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THE EDIFICE COMPLEX: A STUDY OF
THE ARCHITECTURAL PROFESSION

by

Anna Helena Jooste, B.A.

A thesis submitted to the Faculty of
Graduate Studies and Research in partial fulfilment
of the requirements for the degree of
Master of Arts

Department of Sociology and Anthropology

Carleton University

✓ Ottawa, Ontario

November 2, 1982

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THE EDIFICE COMPLEX: A STUDY OF
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ABSTRACT

This thesis approaches the architectural profession from the vantage of the sociology of work and organizational theory. When apt, insights gained from the field of environmental sociology are applied. The architectural profession has to date not been subjected to systematic study by sociologists. The thesis argues that this group is an important one: architects make decisions about how we experience space, about how we are housed and sheltered. As such, they deserve study. This study does notⁿ pretend to be comprehensive. It is offered as background for further substantive work which the writer hopes to undertake at a later date.

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"I have only so many buildings in me."

CHAPTER 1

INTRODUCTION

This thesis approaches the architectural profession from two vantage points: the sociology of the professions and organizational theory. Passing reference is made to certain concepts from environmental sociology. At first glance, such an approach may seem somewhat eclectic but due to the paucity of studies on the architectural profession it is justified. There is a clear need for a study of the architectural profession which can pull together many diverse and seemingly unconnected concepts in a coherent manner.

The profession of architecture is one of the established or old professions and is often grouped with law, the clergy and medical professions. Whereas, there are an abundance of studies concentrating on the medical profession (Becker, 1961; Hall, 1948; Merton, 1957) and many studies of the legal profession and several of the clergy (Fichter, 1961; Hammond, 1966) it is quite startling to note that the architectural profession has by and large escaped serious study. Barrington Kaye (1960) described the development of the British profession of architecture, and Judith Blau has published a number of articles on the results of her study of architectural firms in New York. Several other authors have dealt glancingly with certain aspects of the architectural profession (Fitch, 1982; Salaman, 1974) but to date the architectural profession has not been

*Architect interviewed by the author. 1982.

systematically scrutinized by sociologists.

Why is this? One suspects that architecture as a profession has escaped study because it does not seem to fit any descriptive model particularly well. If, as in the functionalist view, the service ideology is supposed to motivate the professional; the evidence of the motivational impact of service ideologies on architects is ambiguous. If, as in the power model, professionals organize in order to protect scarce goods; then the architectural profession is singularly open to territorial raids.

This thesis represents an initial stab at describing the problem, and highlighting some aspects of the architectural profession. It does not pretend to be comprehensive, but hopes to be provocative. The magnitude of the task is clearly beyond the scope of a masters thesis. This thesis, does however, point to areas deserving of further study.

In the following chapters the rise and development of the architectural profession will be described. Particular attention will be given to the Canadian case. The western profession of architecture is broadly described because it would be impossible to situate the Canadian case otherwise.

Because architecture involves aesthetic sensibilities, a chapter is devoted to the description of major modern architectural schools and styles. This is necessary background for the understanding of the most important tenet of the architectural cosmology: that the highest accolade is to say of an architect that he or she is a good designer. Good design depends on style and aesthetics rather than technical ability.

The title of this thesis -- The Edifice Complex -- was not facetiously chosen. The writer is not the first to use this expression in connexion with things architectural. In the early seventies it was used among wags to refer to Nelson Rockefeller's propensity for commissioning monumental

buildings. It is here, however, intended as a reminder of an issue that came up continually when the writer interviewed architects, and which is best summed up by the quotation which precedes this section, namely that design is a race against time. The architect attempts; in Broadbent's (1973) words, to devise a "statistically infrequent solution" to a problem and then to get it built before anyone else strikes the same solution. The analogy to research chemistry or academia's "publish or perish" ethic is inescapable. The frequently mentioned desire of architects to design more and more and better and better is here styled the Edifice Complex.

This thesis will briefly examine sociological theory around the professions, environmental sociology and organizational sociology in order to gain insights on the architectural profession. In order to pull this broadly-based inquiry together it is structured around one central theme. The argument hinges on the acceptance that shelter and therefore built space is a social institution and that the "history of the architect is the history of the differentiation of the institution of shelter" (Gordon, 1973:5).

Gordon makes a further point, which is accepted here, that architects might be seen as the elite group concerned with the specialized control and maintenance of shelter. This thesis dips into the literature around the professions, organizations and environmental sociology with the particular intent of examining the architectural profession in relation to the social institution of shelter. Architects do not control shelter. More than ninety percent of the world's built spaces are designed by non-specialists and are referred to as "vernacular buildings". This thesis is primarily concerned with the specialists who design specialized built spaces.

A part of this thesis is devoted to a particular kind of architect: the architect who is an employee in a large organization. In North-American and British sociology the concept of profession is more usually than not presented as the antithesis of bureaucracy and the bureaucratic mode of work organization (Larson, 1977:xvii). On the other hand, recent census data would confirm that the professional employee category has consistently increased for all western societies over the last few decades. There are many contributing reasons for this growth of the third sector of the economy and theorists (Bell, 1973; Poulantzas, 1975) have attempted to explain why such change is occurring.

The position of the employee professional is different from the self-employed professional. Prandy (1965) in a study of scientists and engineers established that the employee professional encounters unique problems of identification with the profession versus the employer. Fielding and Portwood (1980) identify the state as a key variable for what they style "bureaucratic professions". There has been no study of architects as employee professionals. This thesis hopes to address this question, or at least, to provide a basis for further study.

Information was obtained in the following ways - literature search in the social sciences as well as architectural history and criticism. Additional information was obtained by the writer by interviewing twenty-eight architects over a two and a half year period starting in the winter of 1980. These interviews were for the most part informal and open-ended. Some architects were questioned on several occasions and some were only contacted once. No formal sampling procedure was followed. The writer simply made a point of questioning every architect she knew with the object of gaining

additional "background" information. The writer has easy access to architects by virtue of being married to one.

Initially it was intended to do a secondary analysis of Judith Blau's study of Manhattan architectural firms but this proved difficult since the documentation of the data was not complete.

The study presented here does not pretend to be exhaustive: rather it should be seen as an exploratory attempt to come to grips with a hitherto scarcely studied area. The architectural profession deserves further study. In fact, in the light of some of the problems which are described in this thesis; one might conclude that it is begging for a comprehensive sociological treatment.

In this brief introduction an attempt has been made to situate this investigation within broad sociological concerns. Chapter 2 will examine the occupation of architect from the vantage point of the sociology of the professions. In Chapter 3 a brief historical resume of architecture is presented as the author believes it relates to the development of modern architectural styles. Chapter 4 deals with expertise in the architectural profession and relates expertise to success as well as the art/technology controversy within the profession. Chapter 5 will examine the work organizations wherein architects practise their profession. The final Chapter raises some questions and suggests further avenues of research.

CHAPTER 2

THE ARCHITECTURAL PROFESSION FROM THE VANTAGE OF THE SOCIOLOGY OF THE PROFESSIONS

Introduction

The following chapter deals with the architectural profession from the perspective of the sociology of work and the professions. It uses the "traits" taxonomy to briefly describe the profession in Canada and to make general statements about the position of architects compared with other professionals.

The previous chapter has sketched the broad framework of this thesis. The sociology of the professions seems the logical starting-point when commencing a study of the architectural profession. The student expects to find many existing studies of this group which might be weighed and sifted at leisure. The most startling "finding" in this thesis is the realization that surprisingly little exists in the way of particular studies dealing with architecture. It is therefore necessary to examine the broader literature around the professions to determine how any insights gained may apply to architecture.

Literature Review

The study of the professions has proven to be a popular sociological pursuit and there is a wide and varied literature. Carr-Saunders and Wilson (1933) saw the professions as among the most "stable elements in society." The professions, they claimed

inherit, preserve and pass on a tradition... the engender modes of life, habits of thought and standards of judgment which render them centres of resistance to crude forces which threaten steady and peaceful evolution... The family, the church and the universities, certain associations of intellectuals, and above all the great professions, stand like rocks against which the waves raised by these forces beat in rain. (Carr-Saunders and Wilson, 1933: 497)

In the 1950's Lewis and Maude (1952), albeit more conservative, joined with Carr-Saunders and Wilson in identifying the great industrial and governmental bureaucracies as the major threat to the "proper" functioning of the professions in Britain.

There are two major sociological points of departure when considering the professions in relation to modes of bureaucratic organization. Some social scientists, particularly economists, (Kuznets and Friedman, 1945; Lees, 1966) have taken a sceptical view and have questioned the benefits of professionalism, pointing to the harmful monopolistic practices of professional associations. In this view, rather than being anti-bureaucratic entities, professional corporations are in themselves bureaucratic mechanisms with the function of enforcing monopolistic practices.

Weber did not make a radical distinction between the consequences of professionalization and bureaucratization. He explicitly linked the process

of bureaucratization with the development of specialized professional education. (See Parsons' introduction to Max Weber, The Theory of Social and Economic Organization, New York, 1964.) Weber saw both of these processes as expressions of the increasing rationalization of Western societies. The Weberian argument conforms well with the view of Carr-Saunders and Wilson that the professions bring "knowledge to the service of power"; Weber saw this convergence in terms of one element in the process of rationalization and not as a limitation upon the exercise of power. In this model the professional or expert is a cog in a rational bureaucratic machine and importantly, the expert position and its ensuing privilege and obligations, is justified, indeed legitimized by the bureaucracy in its juridical persona.

C.Wright Mills, who feared that professions were increasingly succumbing to a "managerial demiurge" argued that Weber's prophecies of bureaucratic hegemony have been at least partially fulfilled.

... most professionals are now salaried employees; much professional work has become divided and standardised and fitted into new hierarchical organizations of educated skill and service, intensive narrow specialization has replaced self-cultivation and wide knowledge; assistants and sub-professionals perform routine although often intricate tasks, while successful professional men become more and more the managerial type. (C.Wright Mills, 1956:112)

Another argument has been that the fusion of knowledge and power has created a new kind of professional-technocrat who are in position to replace existing ruling groups. The professional-technocrats, it is suggested, would form an elite on the basis of "merit" and as a result of such legitimation would enjoy a more complete and more secure authority

than any ruling class (see M.Young, The Rise of the Meritocracy, London, 1958).

Attempts have also been made to place professionals in a class position of their own. Barbara and John Ehrenreich (1978) argue that professional wage earners constitute a new class in their own right, distinct from the petty bourgeoisie as well as from the working class and the capitalist class. The Ehrenreich argument is based on the premise that during the course of the development of capitalism a distinctive new class has emerged (at least in North America). They call it the Professional-Managerial Class and define it as

consisting of salaried mental workers who do not own the means of production and whose major function in the social division of labour may be described broadly as the reproduction of capitalist culture and capitalist class relations. (Barbara and John Ehrenreich, in Walker (ed.), 1978: 12)

Johnson. (1972) has attempted to explain the professions in terms of power relations, in short he examines the sources of their power and authority and the ways in which they use them.

Larson (1977), recognizing that

the conditions of professional work have changed, so that the predominant pattern is no longer that of the free practitioner in a market of services but that of the salaried specialist in a large organization. (Larson, 1977: xviii)

then provides a model of profession which passes from a predominantly economic function (organizing the linkage between education and market-place) to a predominantly ideological one, that of justifying inequality of status and closure of access in the occupational order.

There are, in the sociology of occupations and professions various operational definitions of "professions". Hall uses the taxonomic

approach (1968: 92-104; 1969: 70-91; 1979: 124-126) by identifying characteristic professional traits or attributes. Hall cites Parsons' (1959:547) and Greenwood's (1957: 45-55) definitions. Anselm Strauss uses another taxonomy where stages of development in the process of professionalization are emphasized (1971:69-70).

One is easily able to describe the profession of architecture in terms of a taxonomic approach. Architecture is widely regarded as an established profession, meaning that it has completed the stages of development described by Strauss (1971). The usual criteria by which professional status is evaluated is whether the discipline is distinguished by the following distinctive characteristics.

- 1) a specifiable theory or intellectual technique
- 2) relevance to basic social values
- 3) a long training period
- 4) a service ideology of motivation
- 5) autonomy
- 6) a sense of calling or vocation
- 7) a sense of community
- 8) a code of ethics. (Pavalko, 1971: 15-41)

The purpose here is not to answer whether the discipline of architecture fits these eight traits (it clearly does) nor to establish whether architecture is a profession or not. It clearly is. Architects act as if they are professionals and society accords professional status to architects. However, the purpose here is to examine and specify the profession of architecture in terms of these eight dimensions in order to get a clear understanding of a) what the normal structure of the profession is and b) what insight might be gained from a systematic study.

of the profession.

The dimensions of professionalism are discussed in terms of the internal characteristics of architecture but also in terms of external societal concerns. Professionalism is seen in terms of its dynamic qualities: never in isolation.

1. Theory or Intellectual Technique

This dimension refers to the extent to which there is a systematic body of theory and esoteric, abstract knowledge on which work is based.

In architecture theoretical knowledge is complex and articulated and can be traced from the Roman heyday of Vitruvius (or even earlier if one can regard the fragments of architectural lore found in the archeological remains of Ur-Namu as evidence of architectural theory) through to the present. In the following chapter the transition from a vernacular or non-specialized tradition of building a partial adherence to specialist designed built spaces is traced. It is prudent to keep in mind that specialist designed built spaces are, even today not the norm and that about 90 percent of all buildings are non-specialist designed (Doxiadis, 1963: 69-85).

However, the transition from vernacular to specialist designed built spaces can be shown to be related to the existence of written language codes, and that to a certain extent the concept "specialization" in architecture (here opposed to vernacular or folk architecture) depends on the writing down and drawing of instructions which can be followed by other individual. Of pertinence here is that the reliance

on written instructions postulates the early development of architectural theory. Recent Egyptian discoveries of hieroglyphic "building manuals" lend credence to this hypothesis. Coulton (1977) in documenting the early Greek architect at work, points repeatedly to the remarkable sophistication of architectural theory.

