A System of Formal Analysis for Architectural Composition

by William Q. Hubbard, Jr.

Bachelor of Architecture
University of Virginia
1970

submitted in partial fulfillment
of the requirements for the degree of
Master of Architecture in Advanced Studies

at the
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
June, 1976

Author_____
           Department of Architecture
           May 7, 1976

Certified by_____
           Stanford Anderson
           Professor of Architecture
           Thesis Supervisor

Accepted by_____
           Eduardo Catalano
           Chairman,
           Departmental Committee on
           Graduate Students

For Stan Anderson, who muddied the waters
of my too-clear vision and showed me the
possibilities I'd missed.

Contents

Abstract

Any building can be studied in a variety
of ways, depending upon the information
one wishes to draw from it. One of the
central problems of architectural studies
has been that architectural history looks
at buildings with goals different from
those of design and so does not produce
information that addresses the concerns
of the working architect. As a means of
linking the two fields, this thesis
proposes a model for the process of con-
ceptualizing building form in which that
form is seen as both an analyzable
result and a designed signifier of the
conditions the building was built to
address. From this model the thesis
develops a dual system in which the
processes of analysis and design are
conceived as the "playing back" of each
other's methods.

The major ideas of the thesis are
presented at two levels: the first
presentation gives a quick overview of
the conceptual model and the method of
formal analysis based upon it. The
workings of the method are then illus-
trated by an analysis of H. H. Richardson's
Percy Browne house of 1881. The next
sections show how the information from
the analysis can be "played back" to
produce designs consonant with the
environment as built and analyzed. To
do this, the situation of the Browne
house is used as a base upon which is
imposed a succession of hypothetical
interventions of increasingly-greater

scope, each of which reflects certain new aspects brought to bear upon that situation--the first design being for a renovation, a rearranging of interior spaces that leaves the exterior relatively intact; the second being for an addition, in this case involving changes to both inside and outside. Following these designs, the second presentation of the model and method explores in greater depth several issues raised by the first presentation, in an attempt to provide a rigorous theoretical grounding for the system and its products.

Introduction

To quote from my application for admission of December 1973:

> I am interested in an architecture of significant form. I believe that architecture ought to signify to ordinary people meanings and associations beyond those simple signals that tell one how to function in a building. The purpose of my research would be to derive a process that would allow me to isolate meaningful architectural elements and incorporate them into building designs. . .

Still true. My concern with the needs and perceptions of "ordinary people" has guided this research from the beginning. And from the beginning this focus has raised the problem of judgement: how one can find a standard for analyzing and designing buildings that is convincing both for the practitioner and the user. Two polar possibilities exist, of course, both of them unsatisfactory: the standard that states, "Whatever the public likes is good" (besides leading to a potentially-dangerous affirmation of any existing state of affairs) represents both the designer/analyst's abdication of judgement (and therefore responsibility) and his romanticizing of "The Public;" conversely, the alternative pole of "I know what's best" poses the danger of irrelevance, and in any case, today's politics and economics prevent its application outside a narrow circle.

The problem's basis is that the public cannot know (and really doesn't care to know) how architects go about designing buildings, and yet the same public--because it must use those buildings--

legitimately feels it has the right to
accept or reject buildings according to
its standards. In essence there exists
an inevitable situation in which the
public judges the products of a process
without knowing how that process operates.
As a way of addressing (but not "solving")
this problem, I have adopted as a standard
of judgement the legal concept of reason-
ableness: in law, the ordinary citizen
does not have a detailed knowledge of
the workings of jurisprudence but he does
have a feeling for "what's fair;" it is
not necessary that a complex legal
decision immediately appear "fair" to
him, but what is necessary--if the law is
to remain publicly-acceptable and there-
fore valid--is that, if the fine points
of the decision are explained to him, he
will realize how his conception of
fairness is subsumed within the wider
perspective of jurisprudence. And like-
wise with the system of design and
analysis I will be proposing in this
study: the buildings that result from
the system need not immediately appear
"right" to a casual or naive observer,
but the system must be constructed so
that the person giving his "complicity"
by viewing in the system's terms will
not be confronted with the dilemma of a
way of seeing radically opposed to his
own, but instead will be "rewarded" by
having his own perceptions confirmed and
widened, subsumed within a "larger" way
of seeing. Thus, a standard which the

designer and user can share is this test
of reasonableness, the possibility of
engendering the expansion of awareness
that might be called the "Aha!" reaction.

In fact, this idea of a partial
understanding fitting inside a wider
conception governs the presentation of
this study, for the system I will be
presenting can be understood on two
distinct levels; and for each level a
certain type of information is necessary
to explain the system at that level and
to enable the reader to evaluate it. So,
when seen purely as a usable "tool" for
analyzing and designing buildings, the
system should be evaluated on the basis
of its "production," both buildings and
analyses of buildings; the first half of
this thesis will therefore present these
"products" almost immediately, preceded
only by that information necessary to
impart an abridged but not misleading
understanding of the workings of the
system. But if the system is to be seen
as more than just another personal work-
method, it should give an understanding
of the nature of architecture not seen
before--and show how analyses under the
system reveal this nature and how design
reflects it; the latter half of the thesis
attempts to do this by presenting the
system a second time, in a fuller fashion,
addressing issues skipped in the neces-
sarily cursory initial presentation.
The two presentations will be tied
together by notes in the first version

which will refer the reader with specific concerns back to specific parts of the second presentation. The goal is thus to give the reader a workable knowledge in the first presentation but to overlay that knowledge in the second with a deeper level of understanding that hopefully will engender a few "Aha!"s of realization.

Footnotes.

Although the second presentation will be foornoted conventionally, this first presentation is simply too eclectic to allow me to assign specific attributions to individual ideas. In general, though, let me give the following credits: the perceptual model of schemata roughly follows that of Christian Norberg-Schulz in his Intentions in Architecture; the notion of conceptualizing spaces for use comes from a part of an urban ecology model being developed by Stanford Anderson, and the concept of articulation springs from the felicitous phrase "an articulate environment" used in Anderson's presentation of the model in Thresholds: Working Paper 1; the characterization of two kinds of conceptual spaces is the result of a conversation with Donlyn Lyndon; and finally, although I take full responsibility for its shortcomings, the idea for the analytical method suggested itself to me while reading Peter Eisenman's 1965 doctoral dissertation.
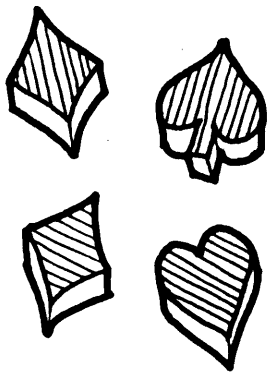
First Presentation

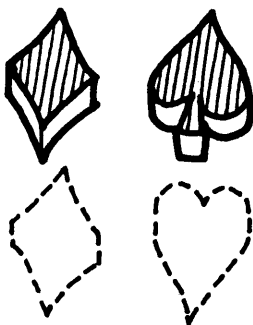## Models are tools, not oracles.

The information derived
from the application of
a model can be useful,
but it must be used with
the constant realization
that, being a construc-
tion, it has no claim to
epistemological "truth."
The nature of models--
their construction,
their limitations, their
relation to "reality"--
is discussed on pages
131-34.

As stated earlier, one of the goals of
this study has been to link architectural
design and analysis so that analysis
would supply information directly
applicable to problems of design. Now,
if the two are to treat form in compatible
ways, they must be based on a common
model of perception. Such a model, if
postulated only for its usefulness, need
not explain the actual process by which
the eye and brain perceive and cognize
form, but need only present a reasonable
scheme that accounts for the end-products
of perception. In this section I will
present the perceptual model on which
this design/analysis method is based and
show how an analogous model can account
for a person's use of space. I will then
show how, by linking these two models, a
third schema results which gives an
account of now a person might be said to
cognize space for his use. The final
step will then be to describe the analo-
gous design goal--that is, to specify the
attributes that would aid the viewer in
seeing and using forms in the manner put
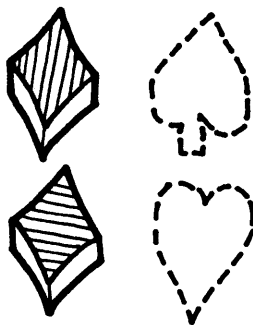forth by the cognitive model.

When a person wants to make sense of
a complex visual field, he can do so by
classifying it--grouping the individual
objects of the field into a manageable
number of sets, the set into which a
given object is placed being determined
by that object's conformance to an
organizing schema. In personalized terms,
the viewer declares certain characteristics

to be _significant_ and groups together
all objects seen to possess those charac-
teristics, ignoring other objects; he
then repeats the process with different
schemata, forming as many additional
groups or classifications as he needs.

"A bunch of objects"

"Vertically-hatched
objects"

"Diamond-shaped objects"

An ambiguously-
classified object
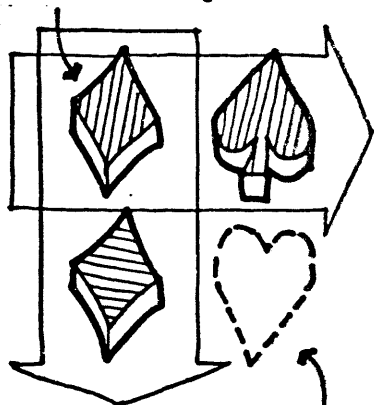
An unaccounted-for
object
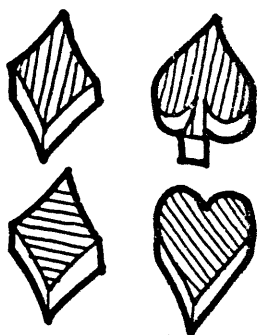
"Hatched objects"

(Note that the viewer
could also have named
the group "playing-card
suits"--which points out
that often more than one
subsuming schema can be
postulated, and that
these schemata might
represent different
realms of prior know-
ledge, as here with the
purely visual knowledge
of hatching and the
"learned" cultural know-
ledge of card suits.

In any real visual field these groupings
are likely not to be mutually exclusive--
that is, some objects will be seen to
fit into more than one group. When this
occurs, the viewer will often search for
a greater commonality, a more general
organizing schema consisting of a set
of characteristics which all the indivi-
dual members of his groups are seen to
possess. By viewing the visual field
with this general schema, the viewer can
form a group that will encompass all the
individual members of the more specific
groups. Note that by doing this the
viewer does not deny his initial
perceptions, rather he adds to them: in
effect he acquires a second layer of
perception which shows him a "whole" into
which all of his groups can be fit,
allowing him to see the objects as
simultaneously members of both the
particular groups and the more general
whole.

Overlapping can be desirable.

It may be the case that
such a resolving schema
cannot be found, in
which case, as Peter
Eisenman has suggested,
the realization (and
acceptance) of the
ambiguity produced by
the overlapping visual
patterns may itself be
the resolution. The
uses of visual ambiguity
are discussed on pages
169-71.

And for other reasons as well.

There are of course
other motivations invol-
ved in the conceptua-
lization of space, but
this model will try
to cover them by expan-
ding the conventional
definition of "use." I
hope the reader will
bear in mind that I have
omitted many necessary
qualifiers and cautionary
notes because they would
work against the brevity
I seek here; and so the
result is this rather
"bald" presentation of
ideas. I hope the
reader will suspend
judgement until he has
read the second presen-
tation.

Analogously, a person approaching
a spatial field would organize it not so
much for vision as for use: that is, he
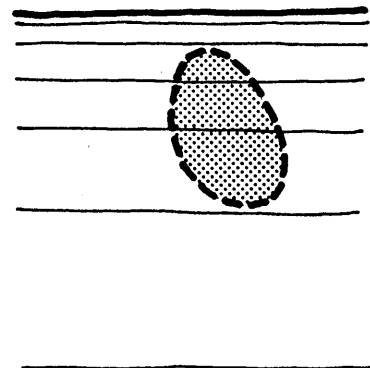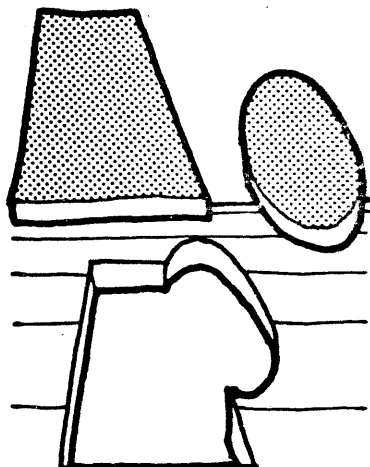
Given a spatial field. . .
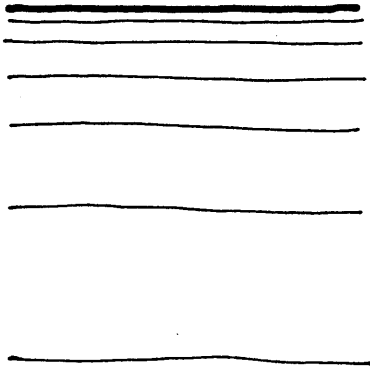
would choose out of the total field those parts-of-space which were significant for the activity he had in mind, ignoring the presence of the other parts. In the

One can imagine a well-bounded "space where I sleep;"
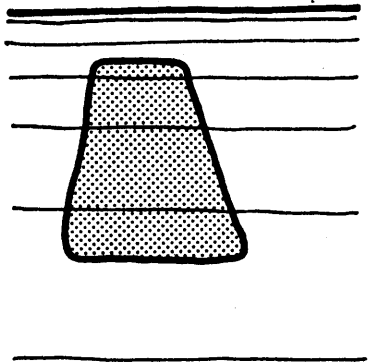
one can also imagine a less well-bounded but nevertheless defined "space where I read."

performance of his everyday activities
he would choose a series of groups that
would be contradictory, in the sense that
they would not form a pattern like a
jigsaw puzzle with fixed, identifiable
boundaries to each activity-space;
rather, the activity-spaces would overlap,
the same portions of actual space being
re-used in more than one group. But as

But note that each of
these spaces is summoned
into existence only
when imagined: they are
not conceptualized as
"always present," as if
each were a cubicle to
which one would go when
he wanted to perform
the specific activity
assigned to that cubicle.
The user thus would not
normally form (for his
orientation) a "mental
map" of the imagined
spaces, for this would
involve having to .
imagine as existing
simultaneously all those
spaces that "exist" only
at separate moments in
time. The problem of
"jigsaw fit" thus
arises only in the arti-
ficial situations, such
as program analysis,
when one does try to map
time-bound activities
into the single space
of a diagram: then over-
laps do occur, becoming
contradictory.

