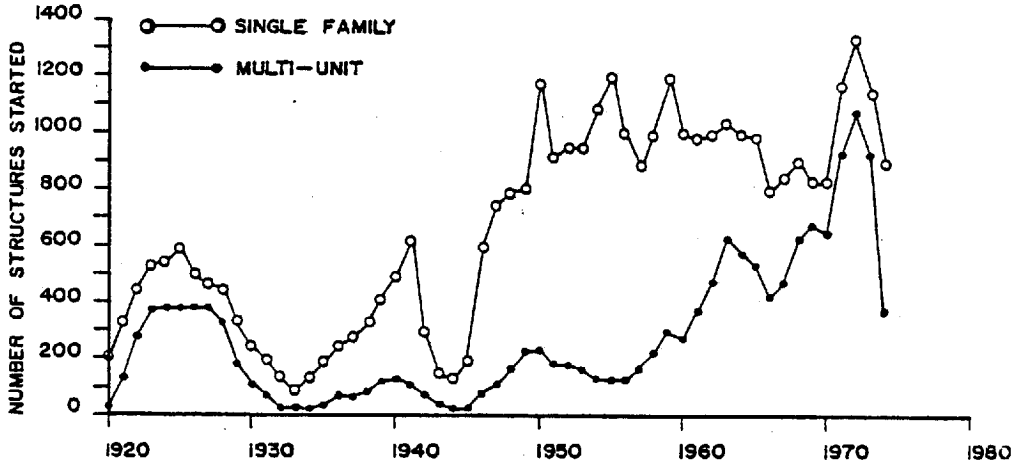
Our tasks included a longitudinal comparison (1920-1974) of two basic types of dwelling (houses and apartments). In view of Gropius' formulation, we needed also to examine related social characteristics. These tasks required review and analysis of housing, population and economic data for the United States and/or selected SMSAs, and in some instances for a specified period (e.g., 1960-1970).

In this report "apartment" is defined simply as any residential structure with two or more units. This includes apartment building, apartment complex and apartment community. The selection of census data on apartments was guided by this definition.

The 1920s and 1960s-early-1970s have been two principal periods of apartment construction booms of the twentieth century (7). Figure 1 shows these two events and presents a comparison of new construction of apartments and single-family homes over the fifty-four-year period of 1920-1974. During this period the smallest number of new starts for single-family homes was 202,000 in 1920 (of a total 247,000 that year) and 16,000 for apartments in 1932 (of a total 134,000) (8). The high point of construction for both in that period was in 1972 when over a million units of each type were built: 1,311,000 homes and 1,068,000 apartments, a total of 2,739,000

Figure 1

NEW HOUSING UNITS STARTED ANNUALLY 1920-1974  
(Thousands)



Sources: U.S. Department of Commerce, Bureau of the Census, Housing Construction Statistics 1889-1964; U.S. Department of Commerce, Bureau of the Census, Construction Reports, 1965-1974.

The duration of the two apartment construction booms, and the apartment proportion of total construction in them, differed. For years in which apartments were thirty percent or more of total new housing construction, 1920-1974, the latter boom was longer, twelve years vs. eight years. (1962-1973 vs. 1922-1929) and reached a higher percentage level, 33.8 to 45.0 vs. 37.9 to 43.9. This included the spreading of apartments to the suburbs, as well as developing in cities, 1960-1974. As mentioned earlier, new apartments in the latter period were designed more as "communities", compared to those of the 1920s.



ANALYSIS AND CONCLUSIONS.

From our review of data on apartments and apartment communities the Gropius hypothesis appears valid for several reasons: 1. Multi-unit housing has become increasingly important in urban life, in spite of the strength of suburbanization and the single-family dwelling. In fact, the appearance of the "new wave" apartments in suburban communities has been abetted by expanding transportation routes, but more significantly by decentralized employment for fifteen major metropolitan areas during the 1960s decade.