One can safely categorize architectural theory, or the setting down of design principles in writing, as having developed in a long unbroken tradition. Of course, as technologies became more sophisticated, so did theory become more articulated. The situation today is the existence of a large body of theory coupled with several intellectual techniques and a substantial core of technical knowledge.

2. Relevance to Basic Social Values

A distinguishing attribute of professional work is the extent to which it is related to the central values of society (Pavalko, 1973: 18). Exactly what constitutes a society's basic social values may be difficult to determine but a characteristic of the professions is the tendency "to seek their justification in abstract values on which there is widespread consensus" (Op. cit.). In other words, one of the legitimating aspects of professionalism is the claim that their work activities are designed to maximise the realization of such values.

Some social values which architects claim to maximise are: a concern with the quality of built environments and a notion of service to society. These broad values include specific tenets such as an aesthetic quality, user efficient qualities and concern for the community as a whole. The architect is ideal/typically seen (both within the profession

and by outsiders) as able to use expert knowledge and capabilities in service of the greater good for clients and the community. It is due to these architectural obligations, usually prescribed in codes of ethics that society has granted the practitioners of architecture relative status and privileges (Parsons, 1939).

There exists an opposing position in the literature. Johnson (1972) argues that the professions utilise their privileged position in society not in service to the community, but to maintain relations of social distance.

Johnson's discussion can be situated in an architectural analogy.

He says:

While specialization creates systematic relationships of interdependence, it also introduces potentialities for autonomy ... Social distance creates a structure of uncertainty ... in the relationship between producer and consumer, so creating a tension in the relationship which must be resolved. There is an irreducible but variable minimum of uncertainty in any consumer/producer relationship, and depending on the degree of this indeterminacy and the social structural context, various institutions will arise to reduce the uncertainty. Power relationships will determine whether uncertainty is reduced at the expense of producer or consumer (Johnson, 1972: 41).

Johnson is saying that specialization of production (the one-off and custom designs of built space) has as a consequence unspecialization in consumption. In preindustrial social systems the act of designing built space is nonspecialized and open to all members of society -- and indeed this remains the prevailing trend in much of the world. Non-specialist designs are styled "folk architecture" and "vernacular". This kind of design is not limited to unindustrialized societies. The

so-called "truckitecture" of North-America is a case in point.) By extension Johnson is arguing that the architect, by claiming and legitimizing a monopoly of specialist design of built spaces, is alienating the consumer from (1) the act of design and (2) limiting choice.

Generally the Johnsonian view is criticized by professionals themselves and one can safely assume that architects would attempt to rebut it. It is, however, undeniable that the professions (and this includes the architectural profession) are granted privilege and power not normally extended to other occupation-based groups. Whether or not this power is abused is an empirical question which needs to be verified. It might, however, be argued that the architectural cosmology tends to be profession-specific and not necessarily a reflection of broad societal values.

3. The Training Period

Professional training involves the transmission of abstract esoteric knowledge along with a varying degree of specialization. In addition to being highly specialized, professional training is ideational, that is it places a strong emphasis on acquiring the ability to manipulate ideas and symbols rather than (and sometimes in addition to) things and objects (Pavalko, 1971:20).

Another aspect of the professional training period is that it involves the acquisition of a distinctive set of values, norms and work role conceptions, as well as specific knowledge and skills. This is widely referred to as the "introduction to the professional subculture"

(Pavalko, 1971: 20; Merton, et al., 1957: 287; Shibutani, 1955: 562-569; Becker et al., 1961: 421).

The formal academic and training requirements leading to a licence to practice architecture in Ontario are spelled out in a pamphlet "Guidelines for Candidates Seeking Registration as Architects in Ontario" which is distributed by the Ontario Association of Architects. The Ontario requirements are not significantly different from those of other Canadian provinces and are used here to indicate broadly the academic and professional requirements in Canada. They are given as:

Successful completion of a five-year course of study in a school or department of architecture granting a degree or diploma or equivalent courses of study ... Alternatively, candidates may seek membership through the courses of study and examinations of the Royal Architectural Institute of Canada Syllabus (Ontario Association of Architects: 1).

Further, the document names the schools or departments of architecture of Canada which provide academic curricula acceptable to the OAA as follows:

The University of British Columbia
University of Calgary
Carleton University
Laval University
The University of Manitoba
McGill University
University of Montreal
University of Toronto
The Nova Scotia Technical College
University of Waterloo

Under a heading academic requirements more specific guidelines are set out.

The major pursuit of the architect is the design of built form. The resolution of an architectural project is derived from an integrative process and

involves all elements which are concerned with our way of life and our means to build. The range of studies which are required include: History of Architecture; Social Sciences; Theory of Architectural Design; Studio Work; Site Analysis and Planning; Architectural Sciences; Materials and Methods of Construction; Building Services and Systems; Acoustics; Economics of Building. The knowledge and skills derived from these subjects are brought to bear on architectural design, which is paramount among the academic requirements (Ontario Association of Architects: 2).

It is of import to note that architectural training is not confined to academia but that it has a practical element as well. The Registration Board requires that a candidate gains supervised (by a licenced architect) "real world" experience for a period of not less than three years.

Experience in the following areas is required. Programming and Predesign, Schematic Design, Design Development, Contract Documents, Interview Participation, Tendering Participation and Contract Administration. Furthermore, the successful candidate is required to sit for examination in a two part registration course. The first part of the registration course tests candidates' knowledge of all the legal aspects of professional practice and contract law, whereas, the second part demonstrates their knowledge of construction practices and procedures.

One can see then, that architectural training is a blend of the academic and the practical. The esoteric knowledge core is broadly based, encompassing many separate areas. Apart from specific design related theory, the knowledge imparted to architects is generalist, for instance, the architect is taught broad general social science precepts in order to gain insights into how people behave in groups or with relation to built spaces. However, this aspect of their training

is less detailed and specified than for instance design theory and its practical applications.

There are unintended consequences to architectural training and these remain to be specified. In common with all other professions, the architectural training serves to initiate trainees into the formal as well as importantly, the informal organization of the profession, or the transmission of the "professional culture".

In formal training situations members of the (profession) represent a normative reference group insofar as they set and enforce norms ... Both faculty and peers may serve as comparative reference groups to which the person may compare himself in arriving at a judgement of his development as a member of the occupation or the extent to which he has mastered its technical requirements and behavioral nuances (Pavalko, 1971:89).

Simpson (1967) has hypothesized that socialization into a profession involves a sequence of three stages.

During the first phase, the person shifts his attention from the broad, societally derived goals which led him to choose the profession, to the goal of proficiency in specific work tasks. During the second, certain significant others in the work milieu become his main reference group. Third, he internalizes the values of the occupational group and adopts the behaviors it prescribes. These three phases may overlap, but in general they constitute a sequence (Simpson, 1967: 47).

The learning and the use of architectural jargon may be one informal means of proclaiming membership to this professional subculture. Other mechanisms may include mutually shared dress and behaviour codes and shared belief systems. One may speculate that the architectural subculture includes those who are entering or entrenched in the profession, but,

also critics, students, academics, art historians, architectural technicians, even spouses of architects.

Clearly, architectural jargon, apart from exhibiting the formal/technical and informal/social characteristics discussed above, also embodies within it mechanisms of closure/exclusion where denying access to the meanings of jargon is a measure of denying the layperson access to the "mysteries" of the group's area of claimed expertise. Similarly, the other side of the concept holds true. Jargon is simultaneously a mechanism of inclusion where access to the meanings of jargon signify membership to the subculture.

For other, more peripheral fragments of the jargon-sharing group, for example spouses, entry tends to be characterized by informality rather than the formal rites of passage demanded by the professionalization process. It has been shown by Larson (1977) and Goode (1957) that a central aspect of professionalism is a tendency for members of the same profession to establish close social ties so that it is possible to talk of a professional subculture (or as Goode would have it, "community"). Fischer (1976) hypothesizes that the

effect of job similarity on the formation of personal relationships produces small social worlds based on occupation. Each occupationally distinct set of people forms internal allegiances, develops a characteristic outlook and style - in short, becomes a potentially viable subculture (Fischer, 1976: 111).

One might profitably extend Fischer's definition of occupational subculture to include those unsung peripheral persons, the spouses, companions, the academics, the critics, who clearly form a part of the social group surrounding professionals. In fact, these peripheral

fragments of the subculture possibly make unstudied contributions to the professional subculture. The obvious observation is in regards to the role of the spouse as a "support person" (Fowlkes, 1980, argues that a woman still stands behind every successful man), but the sociologist might examine the role of the academic and critic in terms of "image creation." A further suggestion is that jargon might be a variable of marked consequence in the process of "image creation."

The architect's success depends, in large, on how well he or she (but more likely he) can market an aesthetic quality which, linked with his technical expertise, is embodied in the product - a building. Jargon as an instrument which protects, obscures, illuminates at the whim (and under the control) of the user may very well be an important variable in the process of architectural "impression management," to borrow Goffman's term, and the marketing of specialized skills.

4. Motivation

The fourth dimension of the model of professionalism proposed by Pavalko, involves the "juxtaposition of service and self-interest as motivational bases" (Pavalko, 1971: 20). Professionals usually emphasize the ideal of service to clients and public as their primary goal and as part of their ideology. Also of import is the extent to which this claim is (at least tacitly) publicly acknowledged. Professionals are assumed to be motivated by the desire to best serve their clients, rather than by self-interest and the desire for monetary gain.

One expression of this ideological orientation amongst architects is the prohibition against advertising. Closely related to this are the

norms which regulate the active seeking out of clients. While this norm may be violated, there is nevertheless the feeling that ideally clients should take the initiative in seeking the services of an architect.

The profession similarly discourages the architect to become a developer -- in other words it is not professional to become one's own client for financial gain.

Whereas, the service ideology is certainly articulated in the architectural profession, it may not in fact be the primary goal. "The major pursuit of the architect is the design of built form," the OAA tells us, and the primacy of the design principle cannot seriously be questioned. It may well be that the architectural artifact, the design, becomes a means as well as an end in this profession. It strikes the observer that a desire to excel in design may in itself be a motivating factor in the profession of architecture.

5. Autonomy

Professional autonomy usually refers to the extent to which a given profession is a self-regulating and self-perpetuating institution. Johnson (1972) links autonomy with concepts of power and control. Power is defined in Hobbesian terms as "the present means to any future good" and control is used as referring to the process of maintaining and/or increasing the means to future goods. One can argue that specifically in the case of the architectural profession, the "present means to future goods" resides in the way in which the profession is organized and maintained. Goals and organization are acknowledged to be related, to some extent goals predicate organization although stated goals stop short of determining organizational form.

The organized profession of architecture exists by virtue of the state having granted and proscribed in legislation the right to the granting of licences to practice architecture to the various provincial associations. Such statutory registration has achieved two main organizational objectives: the guarantee of integrity and competence. Yet, as Fielding and Portwood (1980) point out, the relation with the state remains a key variable.

To a certain extent the maintenance of autonomy and power vis-a-vis the state is an ongoing process. At present the Architects' Act of 1970, and the amended version of 1979, is undergoing a process of review. The primary goal of the organized profession is always to maintain or increase the professional boundaries; to protect the profession from territorial raids by other professions, for instance structural engineering. How well the profession of architecture succeeds in this protection of their means to future goods is the key to the future viability and vitality of the profession.

There is some indication towards a trend for the decline of private practice, especially under worsening economic conditions. More and more architects are exchanging practices for salaried positions. The number of architectural firms has declined steadily over the last two decades (Architectural Record, Jan 1982). Whether the organized profession incorporates such a trend or not, may prove to be the crucial variable in the maintenance of future goods - or the ongoing autonomous profession of architecture as it is known today. To the extent that the profession is successful in realizing its claims to autonomy, it is at present able to achieve a high degree of monopoly and control over the right to perform

architectural work activities.

Professional Associations: When considering the present structure of the profession of architecture in Canada, it is important to note that the regionalism of the country is reflected in the profession. At present there are ten licencing bodies. They are:

- Newfoundland Association of Architects
- Architects Association of Prince Edward Island
- Nova Scotia Association of Architects
- Architects Association of New Brunswick
- Ordre des Architectes du Quebec
- Ontario Association of Architects
- The Saskatchewan Association of Architects
- Alberta Association of Architects
- The Architectural Institute of British Columbia, and
- The Manitoba Association of Architects.

Most of the provincial associations respect each other's licencing procedures and usually an architect who migrates from one province to another is granted the new provincial licence to practice as a formality. There are some exceptions. For example, it is still possible to qualify and be licenced as an architect in Alberta by the apprentice system but with the exception of British Columbia none of the other provincial associations recognize this particular training.

The Royal Architectural Institute of Canada

Another professional group of some import to the architectural profession in Canada is the Royal Architectural Institute of Canada (RAIC). A brief examination of the history of the RAIC is appropriate.

At the turn of the century there was a growing awareness of the need

for close professional ties between the provincial groups of architects throughout Canada, and it became evident to architects in 1906 that the prestige of the architectural profession could be securely established and enhanced only by the creation of a national organization. Following a series of meetings between D. Ewart, Chief Architect of the Department of Public Works, Ottawa; Edmund Burk, President of the Ontario Association of Architects; and Alcide Chausse, President of the Province of Quebec Association of Architects, a national Institute of Architecture was founded.

In April 1907 a circular letter was sent to 500 architects practising in the Dominion inviting them to join the proposed Institute as charter members upon payment of a fee of \$10.00. The initial response was encouraging and the new umbrella body was launched. The first convention of Canadian architects was held in Montreal in August, 1907. It was the first time English and French speaking architects had met together.

