Toward a Human Architecture:

At the moment, architecture's main problem is unemployment, but if and when the American economy returns to good health, architects will have to deal with some of the profession's other problems. My lifework, for example, has been spent largely in having worked with and for architects for over 25 years, but also from architecture's similarity to other professions, including my own disciplines of sociology and planning. Consequently, I begin with a more general analysis of the profession itself, although I may dwell on architecture later.

In my lifetime, at least, American professions have sought, among other things, to be of public service. They have wanted to serve by improving society through the application of their distinctive expertise—sometimes whether or not they were actually wanted or needed by the society, and whether or not the expertise was actually relevant to these wants or needs. In other words, the professions have sought to do good as they defined good, in ways that also increased the power, status and income of their members through a benevolent "professional imperialism" which has not always been benevolent for the ultimate recipients of professional services.

In addition, the professions have been largely peer oriented; practitioners have worked mainly for the approval and respect of their peers and colleagues; only secondarily have they been concerned with their clients' own wants or needs. Partly as a result, they have looked for clients who accepted peer values and practices, which meant, whenever possible, clients of similar socioeconomic status. Finally, in their educational programs, the professions have tried to train students to "advance" the profession; that is, to be original, innovative and prestigious—by peer standards—although in fact, many of the students have wound up in fairly prosaic jobs with little opportunity to be innovative.

During the 1960s, the traditional goals and structures of the professions came under strong criticism from students and young practitioners. Although they also wanted to improve society through the use of their professional expertise, they defined improvement as drastic if not revolutionary change—often toward a more egalitarian society—and they rejected the traditional professional alliance with the elite. In almost all professions, young people wanted to work less for peers and high status clients and more for the poor. (In those professions that deal with individual clients, there were other key issues.)

In the process they also rejected traditional professional methods, so that, for example, sociologists gave up detached research, social workers moved from case work to organized community programs, and doctors and lawyers excelled the commercial relationship with patients and clients. A few activists gave up professional methods altogether and explored various forms of political action that they hoped would produce a more democratic and egalitarian society.

Most of the movements of the 1960s have now disappeared from public view, although they survive in radical organizations that continue to exist within most professions, and sometimes in community groups that have adopted the ideas and organizational forms of the 1960s. In any case, the criticism was not unreasonable; most of the proposals associated with that decade are still alive, and may even become more visible with the return of better economic times.

Virtually all of these observations apply to architecture as well. Traditionally, architects have wanted to improve society through better building, whether or not this actually improved society in a way that society wanted to be improved. They have been peer oriented and pursued originality, so that too often architects cared more how a building would look in the architectural journals than how it would work in actual use; and they have gravitated to high-income clients because they were most likely to let architects do their own thing. But architecture is also distinctive in at least two ways. First, professional imperialism has perhaps been greater, or at least more visible, in architecture than in other professions, partly because some architects felt that their role was to express the contemporary culture or the philosophy of their society through their buildings. Others saw themselves as social reconstructionists, who would build or rebuild social relationships—and thus, people's lives—through physically or otherwise investigative plans and buildings. Indeed, some acted out what I call "the Fountainhead syndrome," the urge to remake society through building that obsessed the hero of the Ayn Rand novel.

Second, architecture's professional expertise involves taste and style, that is, the professional's ability to attract and retain contracts. As a result, architecture has been caught up, not always intentionally, in the long-standing debate over the merits of high culture and popular culture. The most innovative architects, and the architectural elite generally, are on the side of high culture, although they may not be aware of it, for they share its disdain for popular culture, and with it, for popular or vernacular building. Like other high culture artists, they venerate folk art and folk building—as soon as the folk drop it—but they despise commercially produced products, whether television programs made in Hollywood or buildings designed by or for commercial builders. High culture is, however, a minority culture which attracts only a tiny (but affluent and well-educated) sector of society, so that those who follow its aesthetic values are a minority, rejecting the values of the majority. That is their privilege, but one result is that most housing is designed by builders who respond to the aesthetics of the majority and architects therefore play only a minor role in America's residential design.