Table 2

CHANGE IN PERCENTAGE OF TOTAL CIVILIAN EMPLOYMENT IN SUBURBS, 15 MAJOR SMSAs, 1960-1970

SMSA	Percentage of Total Civilian Employment in Suburbs		Percentage Increase, 1960-1970
	1960	1970	
New York	28.8	35.9	7.1
Los Angeles-Long Beach	47.8	54.3	6.5
Chicago-Gary	32.2	47.5	15.3
Philadelphia	37.0	51.8	14.8
Detroit	43.3	61.4	18.1
San Francisco-Oakland	44.9	50.0	5.1
Washington D.C.	36.2	54.9	18.7
Boston	55.5	62.2	6.7
Pittsburgh	64.0	63.7	-.3
St. Louis	39.3	58.0	18.7
Baltimore	34.1	49.9	15.8
Cleveland	28.3	46.0	17.7
Houston	15.7	24.4	8.7
Minneapolis-St. Paul	23.6	41.1	17.5
Dallas	24.4	29.0	4.6

Source: Downs, Anthony, Opening Up the Suburbs, Yale University Press, 1973, p. 20-21

Also, increasing heterogeneity of the expanded suburban population may have contributed to the increase in suburban apartments, which distinguishes the more recent boom

from the one in the 1920s. 2. The second apartment boom, occurring thirty to forty years after the one Gropius first witnessed, was proportionally bigger and lasted longer. 3. Further, apartments of the newer boom tend not only toward "complex", P.U.D. physical form, but whether complex or single structure, they tend toward a "community" arrangement. Therefore they tend also in the direction of the "communal" structures anticipated by Gropius as the "new forms of centralized master households..." (1966d:95). The condominiums, cooperatives and communes of our day appear to be incipient confirmations of that anticipation. 4. Supportive also is the combination of increases in both number and percent of apartments in the housing stock generally, over the past twenty years, with the concomitant non-consanguine relationships of residents. 5. Economic elements contributing to apartment development are the facts that a) home costs have increased faster than income; and b) apartments yield high tax returns to municipalities, combined with requirement of fewer public service than for single-family homes (Melamed, 1961).

In addition to these reasons, some of the changes in physical aspects of apartments appear indeed to be associated with changes in social structure, in line with Gropius' reasoning or 'explanation' of physical changes in housing form. At the time of his hypothesis a major factor he considered was the development of a massive, urban "industrial" population. For the new apartment boom the comparable social changes appear to be lifestyles, characteristics and requirements of the World War II baby boom age group and the elderly, both of whom have increased as percent of population. Table 3 shows that the percentage increase of these two age groups was substantial from 1960 to 1970. The number of apartments escalated rapidly in the early part of that period (from 287,000 units in 1960 to 621,000 units in 1963) and were at a slightly higher level

at the end of the decade (689.000 in 1969). (See figure 1.)

Table 3.  
PERCENTAGE CHANGE IN AGE-SPECIFIC POPU-  
LATION FROM 1960 TO 1970.

Age-Groups	1960	1970	Percentage Change 1960-1970
10-14	16.773.492	20.789.468	23.9
15-19	13.219.243	19.070.348	51.7
20-24	10.800.761	16.371.021	51.5
25-29	10.869.124	13.476.993	23.9
50-54	9.605.954	11.104.018	15.6
55-59	8.429.865	9.973.028	18.7
60-64	7.142.452	8.616.784	20.6
65 +	16.559.580	20.065.502	21.1

Source: 1970 Census, General Population Characteristics, Table 49.

At the time of Gropius' observations in the 1920s, and in our observation of the 1960s and 1970s, changes toward multi-unit structures and new forms of housing seem to be associated with increased numbers and rates of divorce and illegitimate births. Gropius found that in Germany the number of divorces increased dramatically from 9.000 in 1900 to 36.449 in 1927, a period during which apartments increased eventually into a boom. In a comparable period, the number of divorces in the United States increased from 385.000 (of 1.687.000 marriages) in 1950, to 1.077.000 (of 2.133.000 marriages) in 1976--at rates of 2.6 to 5.0 per thousand. (Bacheller, 1977: 227). Gropius found that illegitimate births in Germany rose from 8.7 percent of births in 1900 to 12.6 percent in 1926. (1966e: 96). Although percentages were not available, the number of illegitimate births in the United States for the twenty-five years period of 1950-1975 increased from 141.600 to 447.900. The apparent correlation between the U.S. data

here and the increase pattern of apartments, 1950-1974, shown in Figure 1, is impressive. These data point to significant factors in the demise of the conventional nuclear family, incipient in the 1920s and in an advance stage now. And if Gropius saw the changing role and employment of women in the twenties as contributing further to the passing of the "close-knit" family (1966f: 92, 95, 96) this has become considerably more so now, stimulated by the women's movement.