On November 20, 1907 the draft of the bill to incorporate the Institute of Architecture of Canada was tabled with the Clerk of the House of Commons. This bill had a stormy passage through Parliament and was strongly opposed by "those who saw in it an attempt to create not only a closed corporation but a high professional standard throughout the Dominion to the disadvantage of building contractors, engineers, manufacturers and others who wished also to function as architects" (from an undated information pamphlet of the RAIC).

After many revisions a Bill was finally approved and the Institute of Architects of Canada was incorporated as a special act of the Dominion Parliament in June 1908. An alliance with the Royal Institute of British Architects (RIBA) was completed in May 1909, and Royal assent to the

adoption of the prefix "Royal" was granted in June, 1909. One hundred and thirty-nine architects were admitted as charter members when the Institute was founded in 1907.

The objects of the Institute have changed very little over time.

They are:

- Service to the public as a national organization.
- To establish and maintain a bond between the members of the Institute and to recognize and encourage excellence in the practice of architecture.
- To establish and maintain a bond between the Institute and Societies, Associations, Orders or Institutes having similar objects.
- To establish and maintain liaison with other environmental design professions and learned societies, nationally and internationally, on matters of common concern.
- To promote an appreciation of architecture and the architectural profession in Canada.
- To promote the intellectual development of the profession and active collaboration with the schools and affiliates.
- To promote encouragement and recognition of worthy aspirants to the profession.

(From an undated information booklet distributed by RAIC)

Effective January 1, 1980 the RAIC converted from a federation of Provincial Associations of Architects to voluntary direct membership.

The RAIC wields some influence but very little power. It acts mainly as a lobby in Ottawa to protect architectural concerns. Over the years the RAIC has on several occasions tried to wrest licencing power from the Provincial Associations (trying to emulate its British counterpart, the RIBA) but each attempt met with failure. The 1980 decision to convert to a system of voluntary direct membership by individual architects leads to speculation on the part of this researcher

that the "voice" of this body may weaken further over time.

6. Sense of Commitment

This dimension involves the sentiments that professionals are assumed to have toward their work. For the professional work may be viewed as a "calling" or vocation, and approached with what Pavalko calls a "quasi-religious sense of mission". The prototype of this sentiment is found in the clergy profession (Sherwood, 1980) where those who enter the work claim (and are assumed) to have been "called" by the deity. Closely related to this orientation to work is the notion that commitment to the work is not a passing fancy but rather a long-term if not life-long commitment.

Blau's 1977 study of architects in 153 Manhattan firms tends to confirm that architects value their profession in vocational terms, that it is seen as a life-long pursuit and that the ideology of "once an architect, always an architect" prevails. There is no social reason to assume that Canadian architects would respond differently. Similarly, Lipman's 1964, discussion of the architectural belief system, assumes that such a vocational ideology is prevalent.

7. Sense of Community

The community dimension refers to the extent to which an occupation-bound group exhibits the characteristics of a community. According to Goode, a professional community can be identified as follows:

- (1) Its members are bound by a sense of identity.
- (2) Once in it, few leave, so that it is a terminal or a continuing status for the most part.
- (3) Its members share values in common.
- (4) Its role definitions vis-a-vis both members and non-members are agreed upon and are the same for all members.
- (5) Within the areas of communal action there is a common language, which is understood only partially by outsiders.
- (6) The community has power over its members.
- (7) Its limits are reasonably clear, though they are not physical and geographical, but social.
- (8) Though it does not produce the next generation biologically, it does so socially through its control over the selection of professional trainees, and through its training processes it sends these recruits through an adult socialization process (Goode, 1957: 194-200).

Clearly, the organized profession of architecture in Canada (and elsewhere) satisfies most, if not all, of Goode's criteria. At different times, and under differing social conditions the architectural community may include certain categories of non-architects; such as architect's spouse, critics, clients even other professionals, for instance, landscape architects, planners or engineers. Lipman (1964), Blau (1977) are in agreement that architectural meanings are contained not only in architectural artifacts (as is generally accepted) but are transmitted within the language of architects, or the professional jargon. Access to and ability to manipulate this jargon is thus seen as one of the bounding mechanisms of the architectural community.

8. Code of Ethics

The final dimension on Pavalko's taxonomy is possession of a code of ethics. In a sense, ethical codes can be viewed as a type of normative system that is part and parcel of the work culture discussed above as

belonging to the "community" dimension of the model. The ethical code is the "official record" of the profession's highest values. Professional codes tend to reinforce the service ideal by emphasizing the the practitioner's primary concern is the client's welfare. Codes of ethics also reinforce and bolster the profession's claim to both collective and individual autonomy. In other words, the code of ethics can be seen as one of the mechanisms used by the profession to "maintain the means to future goods". In this sense, the code of ethics is the legitimating institution for social control.

The control aspect of the ethical code is best illustrated when one examines how the architectural profession deals with deviance, or the "breaching of the code of ethics".

Sanctions against architects who violate the ethical code are extremely rare. When the Ontario Association of Architects recently disciplined an architect for incompetence it was the first time an architect had been so accused under the 1935 Ontario Architects Act. Architects had been disciplined for such offences as negligence or dishonesty, but never for incompetence (The Globe and Mail, January 7, 1982).

Recently (July, 1980) the American Institute of Architects (AIA) which has jurisdiction over the United States, not Canada, announced that henceforth the code of ethics will be voluntary. The July editorial of Architectural Record decried this as "a sad day for professionalism". The editorial mourned the discarding of the code "a concept that has long separated professionals from entrepreneurs".

The reasons given by the AIA for the decision are:

1. Because of legal decisions, the only way AIA can retain meaningful statements ... is through voluntary standards.
2. Mandatory standards require the removal of all ethical statements which may cause legal problems, so enforcement is of little value...
3. One purpose of ethics is to communicate AIA's ideals to the public. Voluntary ethics would give AIA the greatest opportunity to do this, whereas mandatory statements would be highly restricted.
4. Enforcement is not the primary reason for ethics...
5. Voluntary standards would be the safest legally.
6. With voluntary ethics, AIA's resources and energies could be applied to other endeavors instead of constantly defending a mandatory code...
7. With a voluntary code, AIA would still maintain the right to discipline a member who violates state licensing laws or commits a felony...
8. Members want to be respected by their peers, and voluntary ethics will be observed by most members.
9. A voluntary code has a positive outlook and is a collective view of individual responsibilities. The threat of a mandatory code is negative in nature.
10. Past history indicates that AIA's ethics have not been enforced to any great extent... Strict rules always can be circumvented or avoided; AIA's time would be better spent focusing on the spirit and ideals of ethics.
11. Voluntary ethics would provide the broadest and strongest set of statements members could make in dealing with each other, in guiding young architects, and in relations with the interested public. (Architectural Record, July 1980, p.13)

In assessing these above reasons, one has to give more weight to the legal aspect than any other. The hint about the code having separated the professional from the entrepreneur inclines this researcher to think that the right to advertise more broadly than is allowed under the code, may also have been a buried issue here.

The editor closes with a rousing statement.

Let it be said that I don't think there will be any enormous impact on architects from this change. Most professionals will perform in a professional manner

with or without a mandatory code. But there is the matter of principle -- you cannot be 'mostly professional' any more than you can be 'slightly pregnant'. (AR, July 1980:13)

In Canada codes of ethics are still mandatory and there is no indication that the trend in the U.S.A. will be followed.

Conclusion

The architectural profession resembles the other established professions, such as Medicine or Law, in many ways, but one can ask: are there any important unique characteristics? Larson (1977) mentions somewhere that architecture may be unique among the professions because it produces an artifact which is closely associated with the individual responsible for it. In fact, engineers may also be individually associated with their "product". Certainly Engineering firms are. However, the architectural success system is very closely linked with the aesthetic qualities of the artifact and this may indeed be a specific characteristic, although one may compare with the music and dramatic professions where peer judgement is more important than audience judgement.

It can be argued that the combination of aesthetic and technical competence to form a single knowledge core provide a unique basis from which to describe this profession, but given the evidence that the aesthetic component is consistently valued more within the profession (Broadbent, 1975; Blau, 1976, 1977) and that this has been the case since the early beginnings (Kaye, 1960; Harvey, 1972) the student may safely conclude that because architects say art is most important, art is most important, at least in terms of the design outcomes but also in terms of the architectural success system.

The field in which architects claim expertise is shared by other

groups. One thinks of City Planners, Structural Engineers, Landscape Designers, Interior Designers even Artists: all these have interfaces with architecture. It would seem that the single unique feature of this profession is, however, tied to the aesthetic. The architect claims as primary expertise the right to act as arbiter of taste in built space. Society seems to accept the architectural aesthetic with little or no murmur. The only logical assumption is that we accord the privilege of telling us which buildings are beautiful to the "experts" who created them, much the same way we accept a doctor's diagnosis of a pain in the abdomen as appendicitis. When the doctor diagnoses appendicitis we are easily able to discard our own intuitive diagnosis of "indigestion". Similarly an intuitive reaction of "this is an ugly bleak building" may be changed by an architectural declaration that the same building is an important stylistic milestone. It is as arbiters of taste that architects have great impact upon society. Architectural designs make statements about how architects believe people should be sheltered. It is argued here (and the point is stressed in several other sections as well) that architects do not have contained in their knowledge core a realistic theory of how people need shelter or how people behave in buildings, such as systematic social science studies have gathered. Instead, while architects generally do absorb a smattering of behavioural precepts, they tend to design from an own internal cosmology (Broadbent, 1975) with a clear notion of how people should behave and not of how they do behave.

The interviews with architects proved to be enlightening. When designing for particular categories of people architects tend to design from remarkably deterministic prejudgments. A common example of this

kind of thinking is "Highrise housing cause crime" and "Old people are easily isolated so the obvious solution is to mix senior housing with family housing." For the sociologist the idea that a built space can cause certain human behaviours is difficult to accept and one wonders if senior citizens would indeed prefer to live in juxtaposition with noisy children. These are empirical questions but they seem to be treated as forgone conclusions by some architects.

The following chapter briefly examines the history of western architecture and the development of modern architectural style as we encounter it.

CHAPTER 3

FROM OLD WORLD TO NEW: THE DEVELOPMENT OF
MODERN ARCHITECTURAL STYLESIntroduction

This chapter deals with the development of modern architecture and its various stylistic trends. It is presented as "background" and does not attempt to be definitive. It certainly does not do justice to the rich variety of stylistic sources available to the architect - it merely paints with broad strokes the major benchmarks and attempts to situate architectural styles within general societal patterns. It is purposely written from the perspective of the sociologist and has a sociological bias. As such, it does not treat styles from the aesthetic vantage, as is usual in architectural histories. Instead it discusses architectural styles in terms of the impact on the users of buildings.

Rapoport (1977:16) tells us that

what is commonly called style can be defined as a system of consistent choices based on the rules and culture of a group (whether tribe or profession). Design can then be seen as a choice process.

The sociologist has to have some insight on the "system of consistent choices"

and the variables in play, before meaningful analysis of the professional subculture is undertaken.

Architecture has its own aesthetic, its own traditions, continuity and institutions. It therefore behoves the student to examine the roots of this profession and to sketch its development to the present; in main to gain an understanding of how the profession has related to society and continues to do so. The ideas and beliefs of this group can provide keys to understand their specific contributions to the built environment.

The First Architects

It is unclear when the task of designing built space was first given over to the "expert". Even today the greater percentage of all buildings are in what is styled the "vernacular" meaning constructed by the non-expert. However, the earliest mention of an architect that this researcher could find was in the code of Ur-Nammu, a Sumerian king who reigned about 2100 B.C. A fragment dealing with the laws governing building states that if an architect should contract to build a house and that house should later fall down on the son of the owner, the owner is entitled to claim the son of the architect. Similarly, if a wall should fall on the owner's wife, the architect shall bear the cost of obtaining another (Hamblin, 1973:106). It is interesting that the notion of the architect being accountable for building performance is an early one.

From early on the architect is ideally a generalist. Vitruvius, defining the nature of the architect says:

Let him be educated, skillful with pencil, instructed in geometry, know much history, have followed the philosophers with attention, understand music, have some knowledge of medicine, know the opinions of the jurists, and be acquainted with astronomy and the theory of the heavens (trans. Morgan, 1914; quoted in Broadbent, 1975:4).

There is some evidence that this generalist ideal is still adhered to by the modern architect. MacKinnon (1962a, b, and c) a psychologist who tested three groups of North American architects on "creativity scales" found that the successful architect exhibits a "juggler-like ability"

to combine, reconcile and exercise the diverse skills of businessman, journalist, psychiatrist, educator and psychologist (op cit.:4).

Lipman (1964) confirms that the modern architect is ideally an all rounder, a problem solver. And Broadbent points out that the architect increasingly tends to use social scientific approaches to design whilst not having particular training in social science methodology (Broadbent, 1975).

The tradition of Western architecture is usually traced as stemming from Ancient Greece and Rome and continuing through the Middle Ages to the Renaissance. Art historians tell us that the period known as the Renaissance should also be seen as the period responsible for the start of a tradition of "name architects" such as continues to this day.

While it is undeniably true that the names of the ancient architects have not survived one can still do a great deal of "archeological sociology" in terms of how and for whom ancient architects were occupied. We have, of course, a problem of selective survival. If one considers buildings as artifacts the logical observation is that modest buildings tend to disappear over time and grandiose ventures tend to be cherished

and maintained.

The architectural remains of ancient Greece and Rome tend to be mainly in the realms of public works and/or religion. We can then deduce that the ancient architect had at least two important clients/patrons, namely the state and the church respectively. However, the remains of Pompeii would suggest that the Roman architect most likely also found employment from wealthy Roman citizens vis. intricately planned homes of private individuals.