These contradictions-
for-the-analyst can be
resolved in a way that
is still true to the
experience of the user
by a diagram such as
this:
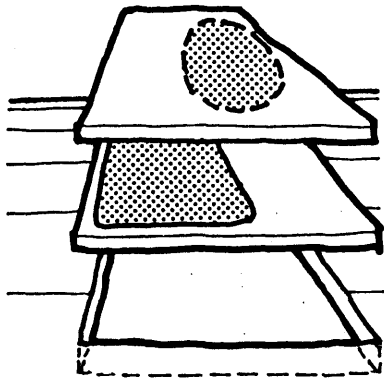
The viewer might say:
"At times the space
where I read exists in
my bedroom, and at other
times the space where I
sleep exists in my bed-
room."

"The bedroom" thus is
the encompassing schema:
it is the name given to
the set of significant
characteristics which
all the individual
imagined spaces share.
And in this way the two
spaces that "exist"
apart in time can be
related to each other
by the fact that both
have their "existence"
within the same space--
and what is more, a
space that "is present"
even when the two
imagined spaces are not.

in the visual groups, the contradictions
inherent in the organization of these
spatial groupings can be subsumed by a
more general organizing schema. In this
case, when one apprehended the general
schema, he would be able to imagine a
larger, encompassing space "layered
over" the groupings of everyday percep-
tion, a container into which all the
groupings could be fit. This second level
of perception would reveal to the viewer
how the individual parts of the spatial
field could be seen as simultaneously
related to each other on the basis of
activities and related to the whole on
the basis of the more general schema.

History, too, can be a matter of choice.

This notion of a person freely choosing spaces for use is derived from a model of an urban ecology developed by Stanford Anderson. But equally interesting are its implications for integrating history into design. Both of these topics are dis-cussed on pages 152-64.

A new idea with old roots.

This vision of design thus runs directly counter to the "close-fit" functionalism of, say, Christopher Alexander. And in doing so, it shares certain ideas with the design goals of Louis Kahn and the older Beaux Arts tradition. See pages 165-69.

From this model flow two linked notions with implications for the manner in which one would design, the first being the concept of an <u>enactive use of space</u>: If one assumes that the space-user will choose for himself the parts of the environment he needs to carry on his activities, then the designer is freed from the necessity of predicting the user's behavior at each moment and trying to match each behavior with a discrete single-use form. Instead the

Other ways to make spaces.

By this I do not mean
to imply that the
possible conceptual
spaces are limited to
those that can be formed
with the parts provided:
people will, on occasion,
form spaces quite apart
from the environment.
(Think, for example, of
the "bubble of space"
two people deep in con-
versation form around
themselves.) I merely
wish to emphasize that,
by supplying a multi-
plicity of parts that
are (as far as possible)
not tied to specific use
uses, the designer
expands the possibili-
ties for conceptualizing
spaces that do attend
to environmental
attributes.

designer need only provide a sufficient
number of appropriate parts which the
user will successively regroup as he sees
fit. But recall that these successive
groupings will not make "jigsaw puzzle"
sense: that is, if one were to map the
actual spaces traced by each of one's
conceptualizations-of-space for a sequence
of activities, the result would not be
a floor-plan-like diagram of discrete
spaces classified by use; the import here
for the designer is that the space-
pattern produced by activities does not,
by itself, yield a clear, memorable
diagram by which the viewer could orient
himself in the building. The designer
therefore must be certain that an alter-
nate conceptual framework exists: he
must insure that, from the forms he mani-
fests, the viewer will be able to
conceptualize a more general organizing
schema that will concain and reconcile
the overlapping individual activity-
spaces. The designer is thus faced with
the problem of presenting a multiplicity
of individual parts in such a way that
the user will be able to apprehend their
underlying pattern even while rearranging
them to suit his needs. My contention
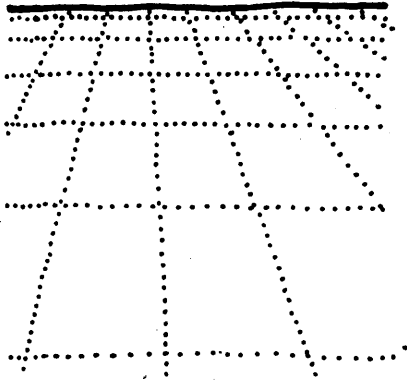
Given an environment
articulated in a pattern
like this, one could
conceptualize two types
of spaces. . .
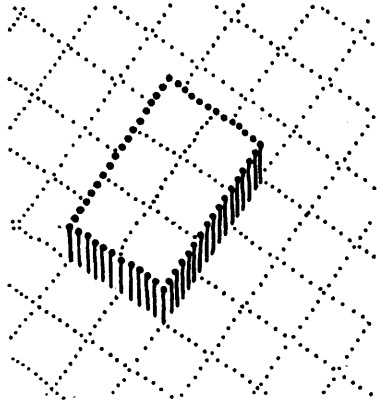
The conceptualization
here "notices" the
edges of the imagined
space; one could thus
locate the space within
the pattern by reference
to the position of its
edges within the pattern.
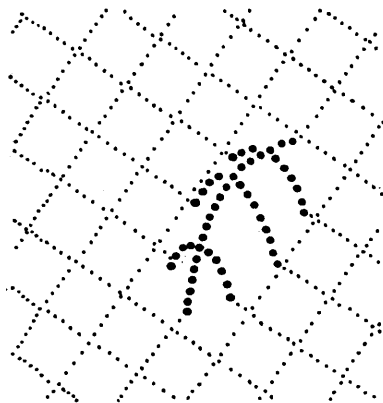
This type of conceptuali-
zation attends to a
"vital center," ignoring,
for the time, the

here is that this simultaneous dual
relationship is best achieved in an
environment of patterned articulations:
that is, a spatial field that displays
a comprehensible pattern of delineations
such that, by exercising the option to
"ignore" a delineation or to "invoke" it
(as either a borderline around a space
or a subdividing line within a space), a
viewer could conceptualize any grouping
of parts he needed for an activity.
With such an arrangement, even though the
articulated parts could be freely concep-
tualized into any arrangement that
suited the viewer's purposes, their
actual objective disposition would still
reveal a complete and consistent pattern
of organization.

pattern of articulations.
Thus by being optional
the pattern does not
limit or inhibit this
type of space-imagining,
but at the same time, by
virtue of their having
a perceptible pattern,
those articulations
falling within the
imagined space allow one
always to be able to
locate that space by
reference to its position
in the pattern.
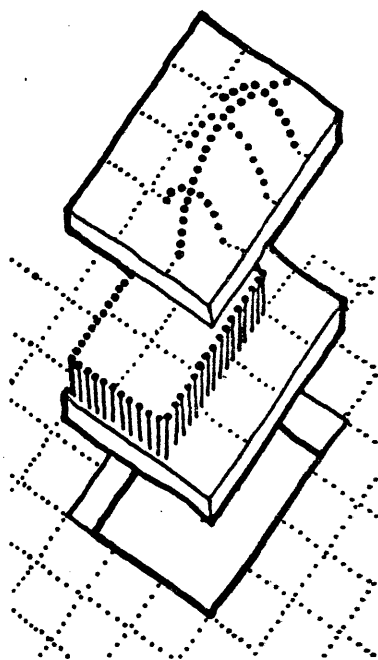
This "larger" space
might be the product of
viewing the spatial
field "objectively,"
that is, detaching one's
self from the activities
that go on there and
attending to spatial cues
as no more than guides to
an understanding of the
space. The frequent
result of this detached
viewing is that one
notices parts of the
environment not recog-
nized in daily activi-
ties. The ensuing
"encompassing" space

thus includes all of the
everyday spaces and
"more."

(This "more" represents
portions of space with
potential for other uses,
a notion discussed in
more detail on pages
50-60.

Just what is an "articulation"?

As applied to the real
environment, by an
"articulation" I mean
any visible break in the
continuity of space or
surface. With this term
I wish to cover breaks
as solid as a wall, as
unobtrusive as the edge
of a rug, or as ephemeral
as a change in illumination--in short, any
visual cue that might
be used to mark the
limit of an imagined
space. I want to use
this single term because
(in the "bald" sense of
this brief presentation)
all of these articulations are potentially
equal. That is, given
the right mental frame,
any of them could be
"ignored" and the zones
they delineate melded
together. As an example
of this, consider the
situation of a party in
a home: depending
mostly upon the focus
of one's conversation,
it is possible to conceptualize as a single
zone the intimate space

of a couch or the larger
spaces of a portion or
all of the dining-room
table; if one is left
out of the dinner-talk,
one might well become
uncomfortably aware of
the extent of the dining
room itself; if the party
were then to spread
throughout the public
rooms of the house, one
might imagine that zone
as a single space,
ignoring, for the time,
the walls that intervened.

A source-
book for
composition.

An "archive" of composi-
tional devices might, in
fact, serve the designer
as a compendium of
possible solutions.
But such an approach
raises the possibility
that the resulting
buildings would be mere
pastiches of historical
fragments. A discussion
of how this danger can
be avoided--how, in
fact, an archive could
serve the designer as
a source of meaningful
innovation and historical
continuity--can be found
on pages 152-55.

Now whether the viewer would be able
to perceive the pattern embodied in the
building would depend upon the clarity
of the relations between the articulated
parts. The process by which this relation
is manifested has traditionally been
called composition, a term often deni-
grated as pertaining only to visual
matters. But seen in this new light,
composition becomes the designer's way
of dealing with matters of function.
For when designing for an enactive
viewer, the designer's primary job
becomes one of finding those compositional
devices that will impel the viewer to
perceive the multiplicity of articulations
from which he will choose those that
satisfy his own functional needs. In

The object or the experience?

Should the artist focus
his attention on the
viewer's experience of
his work or on the work
alone, irrespective of
any experience? This is
a major issue in Modern
Modernist art theory,
and its implications for
an architecture that
aims to have "signifi-
cance for ordinary
people" are discussed

essence, the object of design under this
model is to organize the forms of a
building in such a way that (if one's
hypotheses about perception are correct)
the disposition of the forms will engender
a <u>structured pattern of perceptual effects</u>.

Now, if design is to impel the viewer
to experience a pattern of perceptual
effects, then the complimentary job of
analysis would be to explain to the
viewer why that pattern is the way it is.
This section will present an abridged
explanation of the workings of the
analysis half of the model. I will
present this explanation by outlining the
logic of the model's structure; by using
this mode of presentation I hope to keep
constantly before the reader the reali-
zation that the model is a <u>constructed</u>
system (with thereby delimited applica-
bility and no claims to epistemological
"truth") and that its structure is a
direct function of the purpose it is
meant to serve.

The first section showed how a person
could be said to perceive a static visual
<u>field</u> by viewing it with a schema of
recognized characteristics. Expanding
this notion to cover the perception of
a visual <u>environment</u> that changes as
one experiences it, one can say that a
viewer learns about his environment by
noting the manner in which "what is
presented to the eye" conforms to or
departs from a similar schema. That

Schemata as models.

Recall that I am describing a vastly simplified model of cognition here: the description of schemata as if they were "real things" is only a consequence of this manner of presentation. If schemata actually did exist, then certainly they would not behave in the strictly-separated manner described here, but would interact and inflect one another in complex ways.

is, when one perceives a deviation from a set of characteristics, in effect one notices a previously-unseen characteristic (and thus a piece of new knowledge about the visible building) which one can then incorporate into his schema. This process would represent "learning something about the building," a process that would be continuously repeated in one's experience of a building. Thus it can be said that one learns about a building through an iterative process in which one modifies his understanding to reflect seen deviations from that understanding--in other words, modifying his schemata to bring them into conformance with recognized new characteristics. But as with the classifying process of visual schemata, this process does not by itself lead to a single schema that could encompass all possible characteristics; instead the viewer can be said to adopt a repertoire of schemata which, if taken together, would be contradictory, but which the viewer holds apart by using only one-at-a-time, according to the activity he has in mind.

So if the analytical model is to serve as a tool for understanding, what it must do is to reconstruct the complex iteration by which one gains knowledge of a building into an easily-understood sequence; and further--just as the iteration proceeds until all the building's characteristics have been filed in a myriad of contradictory schemata, so the reconstructed

sequence must proceed until <u>it</u> has filed those characteristics, but in a small number of <u>complimentary</u>, understandable schemata. To provide this accounting, the constructed sequence is made <u>visible</u>: it is presented as a process in which a postulated <u>base form</u> is subjected to a sequence of distortions and modifications until its form matches that of the actual building. This process of modifying a developing base can be said to account for the process of modifying schemata in that, just as one modifies a <u>schema</u> to reflect characteristics not recognized before, so the base form is distorted from its previous state to acquire characteristics <u>it</u> did not possess before.

But there is another level of "learning about a building" which must be modeled. When a viewer apprehends a previously-unseen characteristic of a building, he might view it simply as a fortuitous visual occurrence, to be noted and schematized but not otherwise considered; or he might feel that the characteristic is such that its occurrence needs to be "explained;" and unless it appears completely capricious, the viewer will likely interpret the characteristic as being a reflection of one or more of the factors that he assumes influence the visible form of the building. These explanations, like the schemata they interpret, would be constructed piecemeal by the viewer and thus, like the schemata, would not

What about "incorrect" interpretations?

The second presentation attempts to deal with the issue of building interpretation by presenting a case for considering buildings as <u>artifacts</u> that are reinterpreted over time. For a discussion of this approach and how it avoids complete relativism, see 155-64.

lead to a single coherent interpretation. The model therefore must account for the viewer's explanation of a building by constructing an <u>alternate</u> interpretation that <u>will</u> provide a coherent understanding--one that will subsume the viewer's partial explanations in the "Aha!" manner described above. To do this the model takes the many competing aspects that a thoughtful viewer might cite as reasons for a building "being <u>that</u> way" and reconstructs them into a simplified system of four interacting factors (whose operations will be clarified by their use in the analysis which follows this section):

1. BUILDING PROGRAM: as a rationalized accounting and not a simple retelling of the program, this construction is intended to be a subsuming <u>resolution</u> of all the activities that could reasonably take place in the building;

2. The MOVEMENT of people to and through the building--seen not as a tracing of the actual paths taken between walls or along walkways, but as a resolved vector of the totality of movement;

3. SITE INFLUENCES: as with the program, this is not a summing of the specific ways site conditions impinge on the building, but a resolution of those conditions into a single conception;

4. FORMAL PREDISPOSITION is a construction that is intended to model a reasonable viewer's expectations about

how building forms will look--or in extra-personal terms, to account for the influence that a lifelong experience of buildings has on subsequent perceptions of buildings.