To be sure, other professions also supply only a minor portion of the product or service over which they claim expertise, and often because of similar stylistic conflicts. Medical aid is probably still administered more often by drugists and relatives than by doctors, just as most counseling is done by ministers, relatives, and friends rather than by trained social workers or psychiatrists. Similarly, professional sociologists supply only a small amount of the total sociology produced in our society. Far more Americans read popular sociologists such as Vance Packard and many resort to the vital but virtually invisible "lay" sociology that people develop on their own in order to deal with society. In all cases, there are some differences between the professional and nonprofessional service, but the greater differences are of style. Doctors often treat patients as collections of diseases rather than people, and, like sociologists and social workers, supply their services in a technical language that puts off their patients and clients.
Of course, the minor role that architects play in American building is also a function of cost; few people can afford a custom-built house—or a Park Avenue specialist. Sometimes builders have rejected architects for the same reason; thus, when William Levitt made plans for his third Levittown in the mid-1950s, he called in two internationally famous architects to design new prototypes for him, only to find that their designs would cost around $100,000 to build. He was then selling houses at $11,500–14,500.

During the 1960s, young architects questioned the traditional ways of their profession in much the same way as young people in other professions. They rejected the elite architecture that built only for affluent clients and criticized the emphasis on aesthetics and social reconstruction through architectural methods. Some gave up the idea of designing and building altogether, becoming planners and political activists instead. Indeed, young architects seem to have played a proportionately larger role in the radical movements of the 1960s than young members of other professions, attesting perhaps to their own version of the Fountainhead syndrome.

Today, the ideas and actions of the 1960s are less visible even if radical architects still meet and publish. But with the coming of the economic crisis, many architects, like other professionals, returned to their old ways, and went back to work for their old clients.

Many of the criticisms of architecture that emerged in the 1960s continue to be valid and many of the activists continue to be right, in spirit if not always in letter. Still, times have changed again, and I want to consider what architecture should and can do in the years to come.

To begin with, it is wrong to think of architecture or any other profession in the singular, for no profession can or ought to be homogeneous. In a heterogeneous society, there should be many architectures, and many sociologies. Even so, architects should concern themselves mainly with the design and construction of buildings for that is their distinct expertise. (This means they should not ordinarily try to be planners, a point to which I will return.) Also, architects should continue to be innovative whenever possible, but the greatest opportunity for innovation, as I will note in more detail below, is in designing buildings for the people who use them.

Furthermore, while some architects should continue to work for, and by, the standards of high culture, more architectural effort ought to be devoted to popular culture, because its aesthetic standards are as valid and desirable as those of high culture. As long as taste is determined largely by education and income, different socio-economic levels are entitled to different standards of beauty and good design, and to have work within particular styles. Until all Americans have an opportunity to obtain the education and income prerequisite to high culture, architects should be working for and in all cultures. This, as I understand the Ventris, is one of the projects they want to make, although they are also engaged in using popular culture to develop their own high-culture form, much as high-culture composers incorporate jazz into their works.

Understanding and accepting the standards of popular culture may also be in the economic self-interest of architects, for it would enable them to play a larger role in commercial building—a rational strategy in an era when other clients are scarce. Competing with commercial builders is easier said than done, however, for consciously or not, they have developed a much better sense of what non-elite clients, particularly home buyers, want than architects have. Whatever the case, non-elite builders do not look down their aesthetic noses at such clients. The varieties of neo-Colonial and neo-Spanish design that have dominated residential building for many years may not meet high-culture standards, but they have been popular for a long time, and their popularity cannot therefore be ascribed simply to the aesthetic ignorance or pathology of builders and home buyers.