It is likely that during the mediaeval period private patronage declined somewhat and that the Church and State as principal institutions, tended also to be the principal employers of architects. However, it is highly unlikely that private patronage went into absolute decline, as is strongly suggested by the histories of the period. However, during the mediaeval period there is the first indication of an institution attempting to control the activities of architects. The Roman Catholic Church, especially after the firm establishment of strong monastic orders, attempted at various intervals to establish guidelines for Church architecture and particularly later, under the prolonged threat of protestant schism, attempted to regulate the religious symbolism in Church architecture. However, concomitant with the rise of the Church as an institution, there was also the rise of guilds. The typical European city-state of the Later Middle Ages was dominated by the guilds "in every phase of its commercial and political life.... These were independent associations of bankers and artisan manufacturers. The guilds were self-perpetuating and self-regulating" (Hartt, 1975: 15). In Italy, the guild which governed

architecture was the Arte di Pietra e Legname (guild of the workers in stone and wood). Hartt provides a detailed description of the position of the Italian architect within the guild.

The architect found himself an essential part of a closely knit society, for which he worked on commission. It would hardly have occurred to an architect of the thirteenth or fourteenth century to (work) for any other reason than to satisfy a patron (Op.cit.:16) and Architecture, in the eyes of Italians (of the early Renaissance) was the leading art of the period. New buildings went up everywhere, and old ones were remodeled. New city centers were constructed, and ideal cities -- destined, also, to remain dreams -- at least reached the level of theoretical definition (p.20).

One can draw an analogy and call the guilds "prototypes" of professional associations. The guilds that governed architects in most of the European states were stone worker or "mason's" guilds. They were autonomous in that they were self-policing and self-perpetuating institutions. Entry into guilds was limited and restricted according to demand. A long period of training was the norm. The usual form was initiation into the "mysteries" associated with the guild and a long period of apprenticeship under a skilled craftsman after which the applicant qualified as a journeyman, which gave him the right to own the tools of his trade and also to "journey" from town to town to sell his skill.

When one looks at the guild system in terms of power relations and how they apply to the mediaeval architect one has to note that the power of the guild was essentially restrictive. Entry into the guild was limited from above. However, once in the guild the master mason is free to sell his skill and labour but again, only in ways prescribed and even dictated by the guild. The argument can be made that there is much

similarity between the mediaeval guild and the modern professional association.

The Development of the Architectural Profession in Britain

The following sections of this chapter are directed to the development of the architectural profession in Britain, in part because of the considerable influence of the British system on the structure of the architectural profession in English North America.

Barrington Kaye (1960) traces the development of professionalism in architecture from the guilds through the Office of Works (a kind of State supervised guild). However, he stresses that during the 16th Century a phenomenon of amateur "gentleman" designers became the norm. These gentleman designers, he points out, generally (though not exclusively) were from middle class or upper class origins, were generalists who had made the "grand tour" to France and Italy and they transferred Palladian architectural principles from Europe to Britain.

A further characteristic of eighteenth-century architecture in England was the considerable number of amateur architects. As well as those sons of the upper middle classes who became professional architects, many members of the nobility and gentry designed houses as a hobby, both for themselves and for others (Kaye, 1960:45).

In the United States, Thomas Jefferson and other plantation owners were following the same sort of tradition. It is in the eighteenth century that the notion of architecture as a "gentleman's" profession becomes popular. It is also at this time that there is a power struggle between a group of gentleman architects (not organized into a professional group, though one might refer to it as a special-interest lobby) and the Office of

Works. In the end, the Office of Works was henceforth only concerned with "building standards and performance" and the design function was then firmly in the hands of the gentlemen.

Soon after, another loosely organized lobby started a less successful campaign for specialized architectural training. It is interesting to note that it is the few sons of builders who became architects who clamoured for specialized training while the gentlemen (who naturally had a liberal arts education) resisted this.

One now sees the rise of early architectural societies. The most successful is the Architects' Club founded in 1771.

While the Architects' Club started off as a study association typical of those cited by Carr-Saunders and Wilson as characteristic of the early stages of professionalism, and then rapidly degenerated into little more than an after-dinner gathering there is evidence during its first few years of life of some concern with professional matters (Kaye, 1960: 58-9).

There were a number of architectural societies which flourished for a few years and then disbanded. They shared the same basic concerns: a desire for some standardized training, a recognition that the distinction between architect and builder was only one of degree and therefore a concern to have architects established firmly as arbiters of taste.

It is with the establishment of the Institute of British Architects in 1835 that we find the first firmly entrenched professional association.

Experts from the founding address are interesting:

The Institute of British Architects has been founded for facilitating the acquirement of architectural knowledge, for the promotion of different branches of science connected therewith, and for establishing a uniformity and respectability of practice in the profession.

and

The Honorary Members shall consist of noblemen, who shall contribute a sum at one time of not less than twenty-five guineas, and of gentlemen unconnected with any branch of building as a trade or business, — who shall contribute a like sum (Quoted in Kaye, 1960: 80).

So we see the split between building and design is now institutionalized and legitimized by the charter. It is, one could argue, the first serious attempt at professional control and the intention is clearly to limit entry and to exclude the "ungentlemanly" builder.

Concomitant with the establishment of the Institute several "trade" magazines are established with editorials clamouring for "professionalism" and in 1847 the Architectural Association (or AA) was founded -- the first formal school of Architecture (which incidentally, is still flourishing). The AA from inception was affiliated with the Institute and through the Architectural Association the Institute tried to establish a standardized training programme. This was resisted until the Institute achieved a monopoly on licencing. However, it was still possible (and still is) for an architect to train as a type of "apprentice" under a registered architect. This legacy of the guild system is, however, diminishing rapidly today in most Western societies where architectural professional associations are firmly entrenched and effectively control entry into the profession by prescribing university training as a prerequisite.

Kaye describes the development of the Institute, since become the Royal Institute of British Architects, RIBA, to the present. Notable is an account of the struggle between the Quantity Surveyors and Architects which centred around job descriptions. The Quantity Surveyors lost and

branched off to form their own association.

One question remains, and that is: what is the function of the professional associations, and of the Institute in particular, in Architecture today? Statutory registration has achieved the two main objects of professionalism -- the guarantee of integrity and competence. And as more and more architects exchange their practices for salaried positions, so the need for a professional association to create the conditions necessary for the selling of their services in a free market must disappear. Once full closure of the profession is achieved it is difficult to see what advantage membership of the RIBA will hold out. No doubt the bogey of dispensability ... will continue to incite some to stress the need for professional propaganda. But in these days of experts and specialists, it is very doubtful whether this bogey cannot be effectively laid. And that being done, whether it will become a trade union, bargaining with the Government for higher standard salaries and using its monopoly position to do so, or an association concerned with the maintenance of a traditional code of conduct, or a club ... seems to rest on factors that are not at present predictable (Kaye, 1960:169).

The above is Kaye's closing statement. Twenty years later RIBA is still firmly entrenched. It has effective control of the British architectural profession, and much of the Commonwealth as well. It has expanded its power rather than retrenching. British architects, by and large, resist unionization (Marcuse, 1976) and even though in Britain, as in most other industrialized nations the largest single employer of architects is now the state.

The Twentieth Century

As pointed out earlier, it is necessary to take note of the social conditions under which professionalization takes place. The two world wars have had an undeniable impact on the architectural profession. After World War I, architectural movements such as Bauhaus, Dada and the Russian Constructivists declared to the world that "Art is Dead," and out of these movements the notion of architecture as a social process with social consequences became popular. However, the dichotomy between art and functionalism (in architecture expressed as: form follows function) became much more articulated.

There is sociological theory that suggests that an organized, institutionalized structure such as an entrenched powerful profession rarely acts to its own detriment -- in other words professional institutions are said to be self-perpetuating. It is interesting to note that several architectural movements, such as the Russian Constructivists, have literally ceded their power to the state and in the process were annihilated.

Lipman points out that "... When the social values of such modern pioneers as Gropius and Mies van der Rohe clashed with the prevailing ideology of national socialism in Germany the authorities closed their school of design, the Bauhaus, as early as 1933" (Lipman, 1964: 201). Professionalization, then, does not take place in a vacuum. Societal conditions such as politics and economic conditions clearly do have an impact and have to be taken into account if one desires to have a clear understanding of the process of professionalization. As an aside it may be useful to remark on the obvious: architecture cannot be value free.

The architectural belief system relies heavily on symbolism and architectural symbols are, one could argue, a cultural measuring stick. Architectural critics speak of specific styles in political terms. Every student of architecture knows what is meant by such terms as "Mussolini Civic" and lately a new term "petrodesign" which refers to ornate, very expensive designs executed for clients in the oil-rich Middle East.

The Second World War had a definite impact on the ways in which architects perform their duties. During World War II in Britain (Kaye, 1960; also Doxiadis, 1968) and in the U.S. and Canada, a large proportion of architects were used by the military to form parts of "problem-solving teams".

During the fifties there is a shift to architectural teams and design conglomerates which would typically employ architects, engineers, landscape architects, urban designers et cetera. It was noted earlier that Hughes (1958) suggests that architects resist specialization, preferring the "Renaissance Person" image of being able to perform all architectural duties equally well. Hughes' notion may no longer be appropriate; there is today, one might argue, a definite trend towards specialization by the modern architect who may cut up the architectural pie by specializing for instance in "computer design" or "hospital design" et cetera.

Contemporary Architectural Movements

To some extent, to set oneself the task to bound and define a concept such as "architectural movement" is an exercise in frivolity because few architects claim to be "pure" disciples of one movement or another. Nevertheless architectural movements can and do exist and their artifacts

(buildings), and often what architects have to say about their artifacts, provide the scholar with bases for discussion and comparison.

What follows is a brief overview of the major architectural movements of this century and an evaluation of their social impact.

The Bauhaus

The Bauhaus was the forcing house of modern architecture, its influence in Europe and North America, indeed the entire western world was (is) immense. Walter Gropius founded the Bauhaus School in Weimar, the German capital, in 1919.

It was more than a school; it was a commune, a spiritual movement, a radical approach to art in all its forms, a philosophical center comparable to the Garden of Epicurus (Wolfe, 1981: 10).

One of the inspirational mottoes of Gropius' Bauhaus was the principle of "starting from zero." Purity was glorious, fussy lines or busy designs an emblem of barbarity. "Starting from zero" had an immediate appeal to intellectual Europeans. Germany had been pounded to defeat by the Allied armies and humiliated at Versailles, rife inflation had contributed to economic collapse, the Kaiser was gone, the Social Democrats had taken power in the name of socialism. "Starting from zero" fit the "Zeitgeist" like a glove.

At the Bauhaus several self conscious manifestos were written. The Bauhaus style was derived from certain firm assumptions.

First, the new architecture was being created for the workers. The holiest of all goals: perfect worker housing. Second, the new architecture was to reject all things bourgeois (Wolfe, 1981: 15).

The rejection of bourgeois inputs proved to be close to impossible since most architects in the literal and social sense of the word are bourgeois, however, as Wolfe also points out, the word "bourgeois" came to be used as a pejorative epithet. The very worst criticism was to have a design designated as "bourgeois".

Technology was not bourgeois, indeed in the early twenties the manifestos proclaimed "Art and Technology - a New Unity!" Concrete steel, wood, glass and stucco were uncompromisingly non-bourgeois. Colours were bourgeois. White or beige with here and there a black or grey contrast were non-bourgeois. Architectural theory could be condensed into one word: functionalism. Functionalism was the ultimate of non-bourgeois. Functionalism in architecture had many permutations, the best known being the dictum that "form follows function" meaning that "honest" or non-bourgeois building's design should properly be derived from the function of the building. Factories should look like factories and schools like schools.

Another principle was that of "expressed structure," camouflage of structure was dishonest and bourgeois. The non-bourgeois designer need no longer use walls to support a building, steel and concrete and wooden "structure" does that. Curtain walls of thin skins of glass or stucco became an emblem of non-bourgeois building. The inner structure or "soul" of the building must be exposed and be completely free of decoration. This was purity, this was honest.

The Bauhaus, in the fourteen years of its existence, before it was closed by the Nazis in 1933, had moved three times, had been plagued and threatened by the shortage of funds, hostile officials, and internal feuds.

In fourteen years it had produced less than 500 graduates. Yet, even in its lifetime the Bauhaus was a legend. Now, more than sixty years after its foundation the symbolism of the Bauhaus, its aesthetic and its ideals are still a reality in contemporary architecture.

The school set out, in a resurgence of optimism and idealism after the First World War, to train a generation of architects and designers to accept and anticipate the demands of the twentieth century; and to use all its resources, technical, scientific, intellectual and aesthetic, to create an environment that would satisfy man's spiritual as well as his material needs.... Its foundation ... is a milestone in the history of man's efforts to come to terms with technology; for in spite of its inconsistencies, both ideological and practical, the Bauhaus did more than any other organization, either in the nineteenth or twentieth centuries, to reconcile man and his man-made environment (Naylor, 1968: 7).

The above statement by Naylor is an uncritical acceptance of the architectural judgement of Bauhaus. To the social scientist this issue is less clearcut. Did the act of bringing a new aesthetic to the built environment indeed bring us closer to a conciliation with our environment? Some would answer affirmatively that Bauhaus has given us easily recognizable symbols which we use to sort out some of the conflicting inputs around us. There is reassurance when we see a shape in an urban scape and we know that such a shape contains apartments and another familiar shape contains a factory.

Others would argue that the non-bourgeois aesthetic of Bauhaus seems to rest on arbitrary assumptions that have no firm basis in social reality. How, for instance, was it determined that workers would benefit (indeed prefer) no colour in their housing, that a uniformity of white, grey and beige at the work place and in the housing would provide an "ideal"

environment. This so-called practical aesthetic sometimes gave strange offerings at the altars of the art god. Flat roofs with no eaves were decreed and the decree was strictly enforced. Hence, the legacy of permanently rust-streaked white, beige or grey facades which are monuments to Bauhaus.

Gordon (1980) has pointed out that by providing occupants with "static" or unchangeable environments the architects may be alienating building users from the need to manipulate space and to modify or "personalize" environments. He has speculated that some minimal form of 'design' may be one of the basic human needs.