To summarize then: the analysis will take the complex process of acquiring knowledge of a building, reconstruct that process into an understandable sequence of operations, and present that sequence as a "story" in which a base form undergoes a series of distortions until its form matches that of the actual building. Since each of these distortions will be constructed so as to be both a representation of a perceptual effect that one might reasonably experience and an acknowledgement of one or more of the aspects that the building might be seen to address, the developing sequence of distortions will provide two accounts:

Models and matching.

Thus the model itself has aspects of a selective schema in that it might tend to "recognize" only those formal arrangements that it could "explain" as reflections of its four factors. But this is one of the crucial junctures where a model is tested against the "reality" it purports to cover: for since a model is constructed only for the purpose of accounting for a body of data, any account postulated under the framework of the model has no existence prior to that of the data-base: the account therefore cannot claim that unexplained data are "anomalies;" in such a case the account is anomalous and must be changed until it conforms to the data.

A significance for architecture.

If "significant form"
is the ultimate goal of
this study, then this
integration-of-perception
might well be that
significance. For a
discussion of this
possibility and the
esthetic theory upon
which it is based see
pages 187-91.

What is architectural perception?

Or is there something
about architectural form
that sets it apart from
ordinary form? The
second presentation
focuses on these
questions and, in so
doing, tries to show
how architecture's
deliberateness is the
source of its uniqueness
and autonomy. See pages
124-29.

as a sequence of acknowledgements-of-aspects, the "story" will show how these aspects could be reconciled and how that resolution could be made manifest through a pattern of perceptual effects; or conversely, as a sequence of representations-of-perceptions, the "story" will show how one's perceptions could be integrated into a rational pattern--that is, a pattern that "has a reason for being that way" by virtue of its being interpretable as a reflection of a (likewise rational) resolution of the forces that brought the building itself into being.

These two interpretations of the "story" show how the model serves as a common base for both design and analysis. The first interpretation states the goal of design under this model--that is, to present to the viewer a pattern of perceptual effects that signifies the designer's resolution of the many aspects of the building problem, but which (by being a visual and not a spatial pattern) does not bind the viewer to that single vision. The second interpretation describes the aim of building analysis--to reveal how a building, seen as architecture, can integrate confused experience: in a real sense, to answer the question "Why architecture?"

The test of any model is the convincingness of its account and the usefulness of its insights. The analysis to follow will be just such an account, to which

the reader can apply his own tests. The
designs in the final section will then
make use of the insights of the analysis.

Analysis
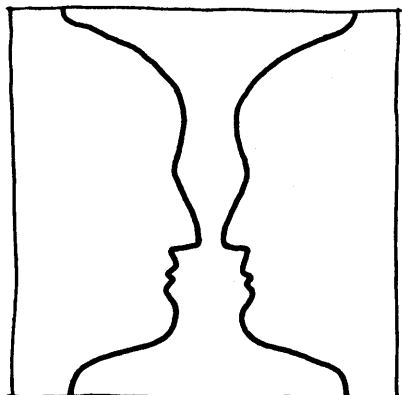
Formal relations.

The distinction between a base form and a form that deviates from the base is a convention I have adopted for this analysis. Actually, of course, each form can be perceived as either a base or a deviation, depending upon the schema of expectations with which

One of the notes in the first presentation pointed out that, with certain ensembles of forms, a viewer might be able to see more than one perceptual effect, and that the realization of this ambiguity might itself be the subsuming knowledge that made sense of a visual or spatial field. One can see that this type of ambiguity is possible because of the nature of the type of perceptual effects with which this study has been dealing; that is, when one apprehends the perceptual effect I have called deviation, in effect one is postulating a certain set of conditions and noting departures from it. But with an ambiguous field, the same viewer could reasonably postulate an alternative set of base conditions, in which case he would perceive another set of deviations. This situation is analogous to the famous vase-and-profiles drawing in which either form can be seen as a figure or a ground--as a base form or a deviation.

In the case of an analysis of this kind of ambiguous situation, one is not dealing with a situation in which one set of base conditions holds true all through an experience of a building, but instead one deals with a situation in which he must be able to imagine several sets of base conditions simultaneously and note the deviations which, during his experience, occur from each. In an actual experience, this juggling of one's assumptions can lead to real pleasure, and a modelling of this

one views the ensemble. What one is really dealing with in a situation like this is not forms themselves but the relations between forms. In fact, isolating this relation is the real object of the analysis, for in designing a new building consonant with the old, the designer would try to manifest this same relation, but between new forms. How this might be achieved is demonstrated in the design sections.

Browne or Brown?

There is some confusion over how the Reverend spelled his name: Mrs. Van Rensselaer uses "Browne;" Hitchcock prefers "Brown;" Richardson's drawings use both. If the question had truly mattered for the analysis I would have checked the town records. But as it is, I am using "Browne" because, when I visited Marion, I found a Browne's Pharmacy in the village center.

juggling--a "story" in which several different base forms undergo parallel sequences of different distortions-- can be particularly revealing. But putting either of these processes into the necessarily uni-linear medium of words is especially difficult. Therefore I ask the reader to follow the discussion with the willingness to carry along two or three threads of thought at the same time; so when the text picks up and develops one of them, hold the other threads in abeyance--they will be dealt with in time.

One last difficulty: the object of this analysis no longer exists in the form in which it was built; the house has been extensively modified, and its open site encroached upon on three sides. I have visited the building and enough remains of the original conditions that-- with the aid of the working drawings-- I can reasonably reconstruct an experience of the building-as-built.

The house was designed by H. H. Richardson for Rev. Percy Browne in 1881 and built the following year in Marion, Massachusetts, a hamlet about ten miles east of New Bedford on Sippican Harbor, an inlet of Buzzards Bay. Its site, at the time of construction, was on the edge of an open hillside north of the village, with a clear view to the ocean. The house fronted on the road that led from the railroad station to the village,

and was approached via a drive that
curved up from the bottom of the hill.
Since the house was built to be a weekend
and vacation retreat for the Rev. Browne,
the program includes, in addition to the
usual family and servant accommodations
of the time, a pastor's study in which he
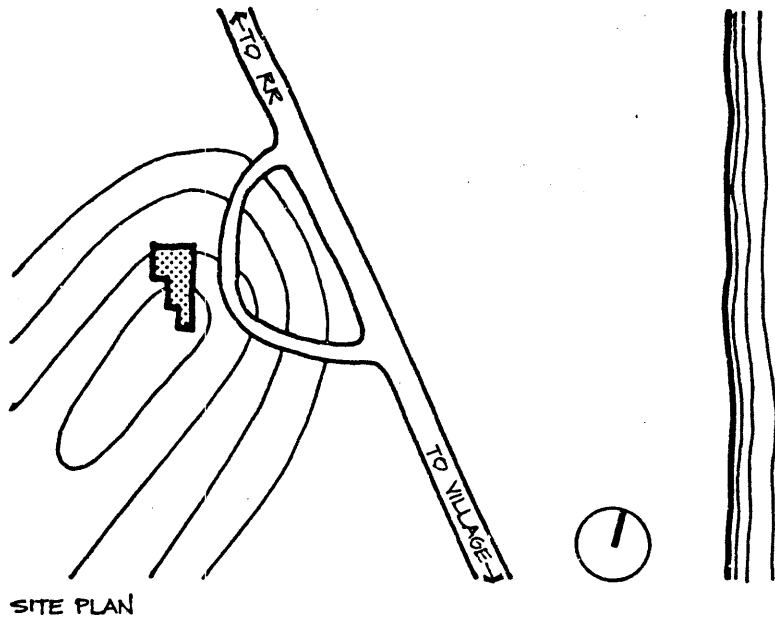could both work and receive people seeking
counsel.

Almost from the beginning its qualities
were appreciated. Mariana Van Rensselaer,
writing in 1888, particularly liked the
house and, in fact, chose it to the
exclusion of the presently more famous
Stoughton house in Cambridge, which it
antedates by a year. Giving a hint of
the flavor of an experience of the original
house, she wrote:

A country house for the Rev. Percy Browne at
Marion, Mass., was designed in the last months
of the same year. It is one of the smallest
structures that Richardson ever built, and,
I believe, the least expensive; yet in its way
it is a great success. It stands on the crest
of a short but steep slope overlooking a road
in the outskirts of the village, beyond which
lie flat meadows and the not distant sea. It is
very low and comparatively very long, with many
windows in broad groups, a loggia in the centre
of the front, a piazza at one end and across a
portion of the back, small dormers, and low but
massive chimneys. Its foundations follow with
delightful frankness the variations of the ground
upon which it stands, while its good proportions
and the harmonious arrangement of its rooflines
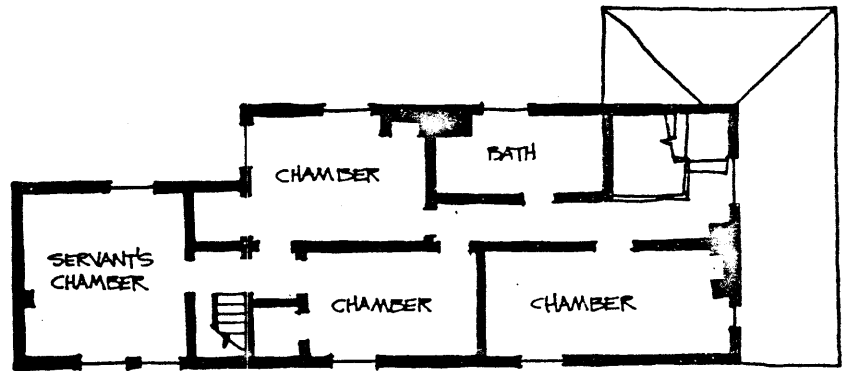give it that truly architectural character in

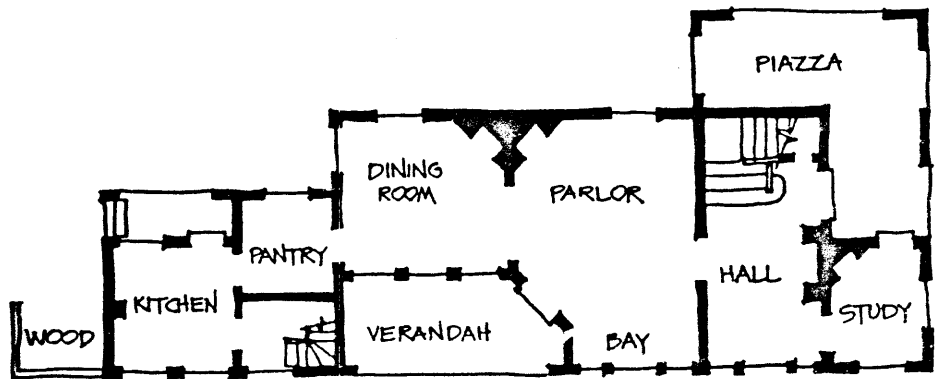REAR OF PERCY BROWNE'S HOUSE, MARION.

which dignity may lie for the most modest
building. It is so appropriate to its surroun-
dings that it seems to have grown out of them
by some process of nature, and it is equally
appropriate to its purpose. It explains itself
at once as a gentleman's summer home, but with a
simplicity which does not put the humblest village
neighbor out of countenance. Inside, the planning
gives an unexpected amount of comfort and air of
space. The doorways are very wide, and are so
arranged as to afford a diagonal instead of a
straight perspective. The windows are carefully
placed to command every possible point of outlook,
the rear views toward woods and sunset being as
much considered as those which show the sea. The
longer one studies this house the better one
likes it, the more typical it seems of that sort
of excellence which the American owner so often
craves--artistic treatment combined with cheap-
ness, comfort with small dimensions, beauty with
simplicity, refinement without decoration.
Outside, the only touch of ornament is given by
the varied shaping of the shingles, and inside,
pleasant tints alone relieve the plainness of
the woodwork, and good outlines the severity of
the chimney-pieces. It has sometimes been said
that Richardson took so much interest in great
problems that he had none left to give to small
ones. But no one could have more carefully
stidied a little house like this, the cost of
which, exclusive of foundations, barely exceeded
twenty-five hundred dollars.[1]