These are merely conclusions about the validity of Gropius' hypothesis of a positive relationship between changes in social structure and corresponding changes in housing form. Even with the data on apartments, apartment communities and relevant social factors we have used to examine and evaluate that hypothesis, we do not pretend to have tested it. Nor do we pretend to be in a position, on the basis of this paper, to recommend use of Gropius' formulation for accurately judging housing policy. These two tasks involve a problem about the Gropius hypothesis and they pertain to a critical question of knowledge of social structure and change, and housing policy adjusted to such knowledge.

Gropius held that policymaking government agencies and officials in charge of housing, need to observe trends of social development. Their toughest task, he said, is to make correct numerical estimations of the extent to which "these general social developments" will progress within their jurisdictional area. The formulation of this estimate (i.e., of new residential social forms) provides the basis for such agencies to discern the difference between the quantitative supply requirements for the older, established and "familiar" forms of housing, and those of the newer forms.

Gropius found that in almost every case, the housing agen-

cies of Germany and other European countries in the 1920s, based their policies for supply of urban housing inordinately on the older, passing familial forms, and virtually ignored the newer, "more individually differentiated needs" of that time.

The statement of Gropius' hypothesis, given earlier in this paper--and as found imbedded in his own text--is too imprecise and ambiguous to test in a systematic manner. In its present form, the hypothesis automatically links development of changes in residential social forms to corresponding changes in physical housing forms. This link is based on the assumption that housing policymaking officials revise their housing policies in accordance with knowledge of local evidence manifesting changes in the larger social structure.

Gropius found that this was not the case. Therefore, we feel that this assumption about the volitional acts of officials, should be eliminated from the statement. This would leave us with two hypothetical statements, each capable of separate testing with respectively appropriate data: the one about social structure and change, with sociological, biological and demographic data; the other, about dwelling form, with physical housing, zoning and technological data.

Presumably there would be more confidence in predicting changes in residential social forms, and less in the correlational changes in physical housing forms, dependent as they are on the perceptions and acts of officials and real estate developers. The very fact, however, of the necessity to divide Gropius' discursive, compound and somewhat ambiguous statement into two simpler (though not necessarily simple) and clearer hypothesis, would make it both possible and more feasible to accomplish two operations: 1. to more systematically test separately each of

the two hypothesis imbedded in the more general statement; and 2. to estimate the degree of correspondance or gap between the pattern of existing residential social forms, on one hand, and the pattern of housing policy in any given location or jurisdiction, in any region or country, in any given period of time.

#### FOOTNOTES

- (1) The hypothesis is not formulated in a single, clearly demarcated statement; it is loosely scattered over several paragraphs on a number of pages in his text. It was originally published in 1929 as "Die soziologischen Grundlagen der Minimalwohnung", Die Justiz, Vol. 5, n° 8 (1929), Verlag Dr. Walther Rothschild, Berlin-Grunewald.
- (2) These categories were developed more than two years ago as part of a larger study by Jenkins.
- (3) Sometimes in this paper this term is used to refer generally to all apartments produced in the 1960-1974 boom; in several instances, however, it refers specifically to those apartments of the same period having physical and social amenities, such as swimming pools and management-provided social activities, absent in the old apartments.
- (4) This period of time is a guesstimate based on Gropius' statements and allusions.
- (5) These eras are spelled out in greater detail in Muller-lyer's book, Die Entwicklungsstufen der Menschheit (Man's Phases of Development), J.F. Lehmann, Munchen, 1912, which Gropius cites on page 91 of his paper used for this report.
- (6) Gropius saw this in part as a return (in future) to the "concept of the tribe and the patriarchal family.." (p. 92).
- (7) Acknowledgement should be made of a special report by Jacqueline Tyrwhitt: High Rise Apartments and Urban Form, ACE Publication Series, N° 5, Athens: Athens Center of Ekistics, 1968. She describes the earlier rise of the apartment, both before and after the invention of the elevator, its effect on urban structure, and how it in turn was affected by public attitudes, property values and legal codes.
- (8) The data for this illustration were compiled from the

U.S. Census by Patti O'Brien and converted for us from her long, detailed table, by Professor Harris Forusz of the University of Cincinnati.

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