Le Corbusier's Version of Purism

Perhaps the most eloquent, the most controversial, the most self consciously rational and certainly the most influential figure in European architectural circles of the mid-twenties was a Swiss who lived and worked in Paris. Starting from zero, he discarded his Swiss past and took a stark and startling name: Le Corbusier, or for the inner circle, simply Corbu!

Le Corbusier spent a few months at the Bauhaus and also travelled around in Europe making contact with the most prominent non-bourgeois architectural groups. He very soon became a spokesman, an intellectual leader who theorized (and was well received) for congresses, conferences, symposia and panel discussion. Corbu would lead architecture through the Machine Age: indeed, he designed not houses, but "machines for living".

Le Corbusier's Vers Une Architecture soon became a holy book, its decrees and commandments fervently kept by the young acolytes. Curiously,

Corbu said much and built little. It could be that prospective clients were taken aback by the high principled unambiguous statements of superiority even deity of the architectural compound.

Henceforth, anyone who wishes to bathe in that divine glow must come here, inside the compound and accept the forms we have created. No alterations or special orders and no loud talk from the client permitted (quoted in Wolfe, 1981:30).

Corbu's purism is derived from a logic that developed out of the "starting from zero" Bauhaus ideology. Corbu started from Corbu and ended with Corbu. His ideas about how people should encounter the Machine Age were imposed by Corbu on the user of his buildings. He had few private clients, a fact which fails to astonish, but the Europe of his time was experimenting with new socialist governments who were determined to make fresh attempts at social justice. Hence, the German Social Democratic government gave Le Corbusier one of his first commissions: housing for the poor. In 1927 Mies van der Rohe co-ordinated the Weissenhof Werkbund project, a worker-housing exhibition. He invited Corbu from France, the Stams from Holland, Victor Bourgeois from Belgium, and eleven other Germans including Gropius, the Taut brothers and Peter Behrens to join in the production. Upon completion toute le monde were astonished at the amazing harmony (even sameness) of the work of so many architects from four different countries. Voila! The International Style was born.

It is somewhat of a cliché to observe that the central business districts of modern industrial cities, be it Indianapolis or Osaka, Nairobi or Lima, tend to be indistinguishable at first glance. The international style, by treating Corbu's Vers Une Architecture as holy revelation, and

by swaying not a millimetre from its rigorous strictures, has given us interchangeable cities.

Radiant City, Corbu's dream of an urban place designed to all but eliminate pedestrian movement and instead accomodate motor vehicles and conveyor belts for people was, (some would say fortunately), never built. It, incidentally, called for the destruction of much of monumental Paris as we know it, in order to "rationalize" that city.

If housing for workers was the architectural ideal of the times, and there is much evidence that housing was the most desirable building type of the decades between the wars, then it serves our purpose to look at those elements which Le Corbusier sought to give prominence in his designs for workers.

The epitomy of non-bourgeois as transmuted by Corbu turned out to have mandatory flat roofs, no cornices, sheer curtain walls, no window architraves, no raised lintels, no capitals, no pediments, no colours: white, beige, grey and black. Interiors had pure white pristine rooms freed of impedimenta like casings, cornices, mouldings, pillars. They had open floor plans. Privacy was clearly bourgeois. Wallpaper and drapes, rugs, ornaments ... all were banished to the outer-Mongolia of the barbarous bourgeoisie. Radiators were left bare and thus honest. Furniture was made of honest materials in natural colours - leather, tubed steel, canvas and bentwood. Carpets were dispensed with. Grey or black linoleum was practical (from Wolfe, 1981: 31-32).

The workers who had to live in Corbu's housing projects tended to protest rather vehemently. At Pessac they tried valiantly to add some

forbidden colour. Le Corbusier was not surprized or discouraged, he had remarked many times that workers had to be re-educated to comprehend the new aesthetic of the Radiant City of the Machine Age.

In matters of taste, the architects acted as the workers' cultural benefactors. There was no use consulting them directly, since, as Gropius had pointed out, they were as yet 'intellectually undeveloped' (Wolfe, 1981:32).

In other words, under socialism the worker becomes the ideal client on which the architect is encouraged to practice "social consciousness" (another buzz word to come out of the between-the-wars decades) but the clients should be mute whilst the architect, the arbiter of aesthetic, and the intellectual theorist would arrange their lives for them.

Workers were arbitrarily liberated from high ceilings and wide hallways and the very bourgeois decoration of any kind. Workers stubbornly resisted aesthetic reeducation. It should have been discouraging but the Movement remained steadfastly idealistic and the rules of purism remained axiomatic.

The International Style

Thus far, this narrative has had an European focus. Shortly before and during World War II European architects tended to migrate to the United States. There were many of them, Gropius, Breuer, Albers, Moholy-Nagy and Mies van der Rohe amongst others, and their impact on North American architecture was immediate and profound.

Gropius became head of the school of architecture at Harvard University. Mies accepted the position of dean of architecture at the Armour Institute in

Chicago. When the Armour Institute merged with the Lewis Institute to become the Illinois Institute of Technology, Mies received the commission to design the campus. The twenty one large buildings designed as they were in the middle of the Great Depression, was one of the most prominent commissions of the decade.

American architects, such as Philip Johnson felt "unpolished" without contact with the well-known Europeans. Johnson, at age thirty-four, enrolled at Harvard to study under Gropius.

The teaching of architecture at Harvard was transformed overnight. Everyone started from zero. Everyone was now taught in the fundamentals of the International Style. All architecture became nonbourgeois architecture... The old Beaux-Arts traditions became heresy, and so did the legacy of Frank Lloyd Wright ... (Wolfe, 1981:50).

This period, directly prior to and during the second World War marks a shift away from individualism towards a team approach to design. Several factors played a role. Many architects joined the armed forces and as members of military problem-solving teams learned methods of "brain storming" and team approaches to problems. Another factor was the communal philosophies and socialist thought which were transferred from the European schools such as the Bauhaus which stressed, in Gropius' words:

The fundamental pedagogical mistake of the academy arose from its preoccupation with the idea of individual genius (in Wolfe, 1981:56).

Gropius and Mies became proponents of the "team effort". Gropius called his firm "The Architects Collaborative" to underscore the point.

The Chicago School and Frank Lloyd Wright

Walter Gropius' acceptance of the Chair of Architecture at Harvard in 1937 is generally taken in architectural histories to mark the emancipation of American architectural education from the Beaux-Arts tradition. While it is true that the insurgence of eminent Bauhäusler such as Mies van der Rohe and Gropius brought a new inspiration from Europe to America, it is sometimes not recognized that America of the twenties and thirties had a vital architectural tradition of its own.

No discussion of the roots of the Modern Movement would be complete if the influence of Louis Sullivan and the Chicago school is omitted. In Chicago, around the turn of the century we find the first use of "skyscraper construction", the first scientifically planned foundations for high buildings, the first systemized type of high office block and "the development of aesthetic programmes to suit the new techniques" (Furieux Jordan, 1969:307). The architects primarily associated with the Chicago school are William Le Baron Jenney, William Holabird and Martin Roche, Daniel Burnham and John Wellborn Root, Dankmar Adler and Louis Sullivan - and in the space of twenty years they laid the foundations of modern commercial architecture.

Why did this development happen in Chicago? Several factors contributed to make Chicago the springboard of modern urban highrise building. It had emerged as the capital of the middle west by virtue of its situation of dominating the Great Lakes (crucial for the shipping of grain and other agricultural products). Chicago was the key to the new

east-west commercial axis of New York/San Francisco, as opposed to the older north-south cultural axis of Boston/New Orleans. Another factor was the great fire of 1871 which (like the earlier Great Fire in London) proved that architects are inspired by inner city ruins. Finally, there was genius, in the person of Louis Sullivan. Sullivan was a great theoretician of architecture as well as a great architect. He believed that architecture must be democratic; that architects are as important to a democracy as politicians are. Buildings should serve emotional as well as physical needs (Duncan, 1965:419f). Sullivan's theories of architecture are of particular interest to the social scientist because he believed that art and therefore architecture must become a value in democratic society that could stand beside business, politics, science and religion in shaping culture. The study of architecture was the study of society because what happened in architecture determined what happened in society (Duncan, 1965:587).

In a democratic society, Sullivan argued, form must follow function, but functions must be given proper form to become social functions.

On the one hand, Sullivan taught, the social meanings of architectural forms are their 'function' or use as social stages; on the other, they are 'functions' of architectural thought, which is both artistic and scientific. Architectural forms have both existential and ideational meaning. These two meanings represent the difference between the use and the creation of a form... The use of a building determines its form, but architecture gives spatial and temporal form to our environment, and in doing this it orders social experience (Duncan, 1965:588).

This philosophy of Sullivan and the Chicago School and Sullivan's

pupil, Frank Lloyd Wright, of linking architecture and society, albeit in a deterministic way, was profoundly different from the "starting from zero" - architecture of the Bauhausler.

Frank Lloyd Wright, a key figure in the modern movement had a design career of nearly seventy years. He was born in 1867 and died in 1959. He was influenced by Sullivan's philosophy of linking building and society and developed his own theory of "organic design". Frank Lloyd Wright was the creator of the "prairie house" of which he had to say

We of the middle west are living on the prairie. The prairie has a beauty of its own and we should recognize and accentuate this natural beauty, its quiet level. Hence, gently sloping roofs, low proportions, quiet sky lines, suppressed heavy-set chimneys and sheltering overhangs, low terraces and out-reaching walls sequestering private gardens (cited in Richards, 1977: 351).

Wright proclaimed that the "space within" is the reality of architecture. A building should have as few rooms as needed to meet the requirements: openings should be integrated with the structure and form, as should lighting, furniture, ornament and any appliances. The building should grow easily from the site: colours should be warm optimistic earth colours and autumn tones. The nature of the materials should be revealed for "they are all by nature friendly and beautiful" (Richards, 1977: 350-352).

Frank Lloyd Wright's designs and theories proved to be influential to other architects. Mies van der Rohe said in 1940 that "the dynamic impulse emanating from his work invigorated a whole generation" (quoted in Richards, 1977:351).

The Sixties and Seventies

When Talbot Hamlin in 1947 wrote about something he called a "post-modern house" he was looking forward to a happier day when modernism would be over. As Drexler (1979:15) so aptly put it: the postmodern he anticipated was a return to the premodern.

The idea of a postmodern architecture raises the question of what is, or was, properly modern. If orthodox modernism definitionally entailed abstraction, reduction and fidelity to structure in the service of social revolution, then its dominance and hiatus was reached before World War II.

Some critics (Wolfe, 1981) would negate the idea of post-modern altogether, arguing (with some grounds) that the so-called "post modern" style adheres to the box and the grid too rigorously to be separated from "modern architecture".

Some of these distinctions seem confusing to the non-architect who may be stylistically naive. It is, however, possible to sort postwar building into broad groupings.

Interpretations of Cubism and Expressionism

In this style architecture is seen primarily as the invention of sculptural form. Prior to World War II, modern architecture was largely concerned with "planar effects of volume and transparency" (Drexler, 1979:10). Using smooth surfaces of white stucco and large areas of glass, it created an image that is characteristically light, airy (and in the architect's mind) cheerful. After the thirties this idiom was felt to be too limited and its range was broadened by the introduction of natural materials (like

the stone wall in Le Corbusier's Pavillon Suisse) and by effects of rusticity contrasted with new technologically refined materials.

Postwar preoccupations were with mass, weight, rough textures, and deliberately crude workmanship. Drexler suggests that this was the response to an "age of anxiety" characterized by social turmoil. Brutalism, as the style has been called, is aggressive form not necessarily dependent on exposed concrete. North American versions are relatively pacific and tend to the "impersonal smoothness of 'minimal' or 'primary form' sculptural styles which are less associated with Cubism and tend to be described as examples of Expressionism; the forms "express" an emotional content independent of the "objective" facts of structure and function.

Another alternative to Cubism is the curvilinear style in which buildings resemble the forms of living organisms rather than geometric masses. Most architects who design "organically" have sought maximum continuity of surface and space. This goal is incompatible with most building bye-law requirements and, as might be expected, its pursuit is usually confined to houses. Nevertheless, the use of biologically organic form in architecture is a peculiarly modern development and is sustained by its own theory and holistic philosophy. Concerned with the psychological and social effects of enclosure, its proponents have argued for a genuinely radical break with all forms of right-angled, cellular composition, which they see as inherently oppressive.

Structuralist Design

Structuralist design in its purest form deals with what Mies van der Rohe called "skin and bones" architecture: a steel or concrete skeleton

structure covered by a glass or metal skin.

Although Mies' own projects for glass skyscrapers in the twenties emphasized the skin and showed no structure at all, his North-American work increasingly concentrated on the bones until even the skin had its own external armature of metal mullions (Drexler, 1979: 11).

Some architects at the beginning of the sixties sought to abstract the skeletal structure still further by modifying its proportions and eliminating as much detail as possible. Others, perhaps in response to the sculptural Brutalist mode, have given to the skeletal structure itself an expressive plastic complexity.

These approaches have in common a reliance on some aspect of structure to communicate visual information about a building, other than the nature of its use.

The observer who looks at the architectural artifacts of the seventies and early eighties notices that the strict adherence to the grid and box are beginning to wane. Philip Johnson uses a neoclassical pediment on a starkly modern skyscraper and James Stirling talks about "classic neomodern" (Drexler, 1979: 16). The trend seems to be away from the bleakness of uncompromising geometric modernity to more decoration, more contrasts, more diversity. But it is possibly too early to tell... as James Marston Fitch would have it:

Despite the presence of many able and well-trained people in the field, the literature of architectural theory and criticism has never stood in a more confused and less productive state than it does today (James Marston Fitch: AR, July, 1982: 114).