To be sure, commercial builders will rarely employ the innovative designers who are held in highest regard by the profession, at least not until they can prove their willingness to work within popular styles. At the same time, the forthcoming restrictions in the supply of energy may provide a new opportunity for architects, for if energy becomes scarcer and more expensive, American building of all kinds will have to change and designers who can come up with energy-saving solutions that are also popular in style will find themselves extremely busy. But such solutions cannot involve resettling people in a new version of the post-Mesian high-rise apartment building; instead, architects must find better ways of saving the single-family house, or, of adapting the row-house so that it can become a viable substitute for it.

A major distinguishing characteristic of high-culture architecture has been its self-conscious attempt to make philosophical and symbolic statements, but often this is undone. Buildings have many functions, utilitarian and others, and they can also serve as vehicles for statements, but not at the expense of their functions. Architects are generally the custodians of high culture, even though most philosophers in the first place; the statements they want to make are often half-baked or cliched even when the architecture itself is good. Moreover, it is plainly impossible to capture the ethos of a society or an era in a single statement; modern societies are too diverse and eras are of too short duration. There are better media for the pursuit of philosophy than buildings.

Much the same observation applies to the making of symbolic statements, except when a building’s major function is to be symbolic. Symbols are perhaps easier to integrate into design without neglecting other functions than philosophical statements but even so, their importance has been overrated. In addition, the symbol-makers tend to favor high-culture symbols and styles and to forget that the rest of the population may have different symbols. For example, many public buildings follow the dictates of high culture, even though most of the public, which pays for the buildings, does not share these dictates, subsequently expressing its feelings in the satirical names often attached to such buildings. People might feel differently about architects if at least some public buildings expressed popular symbols and styles.

The Fountainhead syndrome has also been primarily associated with high-culture architecture, although even designers of otherwise ordinary residential subdivisions have wanted to influence people’s friendship choices and to encourage their identification with the community through design and site planning. But whether the urge is to reconstruct the entire society or neighborhood sociability, architects cannot, and should not, try to play social engineer with architectural methods. In the last two decades many studies have been made on the impact of buildings, building types and sites on social relationships, other behavior patterns and attitudes. Most of the research indicates that buildings and good design, however defined, have only a minimal effect on behavior and attitudes. Moreover, even when effects have been observed, they have often differed from those intended by the architect.
Finally, architecture should de-emphasize aesthetics, or at least give less priority to the aesthetic functions of buildings, treating them less as works of art or pieces of sculpture. How buildings look from the outside and to the outsider is far less important than how they feel to their users; they ought to be beautiful, but their elevation, and their aesthetic functions generally, should not be the tail that wags the dog.

Above all, architecture should be human. The adjective is merely a label, and one that has sometimes been used to polemicize against tall buildings, but I mean by it that buildings should be designed for the people who will use them. Architecture should be user-oriented, to employ yet another label. Specifically, buildings should be humanly functional, comfortable, and beautiful—and when not all three objectives can be met, in that order of priority. I use functional here in the literal sense: a building ought to perform the functions for which it is intended. It should work as a mechanical system, of course, but more important, it ought to facilitate, or at least not get in the way of, the important and recurring tasks, and the social, political and economic relationships that go on within the building. By comfortable, I mean that a building ought to be convenient and pleasant for its occupants, although not all buildings can be comfortable. Some I suppose have to be awe inspiring, and I doubt whether any designer can make a prison comfortable for its involuntary occupants, at least until penology is humanized. A beautiful building is, for me, one that satisfies the aesthetic standards of its users.

Functionality, as I conceive it, is particularly relevant to a human architecture, for it calls attention to the fact that the building ought to work for the often prosaic and mundane needs that are sometimes forgotten because the architect is emphasizing symbolic functions or aesthetic goals. Above all, perhaps, functionality has to do with the allocation of the scarcest resource with which the architect works, space, so that major activities and relationships can be satisfied effectively. For example, in a house functionality has to do with so locating the kitchen that mothers can watch their young children playing outside; in an apartment, providing play space for them when they cannot go outside but will not stay in their own rooms—as they rarely do. It means designing bedrooms for teenagers so that they can entertain their friends with high-decibel records without deafening their elders, and finding ways to give both age groups visual and aural privacy. In an office building, it means finding a design that will provide enough—and comfortable—space for both secretaries and executives. In short, human architecture is understanding how people actually try to use the buildings they live and work in, and then finding design solutions for these uses.