SITE PLAN

CHAMBER

BATH

SERVANT'S
CHAMBER

CHAMBER

CHAMBER

SECOND FLOOR

PIAZZA

DINING
ROOM

PARLOR

PANTRY

HALL

KITCHEN

WOOD

VERANDAH

BAY

STUDY

FIRST FLOOR

Looking at the total form
of the house, one can pos-
tulate a base form which
embodies a resolution of
the program: an ensemble
of three houses--a gambrel-
roofed barn to house the
service wing, a hip-
roofed cottage to serve
the pastor, and a square
gabled main house for the
shared activities of the
family. As specific,
familiar forms, these
three·houses can serve as
a base on which the pos-
tulated sequence of
distortions can be applied,
but as a model for the
experience of the space
they contain, they are
incomplete. One of the
illustrations of the first
presentation noted that
there are two ways one
might be said to concep-
tualize space: one way
attends to the specific
boundaries of a space,
seeing space as if a
vacuum inside an empty
box--the type of concep-
tion modeled by the three
specific, hard-edged house-
forms; but the other
type of conceptualization
focuses inward upon the
space itself, viewing
space as an almost palpable
substance, having extent
and therefore boundaries
but no "hard" configura-
tion. As this analysis
proceeds, it will become
apparent that, in the case
of the Browne house, these
two space-conceptions are
in tension with each
other; that is, while
the specific shape of the
building envelope suggests
that it can be divided
into three empty, hard-
edged boxes, other spatial
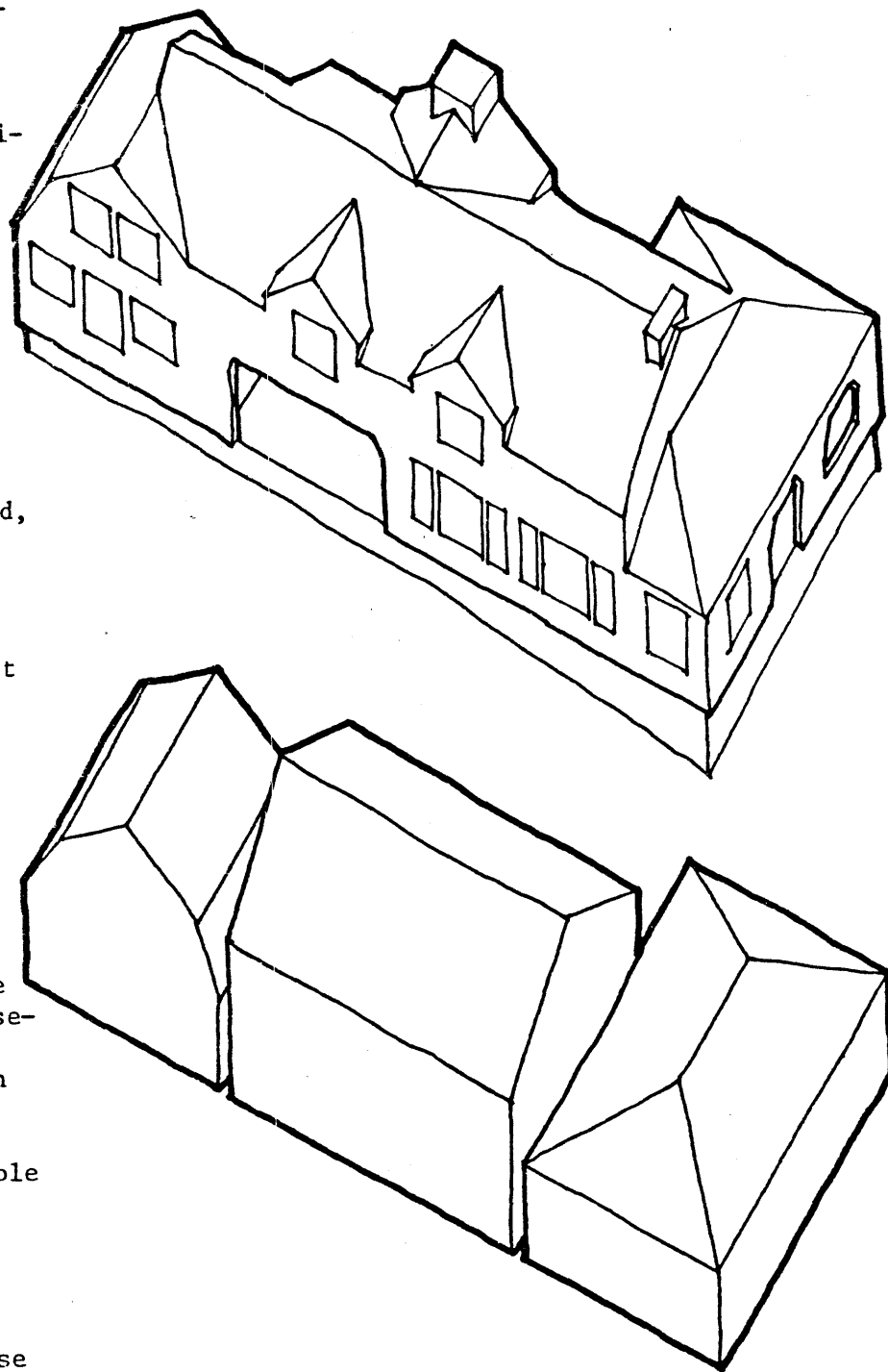
cues will be seen that
just as strongly suggest
alternative arrangements
of the palpable spaces
of the second type within
the same building envelope.
To distinguish these two
types of space-conception,
I will adopt the conven-
tion of speaking of spaces
of the surface order
(space as a hard-edged
empty box) and spaces of
the volumetric order
(space as a cloudlike,
full volume).

If one thus looks at
the three sub-houses as
spaces in the surface
sense, one can visualize
an arrangement of shapes
that would model an
analogous volumetric
conceptualization of the
spaces: a tall, narrow
shape next to a cubical
shape next to a low,
long shape. Thus there
can be seen two base
forms which will interact
in the analysis: the
three houses are the
base form upon which one
can display distortions
of the surface order,
and the three shapes are
the base form upon which
one can display distor-
tions of the volumetric
order.

Just as the surface-
order base can be analyzed
as a reflection of the
building program, so the
volumetric base form can
be seen as a reflection
of the hillside site
upon which the house sits:
a progression from a tall
compressed form, grading
through a stable compact
shape, to a low spreading
form. But recall that an
additional site condition
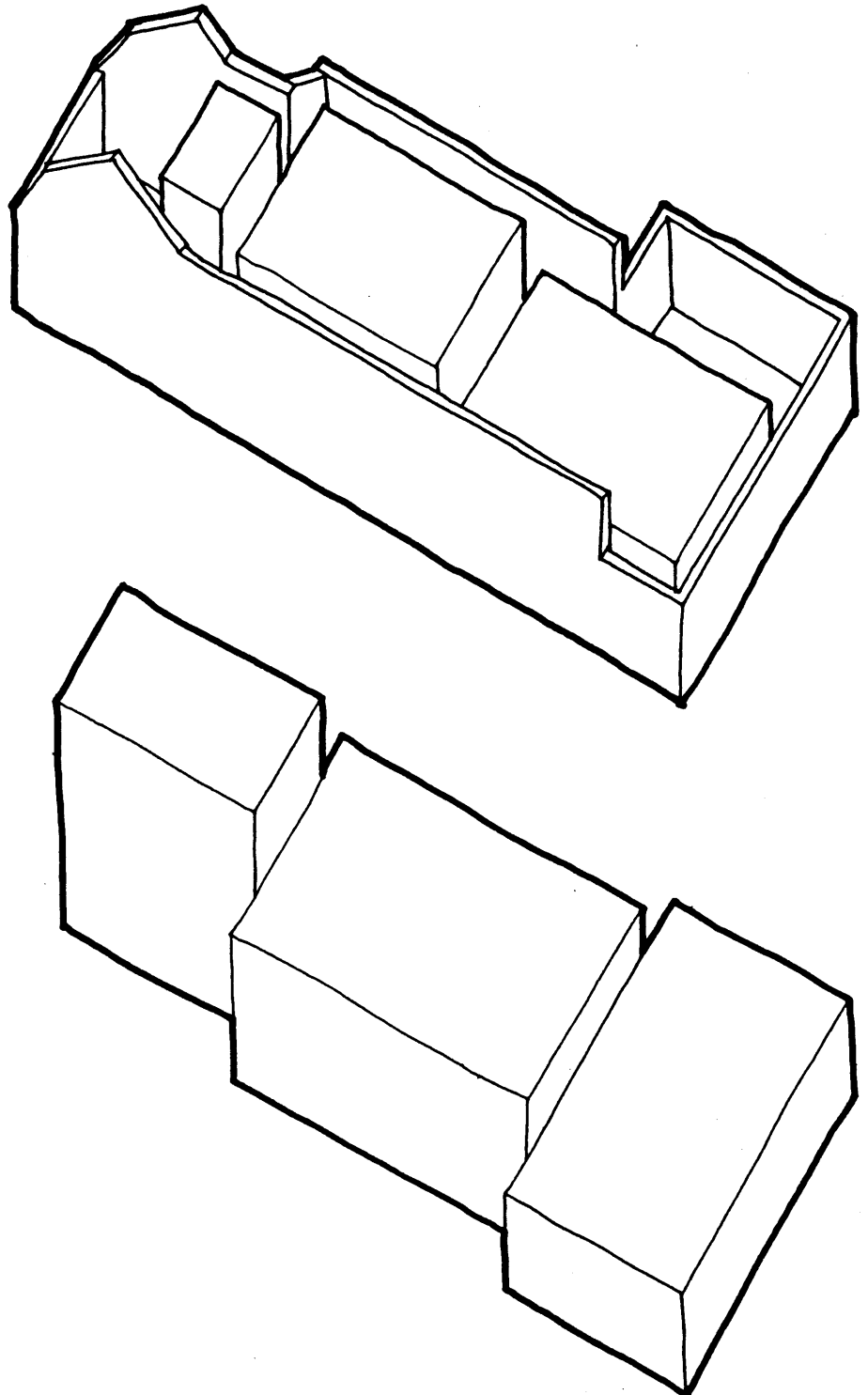
is the fact that the
house sits parallel with
and facing the ocean:
the forms can be seen as
acknowledging this con-
dition by their being
aligned along a plane
that enfronts the ocean.
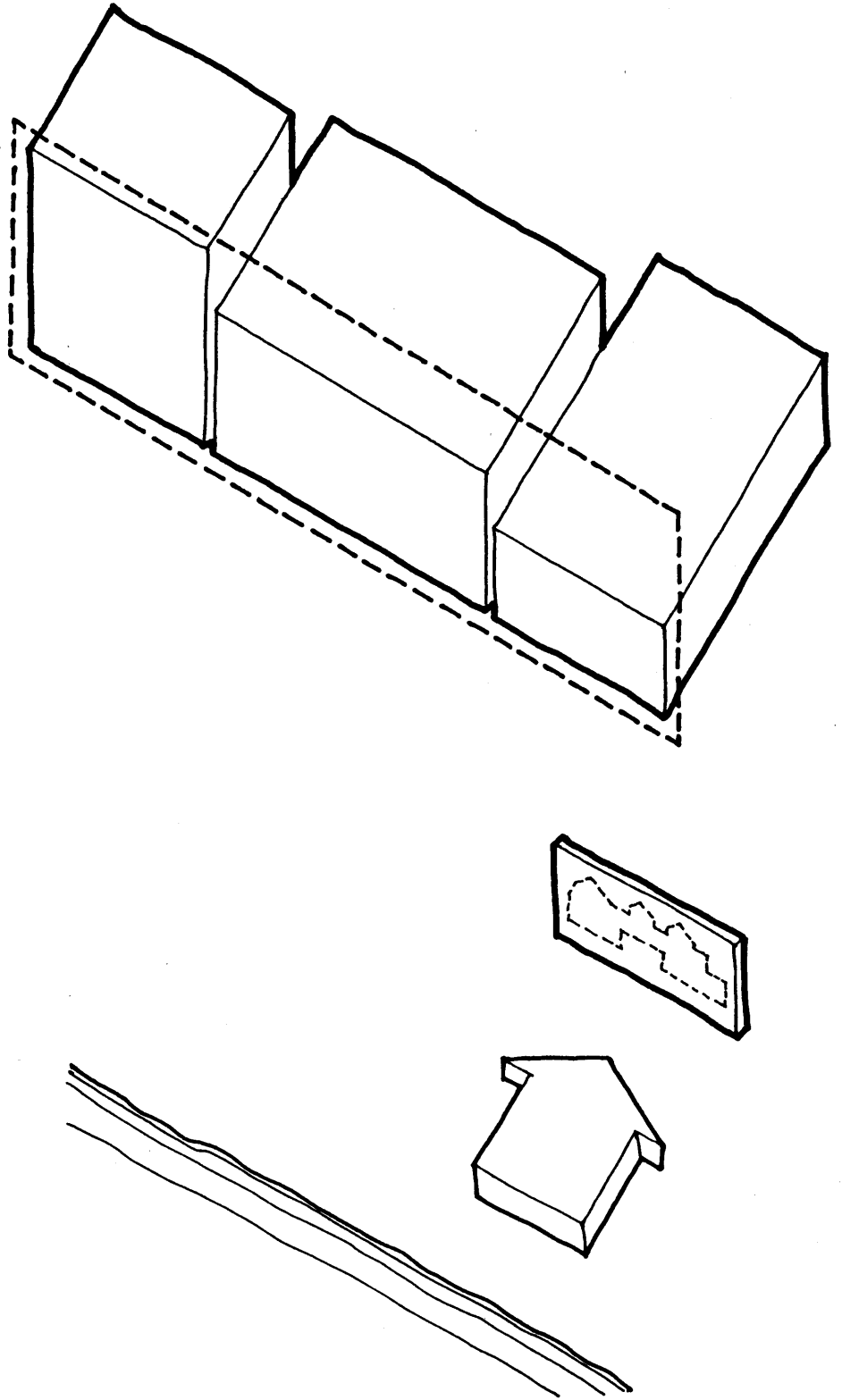
This plane, in fact,
can be seen as a link
between the volumetric
and surface orders--as a
hard edge against which
the soft volumes are
tensed, as if pinned
against it and seen in
cross-section. The
analogous devices by
which actual interior
volumes are linked to the
outside of a building
are windows; and if
one postulates a base
arrangement of windows
upon this plane and
observes the distortions
necessary to bring this
base arrangement into
conformance with the final
configuration, these
shifts in placement can
be read as indicating
shifts in the volumetric
spaces behind them. These
volumetric shifts can then
be interpreted as acknow-
ledgements of aspects of
the building situation--
interpretations which, in
turn, are lent plausibi-
lity by their being indi-
cated in ways in addition
to the window shifts.