Conclusion

It has been necessary to run through the major stylistic developments

in architecture this century in order to get a grasp on the milieu from which the architect designs. The foregoing is not intended as an exhaustive review, rather it is a brief run down of major architectural styles and some of the leading proponents or "master builders" as Blake (1976) would have it.

This century has been characterized as an "age of uncertainty" (by John Kenneth Galbraith) and it is not surprising that architectural movements have reflected some of the social turmoil which have characterized the twentieth century.

The question of where to go next remains to be answered. Judging by the editorials in architectural magazines and curricula of design schools, the profession takes into the eighties a heightened awareness of the third world. There is concern with energy efficient design, design for labour intensive building, design for local materials. Further, there seems to be a realization that buildings have both intended and unintended effects on people, and a desire to study these (Broadbent, 1973: Introduction).

CHAPTER 4

EXPERTISE, SUCCESS AND THE ART-TECHNOLOGY
CONTROVERSY IN ARCHITECTURE

"The marriage of art and technology, that's
what makes this job exciting."

Architect recorded by Salaman
1974.

Introduction

This chapter seeks to explain from which sources prestige is derived both within and without the profession. It examines the architectural success system with relation to two types of expertise: technological and artistic. Both kinds of expertise are briefly situated in the craft-profession model as proposed by Dubin (1976).

Expertise is linked to control of scarce goods, here the ability of the architectural profession to protect its range of activities from usurpation by other professions and/or occupations.

This portion of the thesis was delivered in a somewhat abridged form at the Canadian Sociology and Anthropology Association Meetings held in Ottawa, Summer 1982, under the title "Art and Technology in the Architectural Profession".

Central to this discussion is the quest for understanding just how a particular group, here the architectural profession, incorporates technology as a tool to effect control over scarce goods. Professional autonomy, or to what degree this profession is self-policing and self-regulating, has been related to power and control of expertise (Johnson, 1972; Larson, 1977).

Technology and Architectural Expertise

The discipline of the researcher seems to have much impact on how practitioners of architecture are seen. For example, (as Broadbent, 1975:1, has documented) most psychologists have studied architects in terms of creativity, whereas, sociologists such as Kaye tend to concentrate on professionalization. In the architectural context "creative" generally suggests "artistic."

Broadbent describes the "artistic" architect as "looking for novel and statistically infrequent responses at the level of the whole building" and then he immediately qualifies this statement by noting that "many highly skilled professionals would be profoundly disturbed at the thought that such a response has any place in architectural design today" (Broadbent, 1975:2).

Broadbent's point illustrates the problematic underlying this enquiry. There is uncertainty within and without the profession where to place architecture -- whether it should be seen as belonging firmly in the realm of art or whether it has over time become imbued with some aspects of "science." After all, the "experts" in the field seem to be of divided opinion. Michelangelo is purported to have claimed that Architecture is the greatest of the arts, whereas Le Corbusier called for the establishment of standards as the basis of design; these standards to be determined by "logical analysis and precise study." Rationality, not creativity, should be the principal descriptor (Broadbent, 1975: 2-3).

In another chapter the rise of the architectural profession is sketched. Reference is made to shift in approach from one person taking care of all aspects of a building project (the Renaissance Person approach) to what is today more common - a team of architects working together on a project, each contributing of his/her specific expertise. In the chapter of this thesis dealing with the work organizations of architecture there is a discussion of the increasing numbers of architects who now work in a "bureaucratic setting", that is, they increasingly work as employees in large organizations, often where the primary purpose of the organization is not architectural.

Many writers have established as a defining characteristic of professional work that it involves expertise, namely mastery over a body of knowledge and a set of techniques (Greenwood, 1957; Gross, 1958; Parsons, 1939; for a summary, see Hall, 1969: 72-78; Pavalko, 1971: 18-20). While many writers concur on the importance of expertise as defining characteristic of professional work, the essential features of the concept are not

clarified. One problem is that the professional model is "equivocal as to whether expertise involves intensive specialization in one section of the core field or broad and general knowledge that integrates diverse sectors" (Blau, 1979: 105, my emphasis). Some suggest that specialization is the basis of professional work because it promotes superior performance (MacIver, 1955). Others, however, contend that professional competence depends more on general knowledge and skills, because client service requires the broad approach of generalists, not that of narrow specialists (Marshall, 1962). It cannot be denied that one of the essential elements of a community of professionals is that its members have in common a body of knowledge and an orientation to work, and this shared core of the profession would be undermined by too much specialization (Goode, 1957).

Blau identifies as a distinguishing feature of architecture "that creative design skills and charismatic authority are closely linked" (Blau, 1979: 104) and then shows that authority is of course most strongly linked to formal position but that other factors affect power also. In short, her research indicates that where general knowledge of the professional core increases manager's power, it is knowledge of peripheral areas, such as fields of engineering, that increases the power of salaried professionals (designers and staff architects). This indicates that the source of power of what she terms "lower participants" in the professional firm rests largely on their ability to control areas that are highly ambiguous or uncertain for most architects (Blau, 1979: 103-123).

It can be argued that if Blau is correct in identifying such a link between specific expertise in the periphery of the core of knowledge or

even expertise outside of the core and relative power within the firm of salaried architects, then one could expect a trend of young architects claiming a specific specialized field of expertise as their own. There are two major ways in which an architect can do this. The most common is by gaining experience in the design and execution of a particular building-type, for example, an architect can spend a lifetime designing primarily hospitals or airports. A building such as a hospital or airport requires sophisticated technical knowledge, typically not covered in the generalist approach of architectural training, but is normally contained in the periphery. A second way for the architect to claim a particular area of expertise is to go outside of the profession to a related profession or field and acquire additional skills to add to the generalist architectural skills already achieved. One might hypothesize that this kind of "external" claiming of expertise is a relatively recent phenomenon. Greenwald (1978) attributes similar actions in other professions to a general tightening of the ship under economic conditions of recession; but unfortunately does not provide us with an architectural example.

External areas where architects can, and do, claim a reputation of expertise for themselves are for instance: structural engineering, landscape planning, urban planning, systems analysis and more and more architects are entering the field of what is called "Computer Assisted Design". Architects are found in both the hard- and software side of this area.

It is interesting to note that architects justify these incursions into other professions or hybrid-professions (such as Computer Assisted Design) by claiming that the increasing sophistication of structures,

systems and materials force them to obtain specific technical skills. Others may, however, speculate that extra skills which delineate expertise may make the architect more marketable and thus positively influence career chances in a declining market. The writer is inclined to hypothesize that claimed external areas of expertise are likely to fall at the "technological" rather than at the "artistic" end of the architectural spectrum.

Creativity and Expertise

As mentioned earlier, most of the studies dealing with creativity in the architectural profession tend to have been executed by psychologists. Creativity in architecture is linked with "art." Broadbent documents the findings of several psychological studies of architects, notably those of MacKinnon (1962) and Abercrombie (1965). (For a summary see Broadbent, 1973:1-24.) The conclusions in these studies vary in the details but there is broad consensus that architects are 'alert, artistic, intelligent and responsible' and that the architect as a norm is able "to combine, reconcile and exercise the diverse skills of businessman, journalist, psychiatrist, educator, and psychologist" (quoted in Broadbent, 1973:4).

These studies seem to confirm the generalist ideology which is very strongly held in the profession. Blau's 1979 findings indicate that it is the "lower participants" or salaried architects who in general tend to be young and still in the process of establishing their careers, who tend to veer from the generalist model and choose a particular field to concentrate on in order to attain a reputation for expertise and thus become more marketable.

It would seem that individual architects who achieve fame, the so-called star architects of whom Arthur Erickson and Peter Rose are current Canadian examples, do so on the basis of creating buildings which in the eyes of other architects are judged as "works of art." Architecture is similar to other professions (for instance scientists) in that the practitioner's work is judged by peers. For the architect achieving renown typically takes the form of having work published in one or more of the professional journals and/or winning a prize, and thus recognition, in a design competition.

The process of getting work published in a magazine is theoretically egalitarian and editors invite any architect to submit plans and photographs to the magazine's jury which is always made up out of several architects. In practice, entry to being published is rather more closed. From 1956 through 1980, Architectural Record, a major professional magazine, in their yearly feature "Record Houses" published 514 houses by 333 architects (AR, August 1980:13). It would seem that the likelihood of having work published in a magazine increases once the breakthrough has been made. The editor of AR defends the choices of the jury as follows:

We do not publish the architect because he or she is 'in fashion.' We publish architects because we think their work has idea content that serves the reader. Some architects' work appears often in RECORD not because they are in fashion, but because in our opinion they are very good at their work. (AR, August, 1980, Editorial, my emphasis.)

One can infer from the above statement, that selection of architectural work for publication seems to be organized particularistically - the sociologist cannot fail to remark that the editor says "in our opinion they are very good at their work" and not that their work is very good.

The conditions for entry into publication of work would be more open if work could be entered "blind", but this may not be possible realistically because an architects' style may be easily distinguishable even if the drawings are not signed; just as unsigned paintings by Van Gogh are easily identified because of characteristic colouration and brush strokes.

In the same editorial the criteria by which a submission is judged are spelled out. Several technical aspects such as location on the site, energy considerations and the like are mentioned but it is abundantly clear that the major criterion is aesthetic. The editor calls time and again for "creative" uses of materials, referents, circulation, et cetera.

The other traditional avenue to recognition is the winning of architectural competitions and awards. Competitions are typically open to all and it would seem as if the "from rags to riches" ideology does hold up to a certain extent in design competitions. While it remains true that many already well-known architects tend to do well at competitions it does happen fairly often that a completely unknown "dark horse" wins a major competition and so achieves instant fame as happened in the much publicized case of the design for the Sydney Opera House, where an unknown student of architecture won the award for his interpretation of a building in terms of yachts with billowing sails given the backdrop of Sydney Harbour. This "solution" was almost unbuildably artistic - in fact, the design had to be modified numerous times in order to become technically possible.

Architectural awards are almost always given to star architects who have already "made" it. One of the highest accolades in architecture today is the Pritzker Award, one could almost say that it is architecture's

Nobel Prize. The award, which comprises of a cheque for \$100,000.00 , and a cast of a Henry Moore sculpture (cast especially for the prize) was given to James Stirling in 1981. One is reminded of R.K.Merton's discussion of the "Matthew Effect" (Merton, 1968). Mr Stirling was the 1980 recipient of the Royal Gold Medal for Architecture, presented by the Royal Institute of British Architects (the other Big Prize). Mr Stirling's current commissions tend to confirm his position as the leading architect. Among his recent projects are university buildings, for Harvard, Columbia and Rice. He is also working on the new Turner Museum at London's Tate Gallery. The writer found several recent articles reviewing James Stirling's life work in various architectural magazines. He is seen preeminently as a "great designer," "a mature leader of world architecture," "a visionary" and "extraordinarily original." His technical competence which is never denied is, however, also never highlighted.

Further evidence that the winning of architectural competitions may to a large extent be predetermined is found in the review of the recent patronage scandal in Canada. In brief, a competition was called for architects to submit designs for the new Canadian embassy in Washington - a prestigious building on a prominent site. Many architects responded. A shortlist of five designs was devised. After deliberation the competition jury chose the design they deemed most suitable and made a recommendation to the Prime Minister. The Prime Minister disregarded the recommendation and awarded the contract to his friend Arthur Erickson. There was hue and cry. The angry response of the media and other architects may have damaged Erickson's reputation, but judging by the

recent books on his work and a television retrospective, one can safely assume that he has by and large weathered the storm.

Art and Technology in Terms of the Craft-Profession Model

Attachment to work through a craft or a profession focuses attention on the performance characteristics of an occupation (Dubin, 1976). Where task behaviours are distinctive and based on an extensive body of knowledge, often secured through formal education or apprenticeship (both forms survive in architecture although apprenticeship is on the decline) this combination of factors may provide the basis for attachment to a craft or a profession (Dibble, 1962). One hypothesis begging further investigation is that the congerie of task behaviours and knowledge is carried with the individual regardless of where the occupation is practiced so that attachment to the craft-profession is likely to take precedence over attachment to a particular work organization. This researcher proposes to test this at a later date using a sample of architects who are employed in a governmental organization structure. It comes to mind that if Blau's identification of the power source of "lower participants" in the profession is correct, then it is likely that the attachment to the generalist architectural core of knowledge, carrying with it the "creative/artistic" ideology, will override the attachment to the "new" specialist knowledge lying on the periphery or even outside of the core.

Technology and Architecture

Some would say that architecture is the art of making engineering pretty. Certainly architects have from early on eagerly incorporated advances in engineering into their designs. One has to remember that there has not always been such a finely drawn boundary between architecture of the Quattrocento, for example Michelangelo Buonarrotti or Leonardo da Vinci, were also engineers and artists and men of letters! Ideally the architect is still supposedly a "Renaissance Person," having a broad knowledge of everything pertaining to the field. Structural and mechanical knowledge has, however, increased exponentially since the days of Michelangelo and even the British gentleman architects who dabbled in building as a hobby.

Lately there is a real separation between the disciplines of structural, mechanical and electrical engineering and architecture, each having its own body of knowledge and its own applications. However, to some extent there is overlap with architecture and each of these fields because the artifact of architecture, the built form, incorporates structural theory in practice, mechanical and electrical systems. Not surprisingly, there frequently is some strain when the four concerned professional associations battle for autonomy over domain.

The general rule of thumb is that the architect should know enough about structures, mechanical and electrical systems to be able to supervise their incorporation into a design. Generally, the use of engineering consultants is encouraged. In practice, whether an engineer is called in often depends on how sophisticated the project is. If the architect is

confident that he/she (but more likely he) can execute it without engineering inputs, chances are that he/she will.

Developments in the fields of civil, mechanical and electrical engineering have had an immeasurable impact on architecture. One thinks of the megabuildings which are now becoming commonplace. Structural theory provided the knowledge and technology for steel framing and spanning which allowed for higher buildings. Mechanical and electrical engineering devised models by which buildings could be made airtight. Electrical engineering came up with air conditioning systems, and voila! the architect could now ignore the impact of climate. From industry came the concept of curtain walls (meaning not load bearing). Put them all together in various combinations and you have the skyscraper which has become the architectural symbol for central business districts all over the world.