User-oriented architecture is simpler to propose than to design. For one thing, user orientation has implications for a building’s functions, for the users should, in one way or another, have a role in determining the intended functions. Second, most buildings have diverse sets of users, and which users ought to determine the building’s functions and its design, and in what order of priority, is a complex issue. Occasionally, buildings can be designed to satisfy all users, but more often they cannot, and then the priority question becomes a political issue. Whether a house should be designed first and foremost for adults or children, or an office building for executives or secretaries, is at bottom a question of power, and normally adults and executives will end up with higher priorities. Architects cannot by themselves reallocate power or even find solutions to power struggles. Ideally, they should speak for the users in their discussions with clients and make sure that those of lesser power do not automatically wind up with lower priority. More pragmatically, they should encourage discussions among clients and users as to how the building is to be designed, indicating that priority determinations are political ones. At the least, they should remind clients not to ignore users.

Clearly, buildings should not be designed simply for clients, and all other things being equal, first priority should be given to those users who make the most intensive or extensive use of a building. But all other things are frequently not equal; thus, a firm which can flourish only by attracting customers for its products must obviously assign high priority to front rooms. Building users who can serve these customers would probably agree, since their paychecks depend on satisfying customers; even so, if these users are consulted, their wants will at least be put on the agenda. One complicating factor is that architects are usually hired and paid by clients, not by users, and must battle for the authority to consider the latter. In a competitive situation, those who do so may be at a disadvantage, for an architect who argues that office buildings should provide comfortable workspace for secretaries as well as executives may obtain fewer commissions than one who pays maximum attention to executives. The experienced user-oriented architect can, however, argue that secretarial productivity and turnover are affected by pleasant working conditions and that these conditions can sometimes be made more pleasant through design. Admittedly, design has its limits; for no architect can design a building in which everyone, ie, executives and secretaries, can have window offices. Nevertheless, addressing itself to users and to the problems this raises is what makes architecture human.
A second issue concerns the determination of user needs and wants. Need is an unfortunate concept, for too often it is projected on to users, and turns out to be what other people think users should need or want. I would emphasize user wants, and when not all wants are achievable, user choices among alternatives. Even wants are not easily determined, for while it may be simple to get people to say what they want, the user-oriented architect must also consider how people actually use buildings once they are inside them. Since no one can predict what people will do in a building they have not yet occupied, architects need to know, in considerable depth and detail, how people use different types of buildings—and building components—in the mechanical, social, and emotional senses of use. Architects should, in fact, be constant observers of how people use buildings; their own and those of other architects and commercial builders; they should understand how use patterns are enhanced and hindered by various design solutions; and they should be talking with users to find out what they like and dislike about their present buildings and what should be changed in the future.

Observing use patterns and ascertaining user wants for the future is only part of the assignment, for architects must synthesize these two kinds of data, and this, too, is complicated. No synthesis can totally rely on use patterns, or else architects will only be perpetuating the status quo. On the other hand, it cannot rely too heavily on verbally expressed wants for the future, since even the most observant users cannot always express what they want, and even when they can, talk is cheap. What people say they want may ultimately not be as important as how they have acted in the past. Finally, no synthesis is complete without the architectural input, combining the data with design ideas. One of the challenges of a human architecture is to develop and perfect this synthesis, through experience, research, professional discussion and education.

When I suggest that architects must talk with users, I do not necessarily mean this literally, for in many cases, the dialogue may be carried on by researchers, and besides, there is no single formula for everyone. Some architects are user-oriented by inclination; they have an intuitive sense of how people use buildings and an almost inborn ability to observe them, although even the most sensitive observer is most insightful about people who are like him or her in age, income, education and interests. Other architects are most at home at the drawing board, or with the calculator, and lack the skill and patience to talk with users.