Let us postulate the
illustrated pattern of
windows in this base plane:
one can see that each of
the three groups of
windows reflects both the
volumetric- and the
surface-order spaces
behind it: the pair-over-
triple arrangement of the
kitchen house fits easily
into the gambrel profile,
the widely-spaced pair of
the pastor's house
reflects the spreading
quality of the hip roof,
and the close-spaced pair
of dormers-over-triples
befits the dual nature of
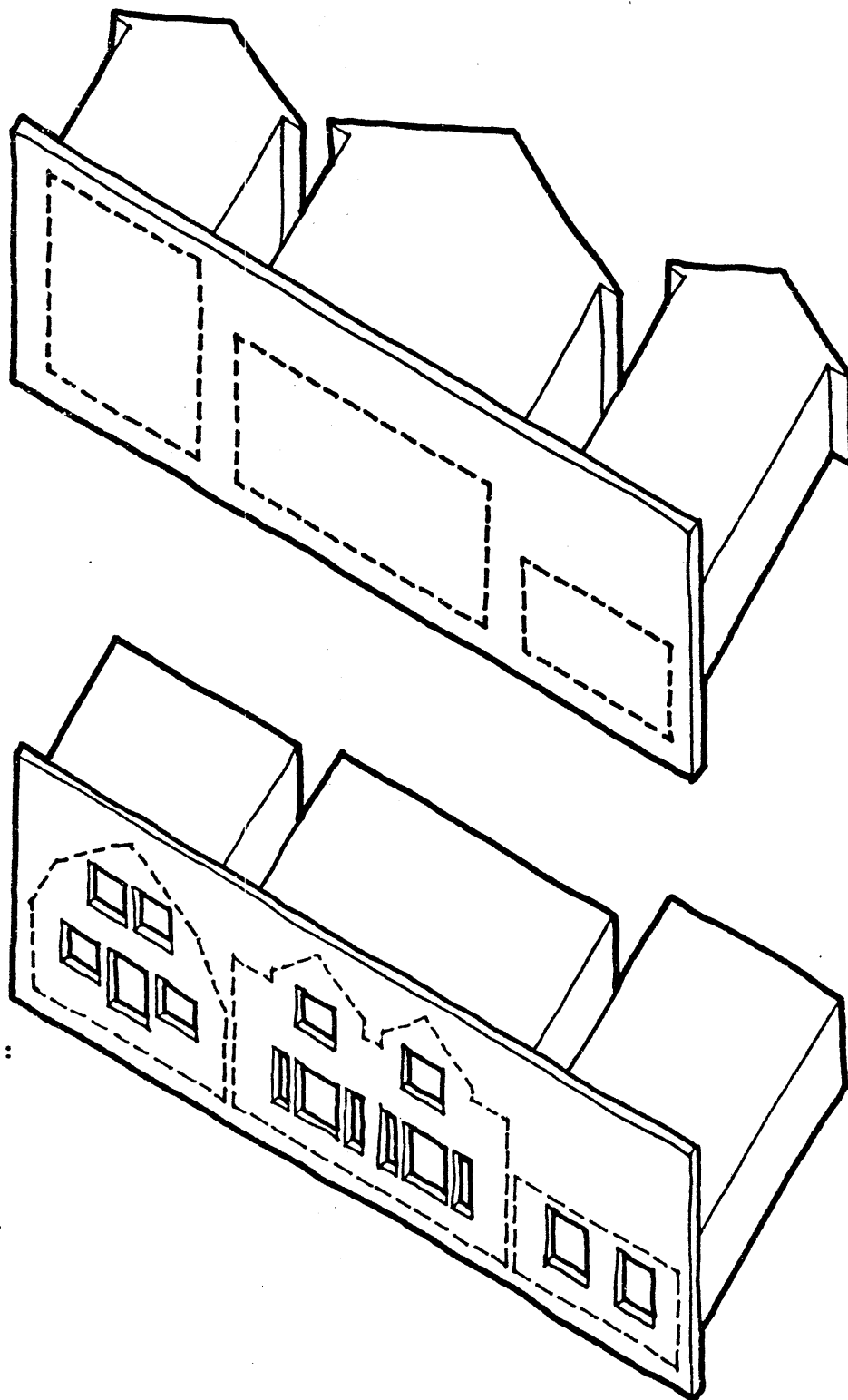
the nearly-cubical gable
box that, because of its
shape, seems to focus both
centrally (toward the
center of its facade) and
laterally (along the
breadth of its facade).
Given this base arrange-
ment, the sideways shifts
necessary to move the
windows to their final
positions can be seen (on
one level) as reflections
of a lateral expansion of
the central volume that
interlocks the three
volumetric shapes: the
windows of the kitchen
house shift left; and on
the right hand, one of
the dormers moves right,
and the pair of triples
moves so far as to push
one of the pastor's win-
dows around the corner.
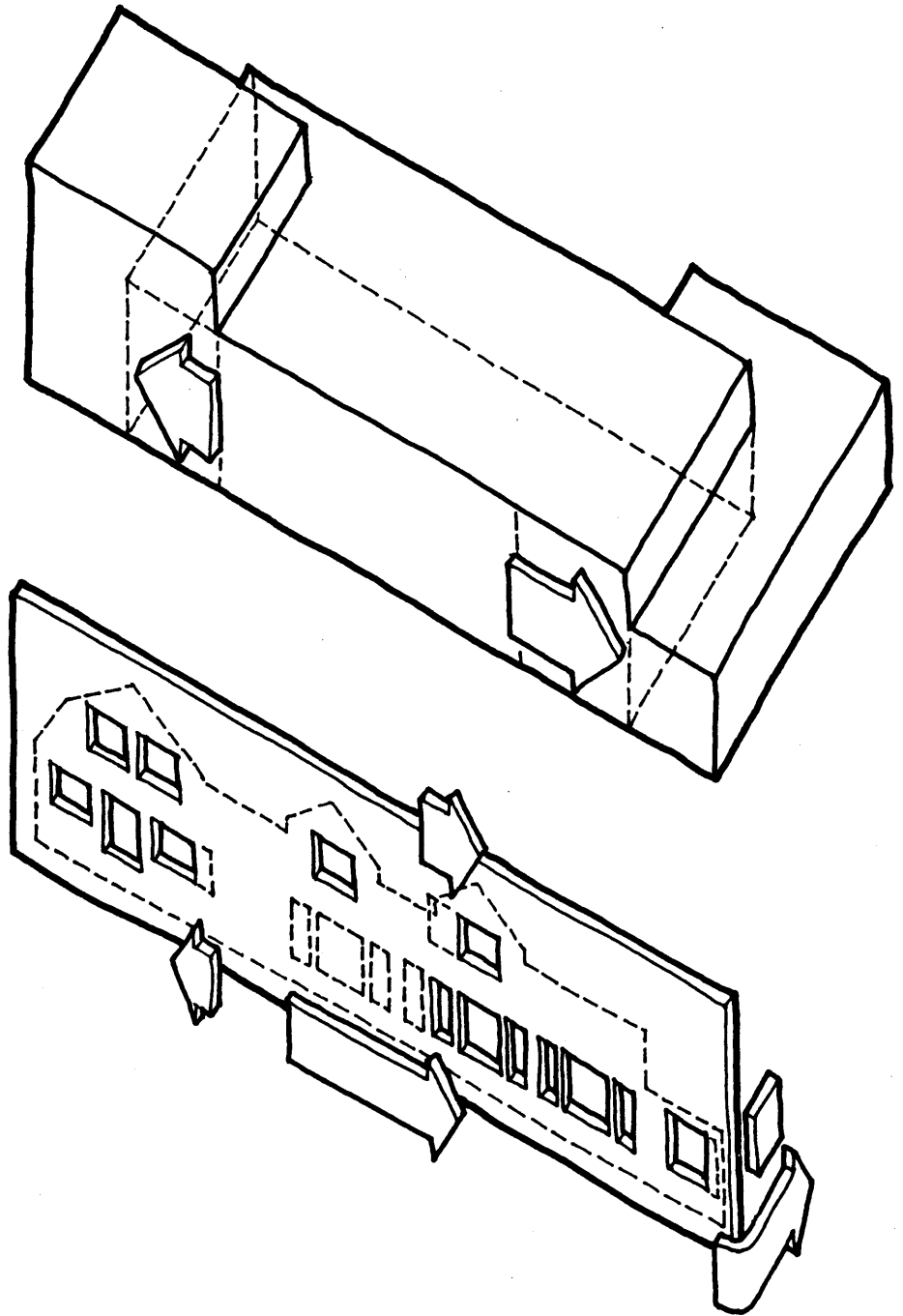
These window-shifts can
be analyzed as reflections
of several more conditions,
but first note the conse-
quences in the specific,
surface order of this
interlocking in the volu-
metric order: the center
gable box extends and
penetrates halfway into
into each of the houses
beside it; but note that
in front the center
house overlaps the side-
houses, while from the
rear the two side-houses
are seen to overlap the
(extended) center form.
This double reading can
be analyzed as a way in
which the ensemble, even
though linked, remains a
true embodiment of the
three-part program; that
is, by virtue of both
overlapping and being
overlapped, the ensemble
is prevented from appearing
as a dominant family house
with two subordinate
wings.

(But more crucial to an
understanding of this
analysis is the fact that
this same ambiguous over-
lapping defeats any notion
that the tripartite divi-
sion of the base form is
the only correct basis
for a perception of the
form of the house; in
precisely this optionally-
viewable sense, by being
overlapped, these forms
are underlined at four
reasonable places.)
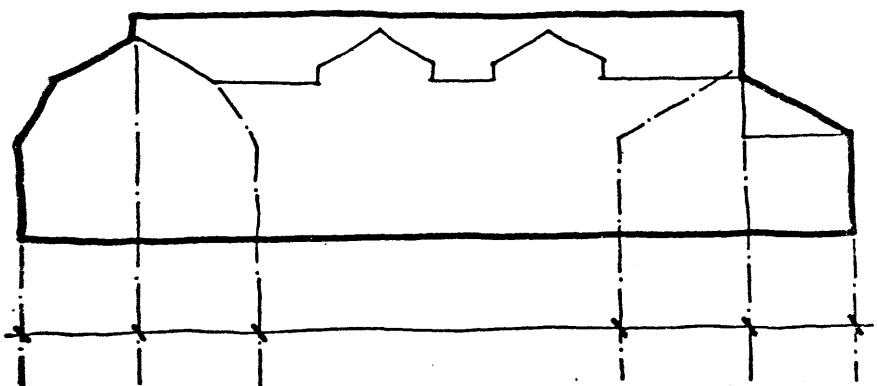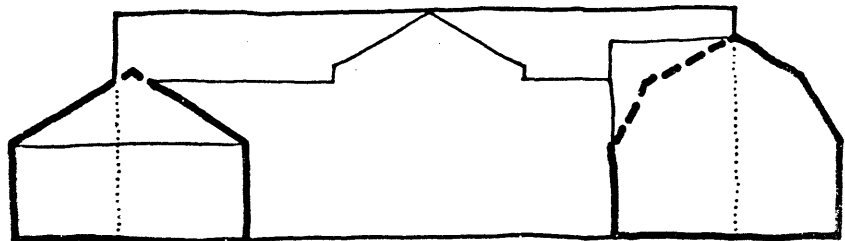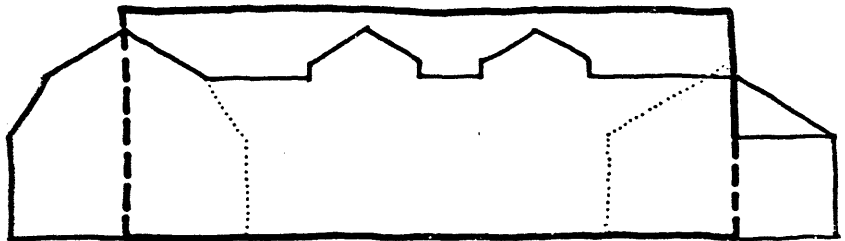
Now recall the pattern
of movement of the win-
dows: the windows of the
first story moved to a
much greater extent than
those of the second
story--giving rise to·
the perception that,
besides being seeable as
a single plane, the facade
can also be viewed as
articulated into three
bands, each of which
moves at its own rate.
(This banded interpre-
tation is given plausibi-
lity by the two flaring
courses of shingles in
the actual house--one
above the first-floor
window heads, the other
at the foundation.) This
extension of the first-
floor band can be analyzed
as an acknowledgement of
three of the postulated
building aspects, the
first of which is <u>formal</u>
<u>predisposition</u>.

Recall that one of the
purposes of the model is
to provide a plausible
account of "why a building
is that way;" with the
aspect of formal predispo-
sition, the question to
be answered is why each
of the three houses takes
that shape and not another;
that is, if one accepts
each roof shape as a given,
the model should provide
a convincing reason for
why each shape was not,
say, longer or wider.
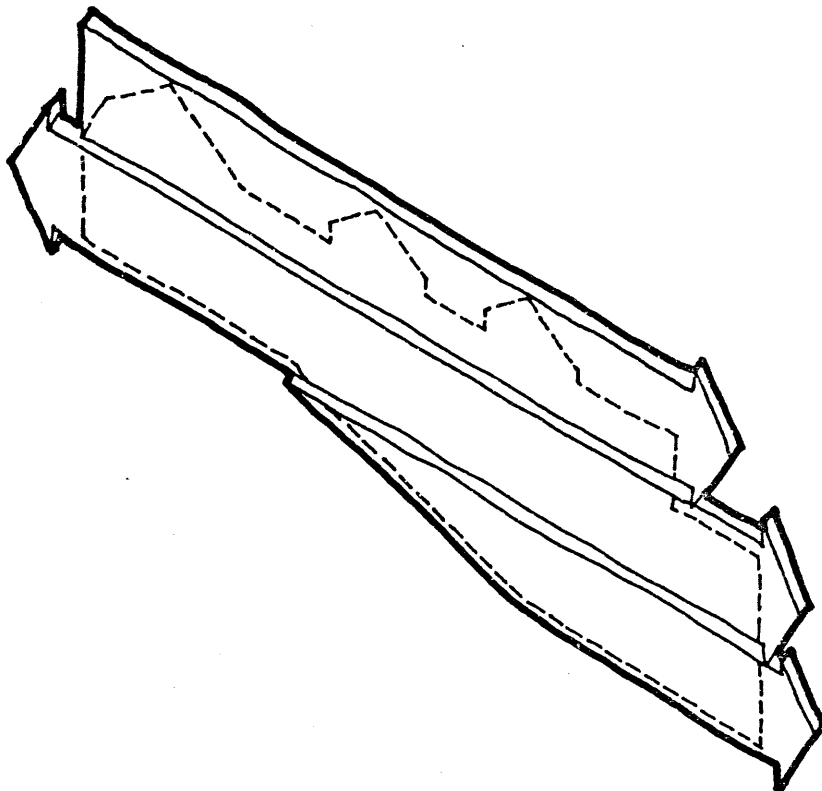
Specifically, both the
gambrel-roof and gable-
roof shapes could be
extended in the direction
of their ridge-lines and
still retain the basic
character of their roof
shapes, and in like
fashion the hip-roofed
form could spread outward
and still remain a hip
roof. But the articulated
facade can be seen as
stopping or containing
this potential expansion:
the gambrel-roof barn
can be thought of as
straining against the
front plane (an analysis
given plausibility by the
fact that a portion of
the barn's rear wall leans
toward the front plane);
the center gable-roof box
is contained by the double
overlapping mentioned
above; and the L-shaped
extension of the first-
floor band checks the
spreading of the pastor's
house (except at the rear
where the roof has a pro-
nounced "kick," as if
ready to spread itself
outward).
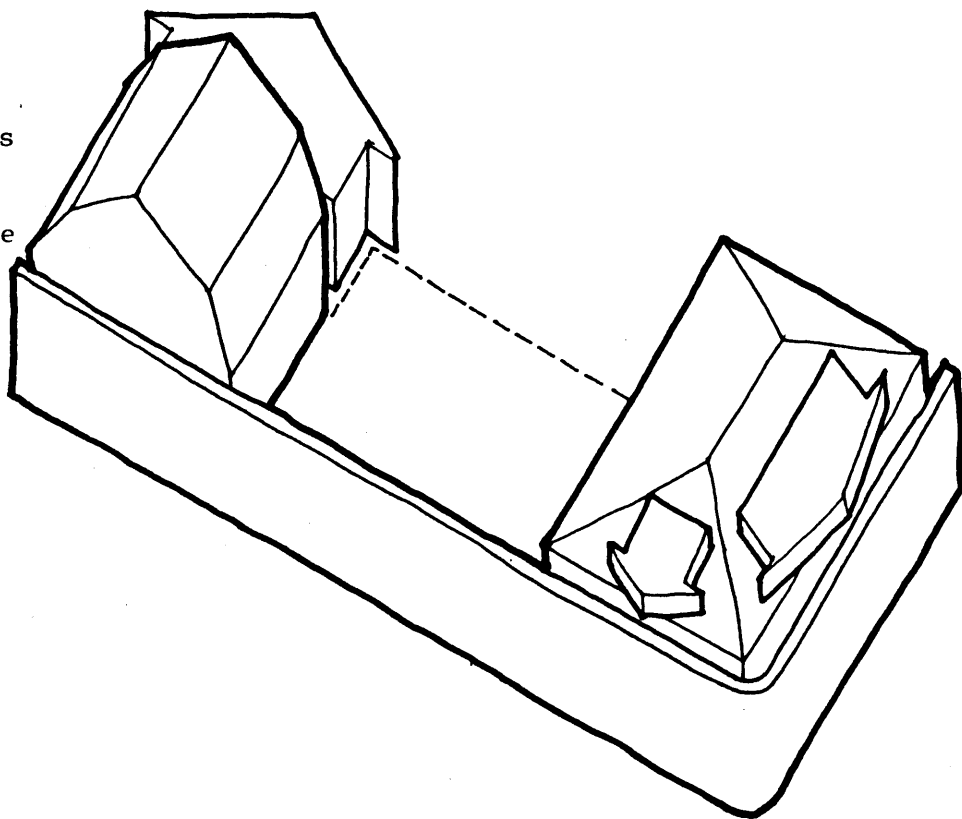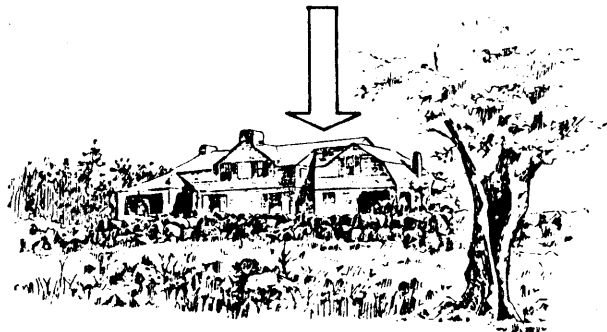
The second aspect being addressed is <u>site conditions</u>, in that, by extending the plane of the facade around the corner, the total ensemble can be seen to enfront both the ocean and the hillside.