At times, architecture has worn its incursions into "new" technologies on its sleeve. The so-called Modern Movement borrowed its aesthetic from 19th century engineering. M. Eiffel's steel constructions needed architecture to turn them into "art". For some time buildings with exposed structures and systems were deemed to be more "honest". (The building of the School of Architecture at Carleton University has its electrical and other systems exposed, ostensibly so that students can learn this honesty. Unfortunately, the exposed air circulating system is so noisy that teaching is almost impossible unless it is switched off. Some would prefer dishonest comfort!)

Some technologies are foisted on architecture and the practitioner has very little choice but to incorporate them. To name one, the theory

of fire prevention (first developed by insurance companies) which lead to the testing of building materials to determine the fire ratings, has as a consequence the incorporation of such theory as building standards into building codes. Most western industrialized nations have adopted building codes as measures to ensure a safe environment. The architect who designs for fire safety (and who is required to do so by law) has reduced options with regards to materials and often spaces.

Conclusion

The architect quoted by Salaman who spoke of architecture as a marriage of art and technology may in fact have over optimistically alluded to an uneasy union.

This brief investigation has shown that whereas, architecture contains within it elements of both creativity and technical ability which tend to be incorporated in the general core of knowledge for the profession, there tends to be a ruling ideology which places technical ability in a subordinate position to creative and/or aesthetic considerations.

Blau (1979) has shown that "lower participants" or salaried architects obtain expertise outside of or peripheral to the core of knowledge in order to positively increase their career marketability. Greenwald (1978) has shown that other professions tend to claim as their own areas of knowledge which properly belong in a different domain when the pressure of economic conditions of recession creates professional insecurity. The conjecture here is that there is no social reason why architecture should act differently from the other established professions in this respect. This is further extended to a yet to be tested hypothesis that architectural

practitioners are likely to extend their knowledge at the "technological" side of the spectrum, in part because, as is shown here, entry into the creative/artistic reward and esteem system tends to be limited from above and even particularistic rather than universalistically organized. A further characteristic of the creative end of the architectural continuum is that creativity seems to be linked with charismatic authority as well as formal position within the organization (Blau, 1979).

The previous chapter dealt with style. This chapter has shown how a particular aesthetic can be linked with success and also how in a contracting market, architects can claim "external" expertise which may be outside the knowledge core in order to become more "marketable". Creativity is the highest value. The following chapter looks at how this learned creativity affects architects in the different organizations where they work.

CHAPTER 5

ARCHITECTS AND WORK ORGANIZATION(S):
THE CONCEPT OF VALUE-RATIONALITYIntroduction

This chapter deals with ways of architectural organization in the work setting. It specifies six different modes of organization of architects. It argues that architectural work organizations should properly be described in dynamic rather than static terms, that organizational forms should be related to internal as well as and importantly external environmental characteristics. It is further contended that the student gains from objectifying each organizational form; rather than treating one or another form as a pathological case.

The previous chapters described how important innovation in terms of creative design is for this group. This chapter hopes to link creativity with particular modes of organization. Although more and more architects now tend to work as employee-professionals in large differentiated organizations, this type of career seems not to be valued very highly within the profession. This discussion points to some reasons for this attitude and specifies the concept of "value-rationality" as a possible key to understanding the position of architects as employee-professionals.

The notion that professionals experience conflict within the bureaucratic mode of organization has almost become a cliché (Benson, 1974; Sorenson and Sorenson, 1974). Like most clichés it contains some kernels of truth. While it is undeniable that professionals frequently are faced with a dilemma of divided loyalties when employed in rational organizations, it is the writer's belief that the concept of value-rationality as developed by Satow (1975) may cast a new light on the problem.

It is (correctly) assumed that commencing an academic inquiry with an anecdote is at minimum unscholarly and at worst naive. Knowing this risk, it nevertheless seems appropriate to give a brief account of the frustrating dilemma which daily confronts an architect of the writer's acquaintance. This architect is employed by a municipality in its architectural division and has worked there for about five years. Let him tell his own story.

It used to be better when we kept track of our own work and we divided it up ourselves. Now we have Administration looking over our shoulders all the time... They want to develop 'averages'. They want to know what the average time is you spend on one sheet. This is impossible. I mean, you might be inspired one day and whip off a lovely thing in an hour. Or, you might be sluggish and spend three days on and off on the same thing. They're mad those Administration people you can't put numbers on creativity. (Ottawa municipal architect, 1980. Interviewed by the writer)

The architect (above) is clearly not happy about the constraints of "Administration" who try to "put numbers on creativity" and one can fruitfully imagine that the administrative viewpoint might not appreciate a range of one hour to three days for the performance of what, given the context, must be seen as a routine task.

For a number of reasons the architect's lament is particularly apt. He has described two cosmologies in headlong conflict. The rational bureaucratic mode of "administration" as opposed to the "creative" world view of the architect. Are these cosmologies really polar opposites?

This chapter attempts to explore the position of architects who work in complex organizations. A complex organization may be a government department, a large diversified architectural firm or a large corporate concern which employs architects but when the primary raison d'être is not architectural (for instance Rothman's Corporation of Canada is primarily concerned with the marketing of tobacco products but it employs its own architects).

Review of Some Studies

The position architect is widely recognized as embodying four distinct roles: artist, technician, businessman and professional (Broadbent, 1975; Blau, 1976). It is logical to assume that for the architect who works in a bureaucratic setting, "bureaucrat" needs to be substituted for "businessman".

A basis for comparison is between architects and other professionals who work in organizations and for whom achievement also primarily depends on unique and creative contributions rather than technical competence. Considerable research has been done on the organizational context of such professionals (commercial artists, Griff, 1968) (scientists, Swatez, 1966; Barber, 1962) (research engineers, Perrucci and Gerstl, 1969) (engineers, McFarlane, 1961). ~~But~~ the chief focus has been the dilemma faced by professionals who work in bureaucratic organizations with a nonprofessional management (Prandy, 1965). Blau points out that "this focus has led to the as yet untested assumptions that autonomous professional organizations are less bureaucratic than organizations that employ professionals, and that within professional organizations, bureaucratic characteristics -

such as widespread rules and procedures, formalized work requirements, and narrow specialization -- hinder the work of the professional staff" (Blau, 1976: 111-112).

An opposite view is also quite common, and in the architectural context can be stated that not only are the resources of large firms advantageous for successful design work, but so is the formal structure that size promotes. Hughes (1963) takes this position and argues that this is the case because it is within large, complicated organizations that professionals have most freedom and most opportunity to specialize. Hughes weakens this argument in the architectural case by mentioning that among professionals architects are more likely to resist specialization.

Blau (1976) set out to test which of these two opposing views best fit social reality. In a study of 153 Manhattan architectural firms and the architects who work in them, she examined these two hypotheses with regard to the influence of bureaucratic characteristics on quality of design. She used three indicators of bureaucratic complexity: number of hierarchical levels, number of major sub-units, and diversity of services. As an indicator of formalization, use of personnel regulations was employed. The indicator for design quality was "receipt of architectural awards".

Blau's findings are not clearcut and run somewhat counter to organizational intuition. She reports that:

Large firms have better chances of winning awards unless small firms have bureaucratic characteristics usually found only in large ones, in which case their chances are just as good as those in large firms. And... these very characteristics do not increase the chances of large firms, for whom it is easier to achieve them (Blau, 1976:121).

One might successfully challenge Blau's use of indicators. Elsewhere, it was argued that the architectural award system is not egalitarian and that entry is to a marked extent limited from above. The researcher cannot rely on only one indicator for architectural success. Peer evaluation is in architecture, as in all other professions, the single most important internal measure of success. Reputational expertise is measurable. It is a pity that Blau's study of Manhattan architects refrains from asking architects to evaluate other architects in terms of such internal characteristics as: design ability, technical expertise, business acumen, even personal liking.

Such objections are, however, to some extent wishful thinking. It strikes the student that the premise underlying this study may be mistaken. Blau studied architects in complex organizations from the philosophical vantage that a) architects are somewhat arbitrarily found in either small, medium sized or large firms and b) that style of organization is determined largely by size of operation and c) that norms of formal rationality prevail.

It is important not to neglect how architects feel about themselves. It has been widely noted that there is such a thing as a professional community, that a group bounded by membership to a profession has its own cosmology, its own culture (See Goode, 1957; Hall, 1969:81-91; Parsons, 1939:457-467). Valuable insights might be gained by examining organizational forms that are valued by architects and contrasting them with organizational forms which are not esteemed within the profession.

McFarlane (1962:251) has noted that chartered engineers tend to value as the greatest chance for a successful career, entry into the ranks of salaried professionals, or a career as employee-professional. The preliminary evidence seems to be that architects tend to value the "older

mode", that of, self-employed professional more than a career as employee-professional. Those architects who were interviewed by the writer overridingly had a career in private practice as highest ambition.

Different Types of Organizations in the Architectural Profession

It is necessary to briefly situate this discussion within the history of the development of the profession. In another chapter the development "from master mason to design team" is examined. It was determined that an adherence to traditional organization following the master-apprentice model, can, in organizational terms be described as oligarchic. It is most probable that this traditional relationship and the social norms that support it are most fully entrenched in the small office, whereas they cannot so easily survive in the large office because "an impersonal bureaucratic setting cannot sustain relations that are based on such great personal dependencies" (Blau, 1979:118).

There is wide support for the contention that the small firm which typically has one to three architects, remains very highly valued within the profession as the ideal work setting, the ideal organizational form. Broadbent (1975) reports the findings of MacKinnon who studied the values of forty of the "most creative architects" in the United States and found, when compared with less creative architects, that they prefer to work alone and not as members of a team.

A shift from the "one-man-band" generalist approach typically found in the small firm setting to design teams which allow for task articulation and specialization, and incidentally, differential forms of organization, can be described. It has been documented that the design team approach was introduced during and after the decades marked by World War II, and one may speculate that architects may have been introduced to "team

problem-solving approach" while engaged in defence work or other military pursuits.

Blau relates the more complex (or larger) architectural firms to the debate within the profession around centralization and decentralization and concludes that

the office dominated by one or a few senior design architects with the mostly routine work carried out by many specialized junior architects may soon be replaced... by a decentralized structure made up of small teams of co-workers (Blau, 1977: 354).

One has to determine whether Blau's findings sketch an unambiguous picture. An examination of the Canadian Handbook of Practice for Architects Vol.1, compiled by the Royal Architectural Institute of Canada, gives the reader an accurate indication of what the profession ideally expects in terms of organization.

In a section entitled Designing the Organization the RAIC Handbook stresses that the relationship between goals and organization cannot be over-emphasized, for the form and character of an organization is clearly dependent on its purpose and goals. It notes, however, that the question will probably not arise until the "firm has attained a certain size and various frictions and dissatisfactions start to appear." (RAIC Handbook..., Office Organization and Management, March, 1978:3).

The article continues to sketch a probable organizational history. Typically at some point in the transition from a small to a large firm, a critical state is reached in organizational procedures.

Most frequently the firm attempts to struggle along under its former cloaks of authority with the mistaken assumption that it has simply become a larger version of the entity it was five or ten years ago. The senior partners of the firm, who may have grown up in the practice, probably know of only one procedure: direct personal control of all activities (RAIC Handbook... (p.Cit.)).

Or, it goes on, "the intensifying conflict of the demands for internal administration and the provision of direct and personal service to clients" can lead to a crisis of organizational breakdown.

Ideal/typical objectives and organization are spelled out for prospective architects. They are:

1. The principals to be freed from administrative routine and be allowed to participate more fully in the practise of their profession.
2. The principals desire to create buildings of sound design and unquestionable integrity which will discharge the professional obligation of the firm itself.
3. The principals wish to exercise tightened control over their professional and administrative employees in order to ensure the achievement of professional work of high quality at a reasonable cost.
4. The principals wish to encourage their employees in the practise of their profession; to strive constantly for the optimum utilization of their abilities and for experience in order that these employees may find a high degree of job satisfaction, while at the same time advancing the reputation of the firm.
5. The principals wish to work in good faith and harmony among themselves in order that each member may find his work rich and challenging
(From RAIC Handbook, March, 1978: 4).

It is clear that the above objectives are designed from the perspective of what is in the best interest for "the principals" is in the best interest of all. Blau (1976 and 1979) points to a more egalitarian trend in firm organization, or at least, that a significant

number of architects in her study identified a desire for more egalitarian organization (they are not the same thing).

The RAIC Handbook... does provide a short discussion of an organizational type called "Participative organization." It notes that the formal organization system, that is, a vertical system organized along rational principles, "can lead to the enforcement of a rigid hierarchy" and that a possible alternative might be the adoption of an organizational form which allows for eventual participation in basic policy control, in risk, and in profit by every member of the firm.

The Handbook discussion of "participative organization" is not encouraging. It cautions that "personalities" can cause a "crisis of breakdown", that some form of hierarchy often has a stabilizing influence and that "participative organization" involves much time lost to staff meetings. Whilst the discussion does not explicitly condemn this form of organization it by no stretch of imagination can be seen as an enthusiastic approval of such practices.

The Royal Architectural Institute of Canada is the mouthpiece, and therefore the tone-setter for the profession in Canada. It seems to advocate hierarchical organization along rational principals. But does this picture fit social reality? Litwak (1961) states that professional organizations while considerably more horizontal than the strictly hierarchical bureaucracy, are still far more hierarchical than the collectivist-democratic organization. The nature of architectural work demands communication that cuts across hierarchical divisions and it seems likely that in everyday practice the organization of an

architectural firm has a strong horizontal component.