Whatever the architect's own inclination, ideally users should do their own talking and should help to determine the program and design of their own buildings. One 1960s idea that has deservedly survived is user participation in architectural and planning decisions. In a literal sense, such participation is often impractical, for even talking with the family of a client for a private house takes a good deal of time and energy; and no one can hold a dialogue with the eventual occupants of a subdivision or office building. Sometimes it is possible to talk with a sample of surrogates, people who are similar to eventual occupants, but often the dialogue will in fact have to be research: studies by social scientists, especially sociologists and psychologists, which provide architects with data on user behavior and user wants.

In recent years, there have been a number of attempts at teamwork between architects and social scientists, and some have been successful. I am well aware, however, that often they have not worked out. Architects have claimed, and rightly so, that the social scientists have different interests, being more concerned with innovations in theory than with improved architecture; they have also complained, again correctly, that social scientists often lack the knowledge and the inclination to work with architects. Social scientists, they say, cannot adapt to architectural deadlines, and cannot communicate in jargon-free English. Most important, they are unable to come up with findings specific enough to be useful for design solutions, or are unwilling to make firm generalizations when their findings are ambiguous. Social scientists are equally unhappy with architects, charging, also often rightly so, that architects are unable or unwilling to use research findings. The complaints of both professions boil down to the charge that the other is unsuited to teamwork, suggesting that both must make changes in their methods of operation before effective teamwork can take place.

If social scientists are too often marching to theoretical rather than practical (architectural) drums, architects are frequently at fault for asking the wrong questions. For one thing, some still want to be social reconstructionists and reject social-science findings that indicate that an architectural solution is irrelevant. Having done a study of a low-income ethnic neighborhood, I am sometimes asked by architects how one designs buildings and neighborhoods that respond to the distinctive culture of low-income people or of an ethnic group; this is a good example of the wrong question. The fundamental, or at least most urgent, user patterns do not vary by class or ethnicity; that is, different income and ethnic groups do not use dwelling units all that differently. They all need living rooms, bedrooms, kitchens, etc., and they all put these rooms to roughly the same use. True, low-income people have traditionally socialized informally and in the kitchen, while high-income people entertain more formally and in the living room, but such class differences are few, and in most cases would not affect design.

The main distinction between the rich and the poor is in their ability to pay for space, and the main problem of the rich is to get enough of it. Of course, poor people virtually never get new housing and they cannot hire architects, but when architects design projects for low-income people, they should worry less about designing for the distinctive characteristics of low-income social life, and more about how to design functional, comfortable and beautiful architecture in a space. In addition, they should use their professional expertise and status to fight against low-income housing projects that try to cram their occupants into an unreasonably small amount of space. Together with researchers, they ought to determine the space requirements of low-income families so that they can develop minimal space standards for the poor. I suspect that these standards will require as much space as the standards for everyone else, thus casting doubt on the desirability of special (and especially small) housing units for the poor. Instead, housing will need to meet a universal threshold of space, with rent supplements for those too poor to afford the minimum.
As for low-income or ethnic neighborhood use patterns, these are not so rigid or permanent that they require special designs; in fact, such designs sometimes ask people to continue behavior patterns they would just as soon give up. For example, among some low-income groups street life is not a choice but a necessity, born of lack of space in the dwelling, which would disappear if apartments were large enough. Among some ethnic groups, street life exists because of immigrant cultural restrictions against inviting people other than relatives into the house, but these restrictions are not being maintained by today’s third and fourth generation ethnics. More important, there are few people or cultural patterns which cannot and do not adapt themselves to available space and design. If one looks at first and second generation Italian neighborhoods in America one finds the social life much the same whether people live in tenements, row houses, or single family houses, whether in all-Italian or mixed neighborhoods, and whether the streets are wide or narrow, traffic-laden or empty.