Thirdly, if one focuses specifically on the first-floor band, one might say that, in stretching around the corner, the band has "snapped" at the area of the front porch (a reading made plausible by the lip that reveals the thickness of the actual facade plane). This break can be seen as an acknowledgement of <u>movement</u>, in that it both allows and locates entry into the house.

The movement aspect raises a number of issues, but they can be dealt with by keeping in mind the basic analytical method being employed here: that is, to postulate a reasonable expectation, to note how an observed deviation moves away from that expectation, and to analyze that movement as acknowledging one or more aspects of the building situation.

With entry, the reasonable expectation (all other things being equal) would be to enter the form at its centerline: by occurring where it does, this break in the facade locates entry at the centerline of the total facade <u>plane</u> and not, as one might expect, at the central axis of the <u>volume</u> of the center house. By this reading, one is
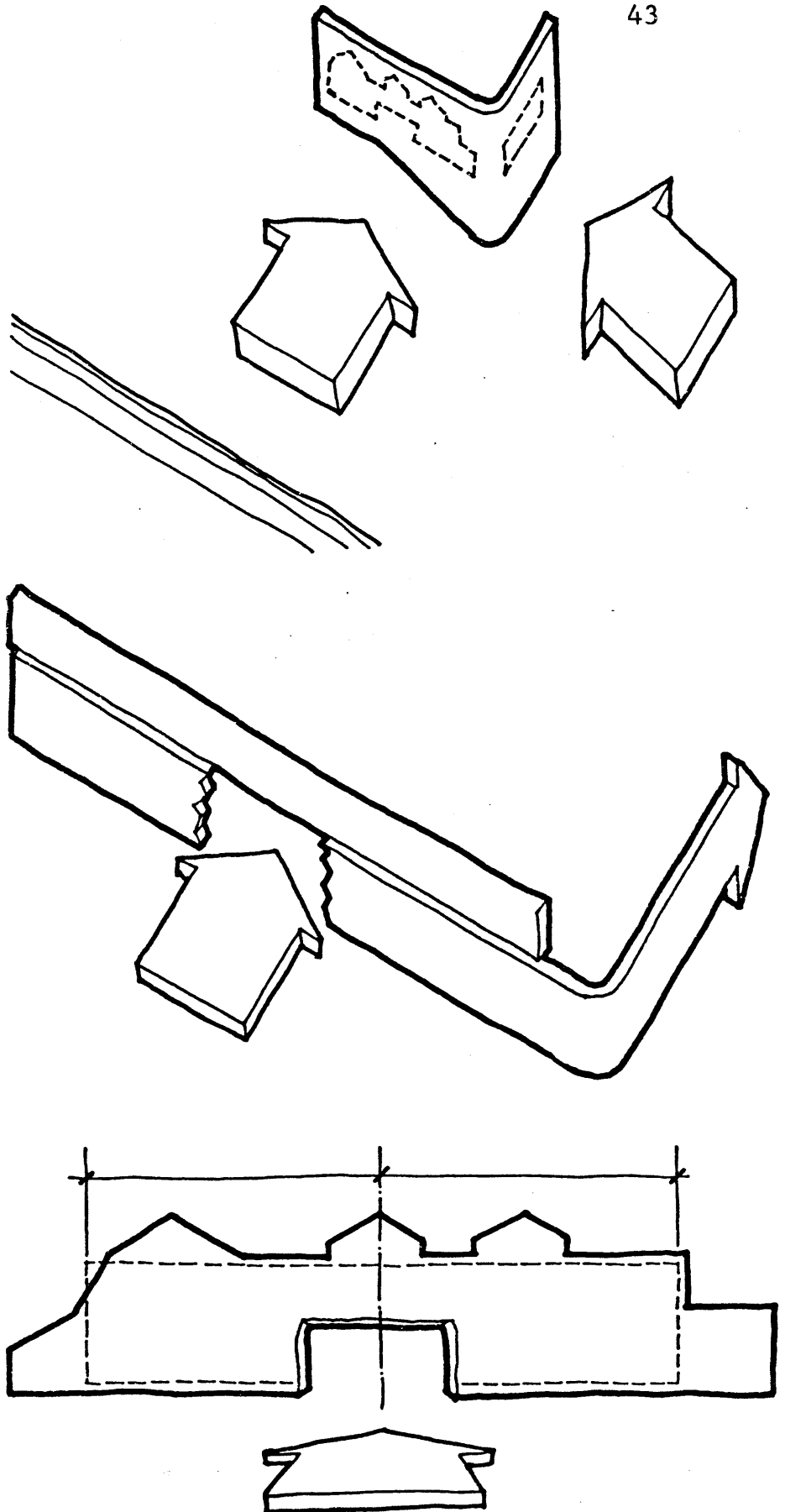
led to the postulation
(which remains to be shown)
that, in this house,
movement is related
primarily to surface; that
is, acknowledgements of
the requirements of
movement can be found by
looking for distortions
of the specific spaces of
the empty volumes of the
surface order.

Following this reasoning,
if one considers the
porch as a kind of prelude
to entry, then its
specific shape might
be seen as a distortion
from the expected (base-
form) shape of a vesti-
bule. And just as the
specific shape of the
vestibule suggests a
natural path along the
axis of the two openings,
so the distorted shape
of the porch volume
engenders its own natural
path of movement, one
that receives movement
from any point along the
broad front step and
turns it toward the
door along the diagonal
axis.

Recalling the supposi-
tion that movement is
associated with the surface
order, note that the dia-
gonal axis of the porch
is parallel to the line
that connects the ends of
the L-shaped facade plane;
one might thus say that,
if the notion of pene-
trating the house volume
reflects ("makes one
aware of") the front
surface, the actual
act of entry, by
occurring upon this
diagonal, reflects the
total surface (and thus
the total surface-order
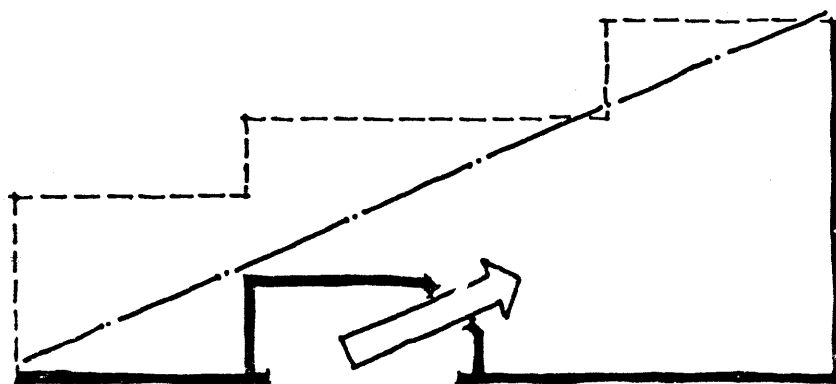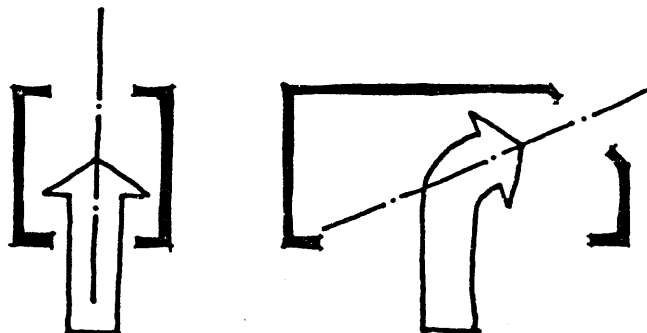
space) of the combinatory
form. Again the path of
movement is distorted to
acknowledge an other-
than-expected aspect of
the building situation,
the two-fronted nature
of the site.

Now, once entry is
accomplished, the path
through the house ought
to be analyzable as a
reflection of the basic
programmatic require-
ments of movement. Once
again, a deviation from
the normal program for
a dwelling occurs in that,
in addition to providing
a circulation armature
for the family's move-
ments through the house,
the path of movement
must also provide visiting
parishoners with a
reasonable, natural path
from the front door to
the pastor's study. And
once again the "natural-
ness" of the path is main-
tained by distorting the
expected pattern in a

manner which reflects the
unique requirements of the
program.