If one can envisage an organizational continuum, it may be possible to situate the typical position of architectural organizations on such a theoretical construct. The writer is deeply indebted in this analysis to the discussion by Rothschild-Whitt (1979).

Figure 1

Source: Rothschild-Whitt, 1979: 525

The two approaches to architectural organization now become polar opposites and one begins to understand why the transition from the one form to the other becomes fraught with "crises of organizational breakdown."

Rothschild-Whitt (1979) discusses and compares these polar opposites in organizational form along eight dimensions, and provides a brief tabular summary.

Table 1. Comparisons of Two Ideal Types of Organization

=====		
Dimensions	Bureaucratic Organization	Collectivist-Democratic Organization
1. Authority	1. Authority resides in individuals by virtue of incumbency in office and/or expertise; hierarchal organization of offices. Compliance is to universal fixed rules as these are implemented by office incumbents.	1. Authority resides in the collectivity as a whole; delegated, if at all, only temporarily and subject to recall. Compliance is to the consensus of the collective which is always fluid and open to negotiation.
2. Rules	2. Formalization of fixed and universalistic rules; calculability and appeal of decision on the basis of correspondence to the formal, written law.	2. Minimal stipulated rules; primacy of ad hoc, individuated decisions; some calculability possible on the basis of knowing the substantive ethics involved in the situation.
3. Social Control	3. Organizational behavior is subject to social control, primarily through direct supervision or standardized rules and sanctions, tertiary through the selection of homogeneous personnel especially at top levels.	3. Social controls are primarily based on personalistic or moralistic appeals and the selection of homogeneous personnel.
4. Social Relations	4. Ideal of impersonality. Relations are to be role-based, segmental and instrumental.	4. Ideal of community. Relations are to be wholistic, personal, of value in themselves.

...cont.

5. Recruitment and Advancement	5.a. Employment based on specialized training formal certification.	5.a. Employment based on friends, social-political values, personality attributes, and informally assessed knowledge and skills.
	5.b. Employment constitutes a career; advancement based on seniority or achievement.	5.b. Concept of career advancement not meaningful; no hierarchy of positions.
6. Incentive	6. Remunerative incentives are primary	6. Normative and solidarity incentives are primary; material incentives are secondary.
7. Social Stratification	7. Isomorphic distribution of prestige, privilege, and power; i.e. differential rewards by office; hierarchy justifies inequality.	7. Egalitarian; reward differentials, if any, are strictly limited by the collectivity.
8. Differentiation	8.a. Maximal division of labour: dichotomy between intellectual work and manual work and between administrative tasks and performance tasks.	8.a. Minimal division of labour: administration is combined with performance tasks; division between intellectual and manual work is reduced.
	8b. Maximal specialization of jobs and functions; segmental roles. Technical expertise is exclusively held: ideal of the specialist-expert.	8.b. Generalization of jobs and functions; wholistic roles. Demystification of expertise: ideal of the amateur factotum.

Source: Rothschild-Whitt, 1979: 519

The writer is aware that typologies are in essence taxonomical devices and as such, are theoretical constructs. However, the typological tradition is firmly entrenched in sociology and the advantages may outweigh the disadvantages. In this instance, Rothschild-Whitt's continuum allows one to place different forms of architectural organization in some sort of theoretical perspective.

One can, for instance, argue that a "design team" closely resembles the collectivist democracy. There are some clear exceptions. (Architectural success systems are primarily individually oriented. Teams such as SITE have gained some prominence but the norm is for design projects to have a name of an individual or individuals attached to it. Similarly, recruitment and advancement is usually based on demonstrated ability with the possible exception of kinship recruitment.)

Furthermore, an argument can be made that in the light of Litwak's 1961 findings, the other architectural organizational form would be found somewhere between Rothschild-Whitt's Horizontal bureaucracy and the Weberian type Hierarchical bureaucracy. Both forms need specification. However, the case is advanced here, that in the light of what is known about architectural organizations, coupled with the previously noted ambiguities in Blau's 1976 findings, this delineation gains intuitive credibility.

The above discussion is centered around architectural firms of varying complexity, but the reader will recall that this exercise commenced with the lament of an architect who is employed in a complex government bureaucracy. The position of the architect employed in a complex organization which is not principally organized around the practise of architecture needs to be examined.

The Bureaucratic Architect

The temptation to place this kind of architect squarely in the bureaucratic pole of Rothschild-Whitt's spectrum is great. In the light of the recent (1980) work of Fielding and Portwood the position of the bureaucratic architect has to be re-evaluated. Fielding and Portwood, in effect redefine the concept of bureaucratic profession. This study relies heavily on their discussion whilst attempting to sketch the architectural case.

Fielding and Portwood treat the state as a key variable and point out that any profession gains so-called autonomy only by a process of state sponsorship. Much like Hughes (1963: 655-658) they contend that professions must be seen in dynamic rather than static terms. The dynamic, they argue may be seen primarily as the heteronomous role of the state. The dimensions of this general dynamic include the increasing numerical importance of the professions, the increasing range of professional activities, the decline of private practice (Fielding and Portwood, 1980: 27-28).

As Fielding and Portwood use the concept bureaucratic profession they are not simply referring to professionals working in complex organizations, or to professionals who have voluntarily organized their practice bureaucratically.

Rather we are concerned with those occupations which have 'achieved' a working relationship between the general, ideologically based 'rational' goals of the state, which aims to provide services efficiently, i.e. cost-effectively, and the more specific value-based goals of the profession which stress their idealism and unique ability to perform a personal service (Fielding and Portwood, 1980: 28-29).

Fielding and Portwood are primarily interested in the question of professional autonomy or not, but their distinction that the state in all its forms is characterized by ideologically-based "rational" goals, whereas professionals are ruled by value-based goals is of crucial import here. The municipal architect referred to above is caught in a situation where the rational goals of the bureaucracy with a strong emphasis on cost-effectiveness and efficiency are in direct conflict with the value-based goals of the architectural profession. The value that is of paramount importance in architecture is aesthetic (Broadbent, 1975; Blau, 1979). Aesthetic considerations are often not quantifiable and to the uninitiated remain fraught with mystery. It is from this that the architect derives expert status but conversely also in this area where architectural contact with rational bureaucratic principles breaks down. One might speculate that the artistic design component of architecture, to use Weberian terminology, invests an aspect of charismatic authority on the architect and we know that there is no place for charisma in a structure which is organized around legal-rational principles.

Satow (1975) provides valuable insight to this dilemma, when she develops the Weberian missing link, or the fourth type of authority which is absent from the Weberian typology. A "value-rational orientation involves commitment to an absolute goal regardless of consequences to the organization" (Satow, 1975: 528). There is some support for Satow's contention that professional organizations should properly be seen as value-rational organizations. Freidson and Rhea (1963: 119) state:

The consensus seems to be that those workers (that is, professionals) require a kind of autonomy that is antithetical to Weber's model of rational-legal bureaucracy, indeed, that the value of their work is actually reduced when done by the book or otherwise subjected to administrative hierarchy.

The professional, and therefore the architect, adheres to a set of norms and gives priority to those norms when they are in conflict with bureaucratic rules. Satow states that "this moral characteristic of professional norms clearly separates the professional from the bureaucrat" (Satow, 1975: 529).

Conclusion

This chapter has identified at least six different modes of work organization of architects. There may well be more. The dynamic qualities of organization are emphasized. Organizational forms were related to internal characteristics (as is customary in this literature) but also and importantly related to external environmental and social characteristics.

The argument was put forward that there is much to gain from objectifying each particular organizational form, rather than (as is customary in this literature) to treat one or another form as a pathology.

A review of organizational studies established that choice is a variable that rarely or never is incorporated into analysis. It was argued that professionals, and certainly architects, are even in worsening economic conditions "choice mobile"; that they can, and probably do choose the kind of organizational style they are most comfortable with. Bigger is not necessarily Better; in fact, some influential and successful architects plumb for Small is Beautiful.

It was further argued that new insights into the position of professionals employed within rational organizations might be gained by considering the concept of value-rationality as developed by Satow (1975). Certainly, the concept of value-rationality seems to apply to the architectural case.

CHAPTER 6

CONCLUSION

This thesis has examined the architectural profession in terms of the sociological literature around the professions and organizational sociology. The scope of the inquiry is broadly based and is offered as an overview. Thusfar, the architectural profession has largely escaped serious academic scrutiny. It is hoped that this study may provoke further studies.

Several questions were addressed in this thesis. It was argued that the institution of shelter and the architectural profession are importantly linked; that the organized practice of architecture can be seen as an attempt to control and determine shelter.

At the moment of writing, the "state of the art" of environmental sociology is still inchoate and no serious academic attempt has been made to deal with shelter from the vantage of the designer. This is regrettable. Unless we know how architects design what they design any criticism can rest only on the fairly uninformed premise of "I like this" or "I do not like this", which boils down to preference as personal taste which is difficult to describe in social-scientific terms (as are all human values). Another way for non-specialists to deal with shelter is only slightly less intuitive and characterized by expressions such as "the building works well" or "it does not work well". This functionalist

approach tends to deny the aesthetic component of shelter. If anything, this inquiry has established the paramount importance of aesthetic considerations within the architectural profession.

Further insights may be gained from approaching the artifacts of the profession through the vantage of the sociology of art and cultural studies (cf. R. Williams, 1981). This was not pursued here, mainly in the interest of brevity.

The artifacts of architects, the buildings, change our physical environment in ways we have very little control over. Certainly architects have to conform to the guidelines set by building codes and by laws, but they are in ultimate control of what the built environment will look like and the kinds of spaces we will experience. They define what is beautiful and conversely, what is in poor taste. To a large extent the notion that clients or users have power to effect what a building will look like is negated by the evidence. The relation between the architects' view of the building users and their ability to adapt to the results of architectural vision is a more abstract version of this problem. In practical terms, we need to know whether people prefer living in glass houses because Philip Johnson says that they do: whether the human experience of living in glass houses conforms to the architectural vision of such experience. This is not an esoteric question. Vandalism is a major problem confronting non-profit housing developments. Architects react extremely negatively to the audacity of users altering their vision in any way whatsoever. They endeavour constantly to design "vandal-proof environments". One way of approaching the human act of vandalism is to see it as a gesture attempting to effect control over the environment - albeit in a deviant way. It may be that a degree of control over the environment or "design" is a basic human need and that denial of control over the environment contributes to alienation. Such speculation gains

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some intuitive credence. In the writers belief we can gain from systematic study in this area.

The Hobbesian notion of power as "the present means to any future good" is helpful when considering the structure and role of the architectural profession in society. It was argued that the "present means to future goods" for this group resides in how well it can control and protect the knowledge core from territorial raids. It was further suggested that an important tool in this endeavour for architects is the claiming of aesthetic expertise. Aesthetic expertise always includes within it technical ability - almost never the other way around. There is a need to study this aesthetic claim and its relation to the labour process.

There is a clear need for a longitudinal study of the architectural profession. We need to know who become architects and whether recruitment patterns are changing. We need to know how the profession is responding to the pattern of increasing bureaucratisation which was identified in this thesis. We need to compare curricula to ascertain what aspiring architects learn about society. We need to know what the patterns of attrition are: who gets turned down when they apply to enter schools of architecture; who drop out before their studies are complete. We need to know how this profession responds to economic threat. The list can go on and on... the major point being that this is an important group in society which controls important activities which have widespread effects, yet it is surprizingly understudied. This thesis hopes to provoke more indepth inquiry.

Implicitly this inquiry has illuminated the necessity of greater dialogue between the disciplines of architecture and the human sciences.

If architects are to continue making decisions about how and in what people live, work, and die then it seems crucial that those insights which are garnered by those who systematically study society be made available without prejudice to the designers of built space. In practical terms this would mean that courses in the human sciences be made compulsory and not elective as they tend to be at present. It remains disconcerting for the sociologist to notice that "laws" of social behaviour are frequently violated with impunity by architects. There is an expectation of thunder claps and that the earth might move in its firmament. Yet, from the sociologists' perspective architects habitually get away with murder.

Design is an innovative process. Architects are trained to be innovative and incidentally to value the "Renaissance Person" ethic that allows them to claim competence in many diverse task behaviours. It is thus not surprisingly that they tend to be organizationally innovative as well. They claim a society of peers even though there may be internal divisions. The distinction between horizontal and vertical lines of authority tend to be diffuse and specific to particular situations: It is likely that the concept of value-rationality may most accurately describe the organizational position of architects (indeed any professionals) employed in the bureaucratic setting. Substantive work in this area is clearly called for.

The charismatic quality of "name" architects begs further examination. At what point does the client order a "Pei" or an "Erickson" rather than

a specific building commission? At some point the "name" architect becomes a living status symbol: a corporation has a Johnson headquarters or a Mies tower. There may be a point where no matter what a "name" architect designs, it becomes instant art by virtue of who designed it.

If Blau, 1979, Larson, 1977, and Johnson, 1972 are correct in identifying control over a core of knowledge as the basis of the power of the professions, then it is likely that the architectural profession will experience a move to firm up control over the peripheral areas. The implications are obvious. The peripheral areas involve conflict with other professions, notably engineering, urban planning, et cetera. These conflicts are nothing new; they have flared up over the years and will continue to do so. Thus far the profession of architecture has been able to prevent other professions such as quantity surveyors and engineers to invade the architectural turf. It remains to be seen how large and how successful this architectural raid of foreign territory will be.

One studies the development of the medical profession by locating it within the institution of medicine, one studies the clergy by locating them within the institution of religion. Once the notion of shelter as an institution is sufficiently developed by the subdiscipline of environmental sociology, it may well be possible to look at the professionals who deal with shelter, architects from this vantage. Added to the insights gained from studying this profession through the sociology of the professions and organizational and cultural studies one should be able to devise a model which more accurately describes the workings of this group than any extant study. It is logical to assume that one reason why this group has thusfar escaped serious scrutiny is precisely because it does not fit the existing models particularly well.

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