The cooperation between architects and social scientists is just beginning, and early failures do not invalidate the possibility of a joint effort. Such an effort requires at least three separate tasks. One is the development of a basic research compendium of user behavior and wants for different types of buildings. Although considerable new research will be required to discover the fundamental generalizations about user behavior, the task is not as huge as it might appear. There are many uniformities in how people use houses, offices, factories etc., with relatively little variation either by demographic characteristic or region. Also, people’s wants are more similar than commonly thought; what differs mainly is their ability to fill them.

The needed research compendium is already beginning to exist, thanks in part to the burgeoning, in the last decade, of the sociology and psychology of design, sometimes called environmental sociology and psychology. To be sure, much of the research is still preliminary, of narrow scope, and overly concerned with theoretical, conceptual and methodological issues. In part, architects, and some social scientists, have only themselves to blame, for they have so far remained quiet about their research needs, and have left the agenda entirely to the social scientists. If architects became interested in user research, and exerted some influence on those who find such research, they might obtain more usable data.

But this also awaits a second task, the recruitment and training of architects who are sufficiently sympathetic to and familiar with the social sciences, and with the use of social science data in architecture. To initiate research at least to the extent of identifying architecturally inclined social scientists who will write the actual grant proposals and do the research. And this in turn must go hand in hand with a third task, the recruitment and training of social scientists who are interested in working with architects.

All three tasks require funds, people, and the development of new research organizations, teaching bodies and curricula in order to develop an effective interdisciplinary relationship in which architects with some training in the social sciences, and social scientists with some training in architecture can develop a common language and research methods that contribute to the common objective. The overall effort will take time, which is why it should be initiated as soon as possible, by academics in architecture and the social sciences, with practitioner support from relevant professional organizations to help obtain the necessary foundation and government funding.

The basic research compendium should consist of specific studies, the broader generalizations drawn from them and translations, by architects, into broad and general user-oriented design guidelines. These cannot always solve the specific design problems encountered by individual architects, however, and will have to be supplemented either by special studies or by social science consultants who can adapt compendium findings to specific design problems for architects who lack the time or money to do new research. Hopefully, the compendium can be updated and elaborated continuously with results of these studies or consultancies, and more importantly, by follow-up studies of user behavior and user satisfactions once buildings have been occupied.

In the early 1950s, when I worked as a city planner in public and private planning agencies, most of my colleagues were architects, for in those days trained planners were few, and many architects thought that their professional training entitled them to be planners as well. Times have changed considerably since then, at least in America, so that architects can no longer become planners just by taking a few planning courses anymore than planners can also be architects by dipping into the architectural curriculum. Planning is rapidly shedding the remainder of its architectural origins and becoming an applied social science, although no one can now tell whether it will be an independent discipline, or one dominated by one of the traditional disciplines, or by operations research, systems analysis, public administration, or by one of its equivalents in business or engineering.

At the same time, however, physical planning will continue to exist, because some of the issues with which planners deal, and some of the decisions on which they advise, have physical consequences and require design solutions. In fact, as some planning agencies and schools have de-emphasized physical planning, it seems to have taken on new life elsewhere, often under architectural auspices and under the label “urban design.” In some ways, urban design is closer to architecture than to planning, but even so, many of the issues with which urban designers must deal, especially in the large cities, involve the same macroeconomic, social, and political questions with which planners also grapple, excluding the architect who is trained to work on smaller sites, and with microeconomic, social and political issues. In the long run, therefore, urban design must probably also split off from architecture, combining a small portion of its design expertise with a large portion of planning skills. As scarcities of energy and money increase, and as public expectations for the efficiency and effectiveness of public agencies rise, no one can be both expert in architecture and urban design, and the era in which the architect could function as a generalist who can also plan will finally end.

During the 1960s, some architects went into planning because they thought that the latter profession, having a larger scope, would be more able to bring about drastic social change. They were disappointed, for while architecture, like buildings, cannot do much to change society, neither can planning, embedded as it is in business-dominated municipal politics. Indeed, it seems fair to say that most professions can do little to bring about social change, at least in a radical direction, for their employees or clients tend to represent the elite.