In the normal, four-
square American house, the
pattern of movement one
might expect to encounter
upon entry would be a
cross of three branches:
directly ahead, on the
axis of movement, the
stairs; perpendicular to
this axis, two opposed
paths, one to the intimate
family quarters, the other
to the more public area
for guests and family
together. In the Browne
house this expected
pattern is maintained but
doubled to reflect the
dual nature of the house.
This doubling of movement
can be analyzed as having
its source in the very sa
same side-shift of surfaces
that extended the facade
plane and provided the
rupture for entry: that
is, the stairs (shown in
the base form of a spiral
cylinder) can be seen as
shifted from their normal
place of facing the entry
axis to a new position in
which they face the turned
axis of entry. In this
manner, the path from
the front door to the
stairs is stretched and
the branching cross-paths
are duplicated--the first
set for the family (leading
to the intimate, family-
only dining room and the
family-and-guests window
seat), the second for
guests (leading to the
living area where close
friends would be enter-
tained and to the recep-
tion hall where the
parishoners would be
received by the pastor).
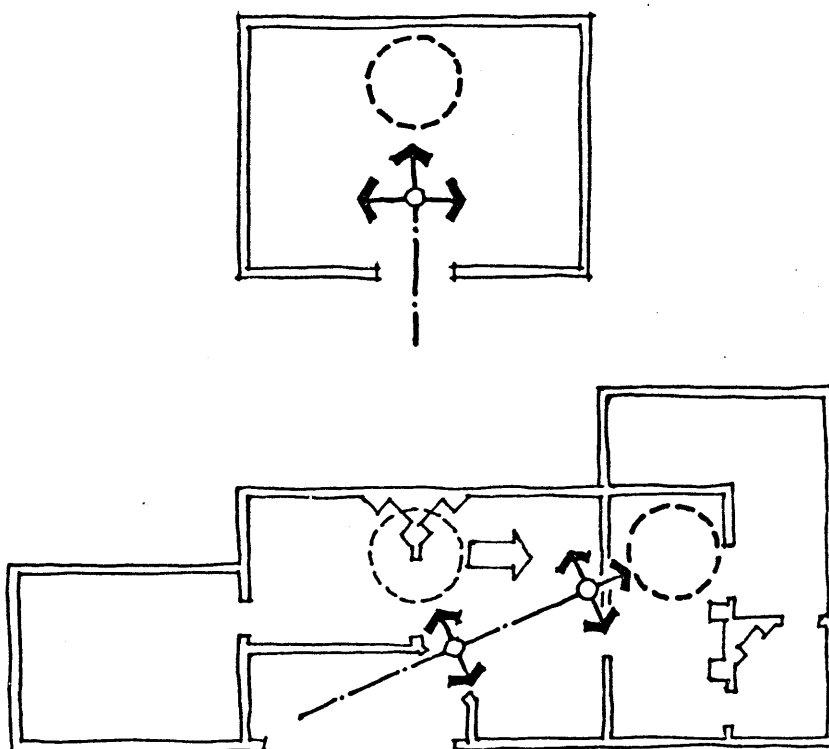
One more aspect of the
stair arises in its
formal predisposition:
that is, if the stair is
seen as shifted, what is
a convincing reason for
its not being shifted to
a different extent? An
answer can be seen if
one postulates a base
relation in which the
stair sits astride the
centerline of an entry
facade. Recalling that
the first-floor band was
seen as ruptured at the
porch, one can look at
the resulting portion of
that band as the facade
of that part of the house
involved with parishoners.
The stair might thus be
thought of as positioned
on the diagonal axis of
this bent plane; and
indeed the openings in
this facade are symmetri-
cal about this diagonal
axis. But an even more
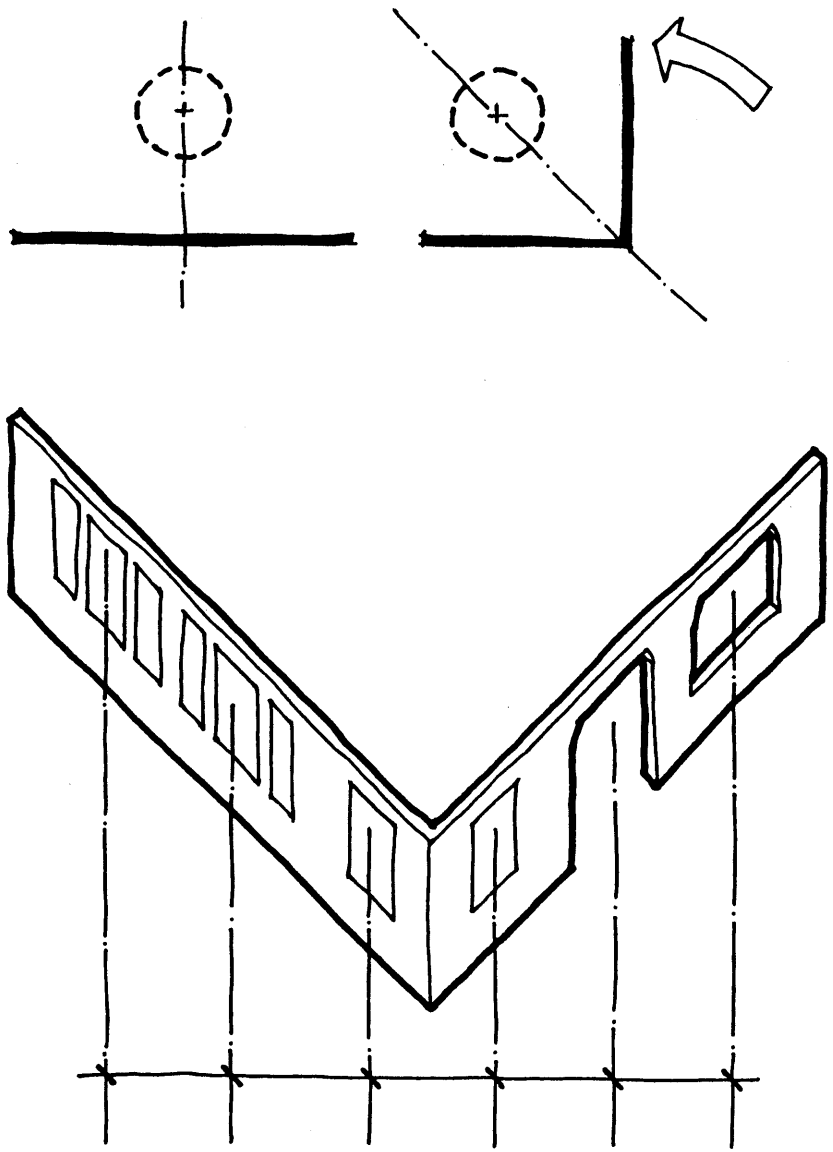
intriguing explanation
results if one imagines
a base form for this
portion of the house: by
straightening out the
facade by rotating the
two diagonal halves about
the cylinder of the stairs,
a base results that repli-
cates the spaces associa-
ted with the three-branch
movement described above.
The "unexpected" confi-
guration of the spaces
associated with the
pastor is thus given a
rationale: the pastor's
spaces can be thought
of as the result of a
doubling or stretching
of the traditional resi-
dential space-pattern to
obtain new spaces required
by a unique program.   But
the most important facet
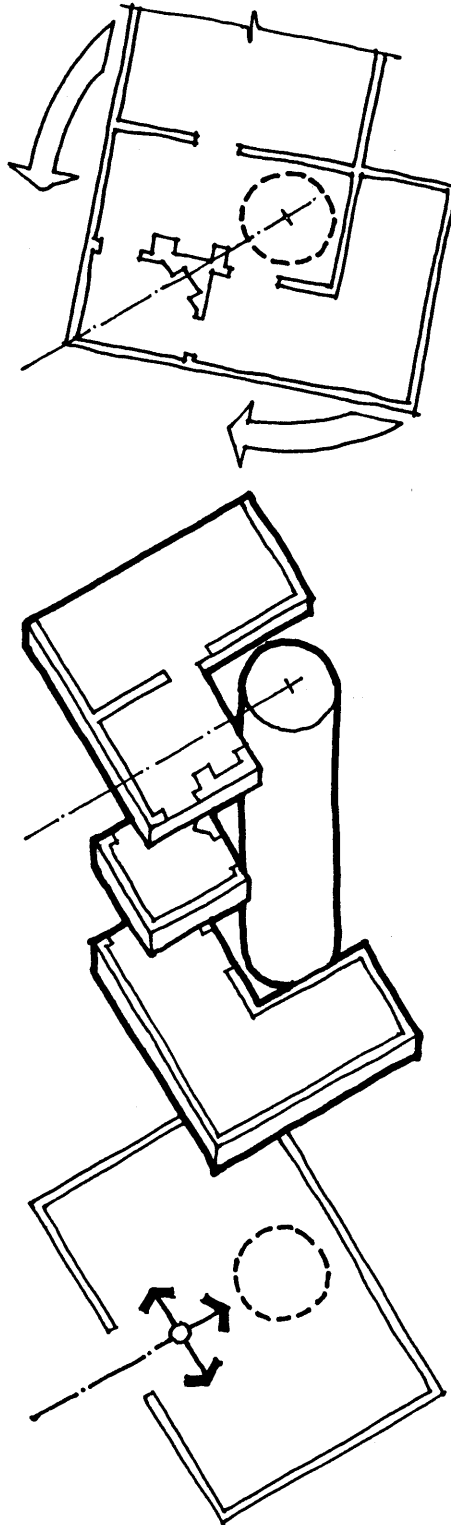
of this reading is that
even though one is hereby
given a reason for seeing
these spaces as a group,
one cannot reasonably
imagine the group broken
off completely from the
whole: in the truest
sense of the word, the
pastor's spaces are
articulated--simultaneously
integral and separate from
the whole house.

I can, in fact, recap
the analysis by illustra-
ting all the possible
points of articulation
that the analysis makes
reasonable. This diagram
shows how integration can
indeed be achieved through
ambiguity: by setting up
a whole series of ways in
which one could concep-
tually divide up the space
of the house, no one
division-scheme can claim
priority. And in this
way one can see how
the unavoidable conflict
and ambiguity of the
situation of the Browne
house has been resolved
and manifested in a
satisfying, reasonable,
and pleasing manner.
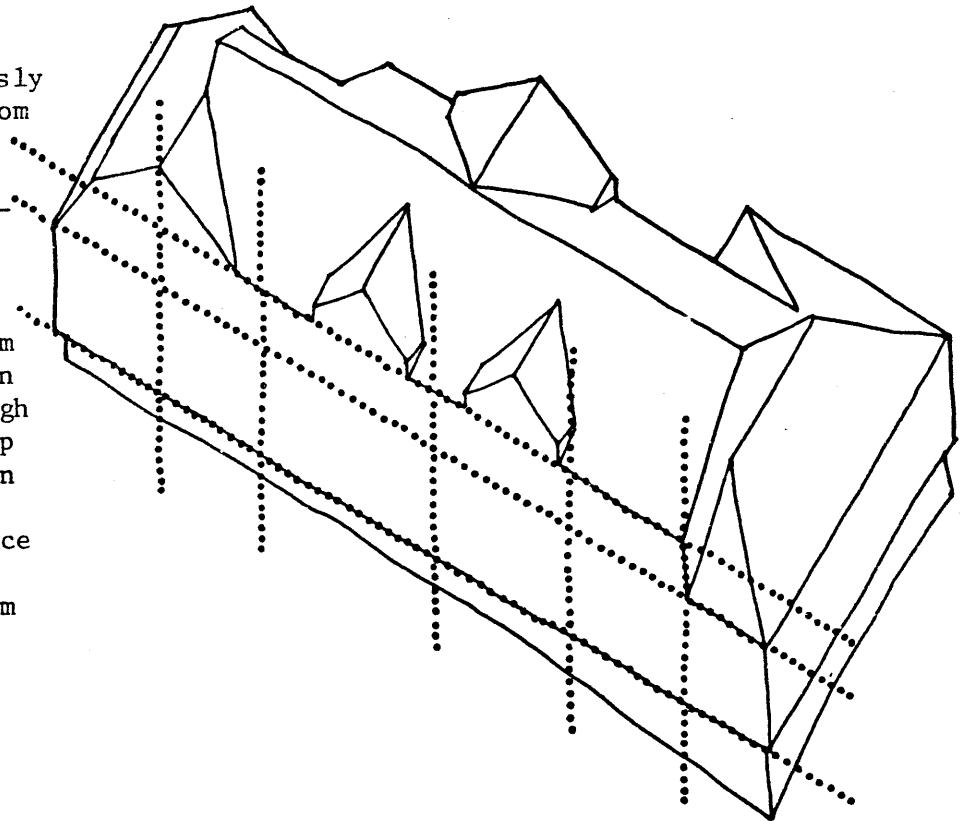
Renovation Prelude

Two insights can be drawn from the Browne
house analysis that have particular impor-
tance for the designs that follow. The
first is the realization that, in most
cases, a given deviation could be seen as
an acknowledgement of more than one building
aspect; for example, the shift in a portion
of the facade simultaneously allowed for
the movement of entry, contained the hip
roof's formal predisposition, and acknow-
ledged the hillside site condition.
Secondly, this acknowledging was achieved
not by adding forms that would "express"
but which would be superfluous to the
actual programmatic requirements of the
building; but rather, the acknowledgement
was achieved by subtle and not-dysfunctional
distortions of only those forms that the
building situation called for.

Recalling the earlier concept of the
enactive use of space, one can see how the
these two notions--which might be termed
multiple suggestiveness and intentional
distortion--describe the character of an
environment intended to be used in an
enactive manner. In contrast to the aggres-
siveness of much of modern architecture,
these ideals describe an architecture
that does not force the viewer, willing
or not, to confront its vision of reality,
but rather accords the viewer the option
of viewing it--and rewarding the willing
viewer with a richly-organized repertoire
of parts, offered up in such a way that
he can not only use as many of them as he
wishes and draw from them whatever meaning

Intentions and inter- pretations.

Note that I have not said that the object should reflect the intentions of its designer. This study has consciously avoided the whole issue of "what the artist meant," both because I feel that second-gues- sing the artist has little to do with the type of ordinary-but- informed perception I have been discussing, and because I am con- cerned with assuring building-users the maximum freedom, both of action and imagination. I feel that it is important, however, that the ordinary viewer not read profound meaning into an object that is purely utilitarian or expedient; I likewise feel that the viewer should not impute a structured import onto an object that is the product of mere caprice. Thus I am proposing that the goal of the viewer should be, not to find the specific intentions behind an object, but only reasonably to estab- lish that it is inten- tional. From this proposition flows the goal of reading only intentional (and thus non-expedient) distortions

he can, but he can also choose to ignore them and not use them at all.

More specifically, in the case of objects distorted to reflect intentionality, by virtue of their being also objects for use, the viewer is not forced at all times to see them as objects for expression; but rather, when he wishes to, he may exercise his option to contemplate them on whatever level he chooses. For even in the case of interpreting these intentionally-distorted objects, the viewer is accorded freedom of action: multiple suggestiveness assures that there can be no single "correct" reading to which the contemplative viewer would be limited.

The question now arises as to how one would manifest forms in such a way that they possessed these two desired charac- teristics. Some possible strategies for achieving multiple suggestiveness and intentional distortion are discussed below; all of these strategies--and others as well-- are utilized in the designs that follow this section.

SUGGEST MULTIPLE USES

One can see that, as a vehicle for the accommodation of a maximum of uses, a multiply-suggestive space stands as an alternative to the anonymous "universal" space in that, while both represent the attempt to avoid the situation in which forms would favor one particular activity to the exclusion of all others, the stra- tegy of the anonymous space is to avoid the suggestion of any activity, while that

of only those objects required by the building situation (and thus non-capricious).

Also note that this is an ideal, a goal toward which to direct one's efforts but which one would never achieve in practice.

This idea is approached from a different perspective--and more fully discussed--in the second presentation on pages

of the multiply-suggestive space is to suggest a range of possible uses. But what is more, multiply-suggestive spaces exhibit a kind of synergy in that, by providing a rich array of cues, the space allows the user to assemble not only those combinations of cues foreseen by the designer, but also to make other combinations for use in staging activities unforeseen in the program.

In actual practice, of course, the extent to which a space can be multiply suggestive is limited by at least two factors--the equipment it contains and its absolute size. But both of these limitations can be partially overcome by the design strategies discussed below.

PROVIDE IGNORABLE EQUIPMENT

It is often the case that an activity to be staged in a space will require the use of facilities specific only to that activity; this equipment might range in size and permanence from built-in cabinets used in cooking through large wardrobes for dressing to portable projectors for showing slides. But in any case, the ideal of multiple suggestiveness implies that the specialized equipment should be configured in such a way that, when other activities are taking place, the users of the space can "ignore" that equipment's implications of a different activity. This goal might be met by making the equipment unobtrusive or literally concealable, but it also might be achieved by making the equipment itself suggestive

of multiple readings--for example, the
sink that can sit easily in the bedroom
because it is set in the counter of a
vanity that looks like any other piece of
furniture.