Radical social change comes about largely because of the interplay of macroeconomic and political forces over which no one group, whether of the elite members of society or radicals, has very much control. More modest social change, on the other hand, is largely the result of political activity, and in this sense, like all other professionals, can be politically active, either as professionals or as citizens. They can lobby, demonstrate, march, or run for elected office; they can also try to persuade their firms and professional organizations to lobby for changes they consider desirable.
As the 1960s activists discovered, however, imminent revolution is not likely, especially one led by architects. Today, the opposition to social change, especially in an egalitarian direction, is once more apparent and even from few architects are politicians, and even those who are rarely have a sizable political base from which to operate, most architects will have to exert political influence through their expertise. As experts, they can play advocate and technical-adviser roles in community organizations involved in building, or in fighting the dubious “progress” of urban renewal. They can also lobby for more research and action to reduce the cost of housing and housing maintenance.

Still, the main cost of housing is the price of land and money, which architects can not affect, either as experts or as activists. If these prices are to be brought down, architects must join with other professionals and with citizen groups to undertake joint political action for the elimination of land speculation and for the transformation of the housing industry into some form of public utility, so that all housing, except for the very rich, becomes a governmental responsibility, as it already is in many countries all over the world. But political action along these lines requires considerably more expertise in the economics and politics of housing, and of urban development generally, than most architects have.

Most of the educational implications of my proposals for the future role of architecture are self-evident and I shall only summarize them briefly. First, architectural schools should devote themselves to the training of architects, sending those students who want to be planners to planning schools, but they should also work with planning schools to develop urban-design curricula that properly train architects to deal with, or at least understand, those urban design decisions that cannot be based solely on architectural expertise.

In addition, schools should train students in what I have called human architecture, encouraging in them an empathic understanding of—and curiosity about—how people use buildings, and teaching them how to apply a user orientation to architectural programming and design. Architectural students ought to have sufficient training and practice in observational and interview techniques so that they will develop the habit of and skills for informal observation of user behavior. Although architects need not do systematic social science research, they will have to know how to use it. Architecture students ought to take courses in the various behavioral sciences so that they can obtain at least a general grasp of what these sciences are about. More importantly, they will require courses within architecture that provide them with the research findings on how people use buildings and how these findings can be applied. Such courses will have to be taught by social scientists who have themselves been taught to address architects, or by architects who have learned how to use design-relevant social research.

In addition, architectural schools should provide more courses on the economics and politics of building, housing, and related subjects. Architects must be knowledgeable not only in cost estimation, but also in the macroeconomics of housing (and other building), especially in an economy in which less than one-fourth of the population can now afford to buy a new house. Similarly architects must understand the politics of housing and building so that they can be familiar with the political context within which they work and they ought to take a course on the political structure of their own profession and on strategies of architectural and social change.

Finally, architects could also use more training in the aesthetics of popular culture, so that they can understand why so many Americans like neocolonial design, and can create architecture that is beautiful by popular standards.

My proposals probably sound revisionist to architectural activists who want to expand the horizons of their profession to encompass planning, and reactionary to those who want to transform architecture into a handmaiden for a future revolution. My proposals may also be unrealistic, for as sociological studies of the professions have shown, most professions are imperialistic and seek to enlarge their roles and increase their power so that they can be, to use an old architectural cliché, the leader of the team.

The human architecture I consider desirable is not new. Essentially, what I am arguing for is only a variant of the now almost extinct idea that form should follow function and that buildings should be designed from the inside out, rather than from the outside in. In its brief life span, the idea that form should follow function received more lip service than drawing board activity, however, and even when it was applied, it overemphasized a narrowly mechanistic conception of function. Human architecture must design for human functions; it has nothing to do with Bauhaus asceticism or with letting the plumbing hang out. Rather, it requires attention to the users as social and psychological beings, and design solutions that allow them to live as they want to live—and in buildings they enjoy being in and consider beautiful. Human architecture may not be published in today’s architectural journals, but it offers enough design and other challenges to involve several generations of practitioners, researchers, students and teachers in an innovative, creative and socially useful professional endeavor.