SUGGEST SPACE-COMBINATIONS

Different activities seldom fit con-
gruently into the same enclosure; their
performance nealry always requires dif-
ferent amounts of actual space. The
conventional way of addressing this condi-
tion is to provide enough space for the
most demanding activity and let the other
uses occupy their requisite portions of
the same space. But the basic theme of
optional regrouping suggests that another
strategy might be to manifest spaces in
such a way that they could (conceptually)
be thrown together into many possible
combinations, each of which would be of a
size more nearly appropriate for the
activity to be staged. This concept is
the embodiment of the idea of articulation,
and an illustration of this ideal of
regroupable spaces--and the notion of
ignorable equipment as well--is provided
by a design for adaptable housing by the
Building Systems Group in London. In
this scheme the kitchen and bath are kept
unobtrusive, being placed at one end of
the unit, and the equipment of closets
has been manifested as portable wardrobes--
with the dual result that, by appearing
as pieces of furniture, their presence
can be ignored, and by being portable, no
room is irrevocably marked as only a
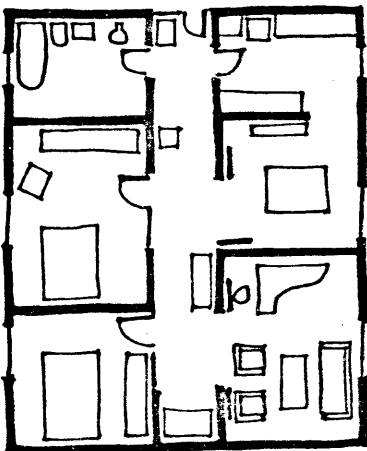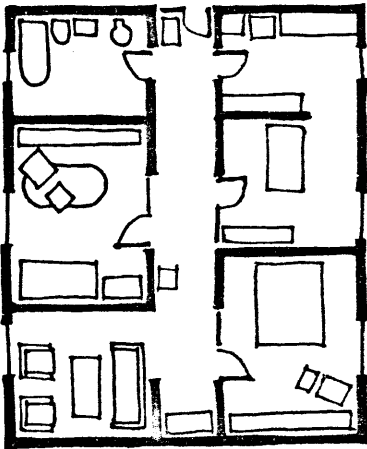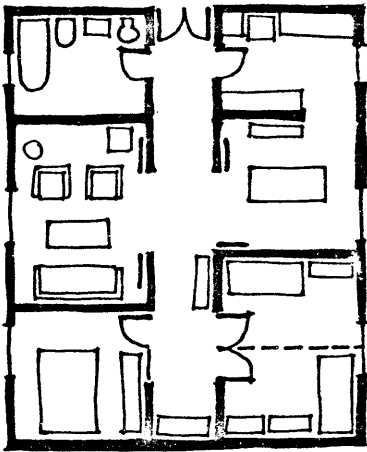
Economics of adaptability

The Building Design
Group found that, in
their design, this kind
of multiple suggestive-
ness did exact a premium
in that the unit required
more absolute square
footage than that speci-
fied by minumum standards.
But the Group also found
that, when compared with
other schemes to achieve
flexibility (provision
for additions, movable
walls, and so on), the
strategy of unclassifed
(but larger) spaces was
cheapest. See Architec-
tural Design, 2/74, pp.
79-90.

bedroom by the usual built-in closet.
The design also points up one method for
joining spaces with an optional articula-
tion through its use of the full-height
double door that a space-user can view
as a wall (both doors closed), as a con-
ventional door (one door open), or (with
both open) as an ignorable seam in a
continuous space.

One can see that the preceding examples
deal with the issue of the differing uses
of space that occur during relatively
short periods of time. But the design
principles also have implications for
designing for the long-term use of space--
for history. If one holds to the ideal
that an environment ought to offer the
viewer the maximum number of options for
both use and interpretation, then it
follows that, in the renovation of an old
building, the suggestions of uses and
readings embodied in the existing forms
ought not to be replaced but rather
maintained and added to. That is, when
one renovates a space for a set of new
uses, the principle of multiple sugges-
tiveness implies that not only should the
new forms offer their own multiple sugges-
tions of uses and readings, but one should
try to maintain those cues-from-the-past
that would suggest additional optional
uses to the enactive user and optional
readings for the contemplative viewer.
Likewise, the ideal of intentional distor-
tion implies that a renovator would limit
his field of intervention: that is,

just as he would not provide forms whose
only role was to "express," so he would
not provide forms whose sole function was
to "reflect today" (the mullioned window
reglazed with a single sheet of glass
being a prime example), but rather, if an
existing form, by virtue of its multiple
suggestiveness, could accommodate a
necessary new use, it would be maintained:
the designer ideally would limit his
interventions to those forms programmati-
cally required to supplement the existing
fabric: from out of only thos_ necessary
forms the designer would choose the ones
which he would distort to suggest optional
interpretations.

The ideal is thus one of transparent or
ignorable intervention, a condition in
which the new forms would offer their
own suggestions of use and interpretation
but would be disposed in such a way that
the suggestions offered by previous forms
would also be visible. In essence, the
ideal is that the building be a layered
record--a palimpsest--of its own history.

The list of strategies thus continues
with methods for making ignorable inter-
ventions:

BRIDGE THE GAP

If the programmatically-required new
use for a space called for more absolute
area than was available in the existing
room, the designer might provide a sugges-
tion that the room be joined (conceptually)
with an adjacent room. This might be done
with continuous surface materials or a

piece of shallow furniture placed in the
opening--two interventions which could be
ignored at will.

SUGGEST REDIVISIONS

Conversely, the design might offer
the suggestion that a space too large for
an activity could be (conceptually)
divided into smaller spaces. This head-
board/closet suggests such a redivision
while still allowing one to imagine the
space as whole.
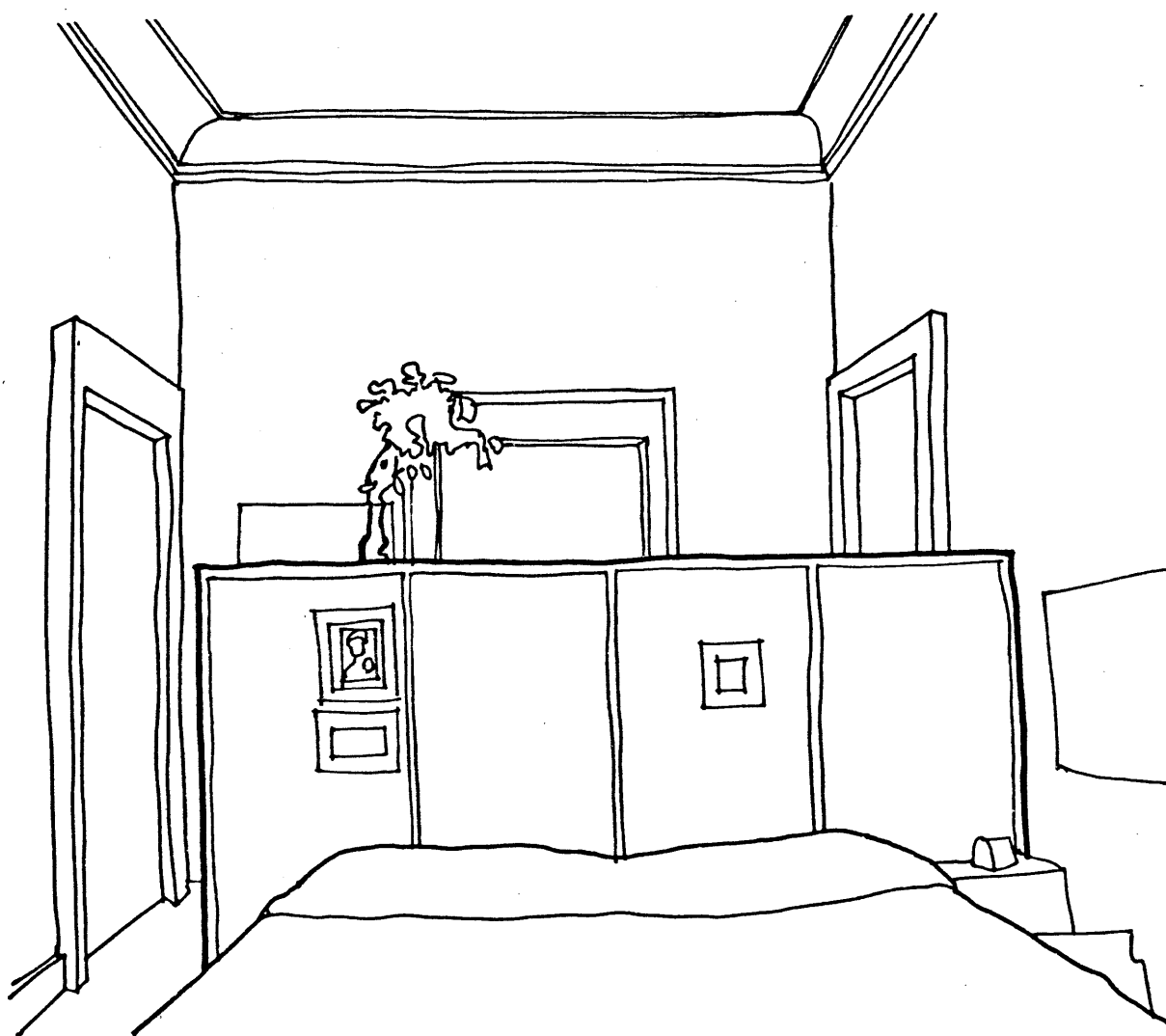
ADD TRANSPARENTLY

One could also add to the <u>surfaces</u>
of a form in such a way that both the
necessary addition and the original face
were visible. The columned shop-front
shown here bespeaks its own time but does
not obliterate the older house to which
it is appended.

OVERLAY THE EQUIPMENT

Besides articulating a single space,
the headboard/closet also represents the
ignorable insertion of equipment into a
space. In similar fashion, one could
attach equipment to the surface of a space
so that, while the extent (and ideally,
the use) of the original enclosure were
still apparent, an additional use would
suggest itself to the viewer. (With
perhaps too much difficulty) one can
imagine the grand entry hall into which
this kitchen equipment has been inserted.
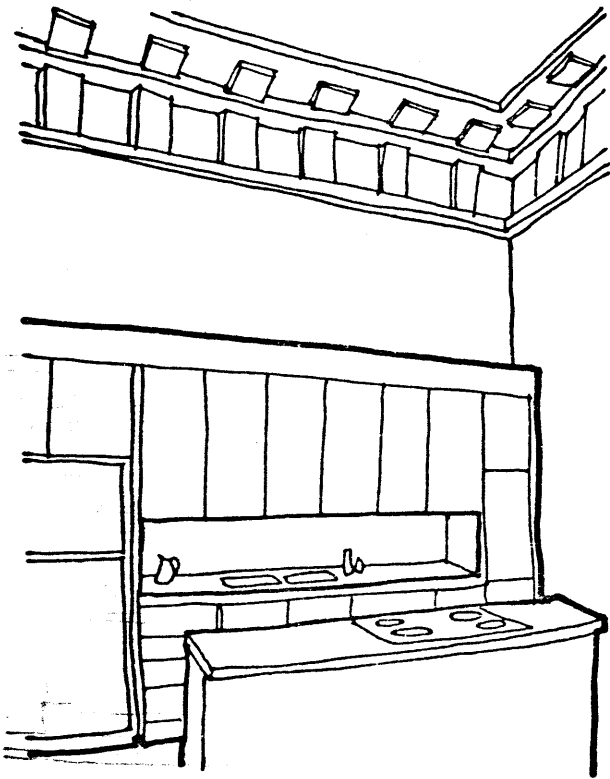
REUSE THE EQUIPMENT

As stated earlier, if the old form can
be reconceptualized as such, it should be
used as the accommodation for a new use.
Here, in a factory converted to a school,
a bank of cabinets for spare-parts
storage is reused as a resource center
for educational materials.
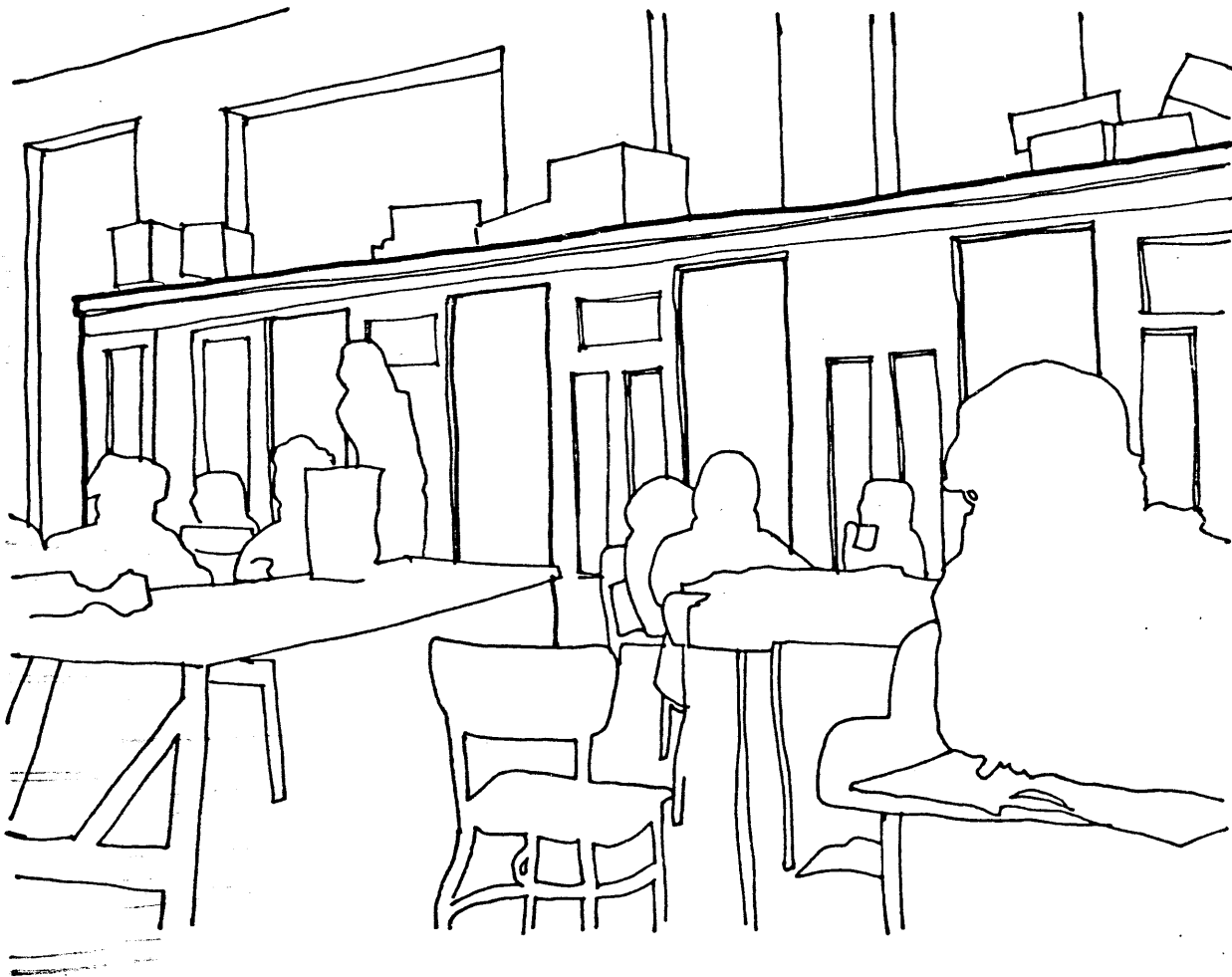
ARTICULATE THE EQUIPMENT

And equipment can also be articulated
so that several new functions are suggested
while the original cues remain visible.
This barn door can still be seen as what
it was intended to be, but now it also
accommodates a front door and a window.
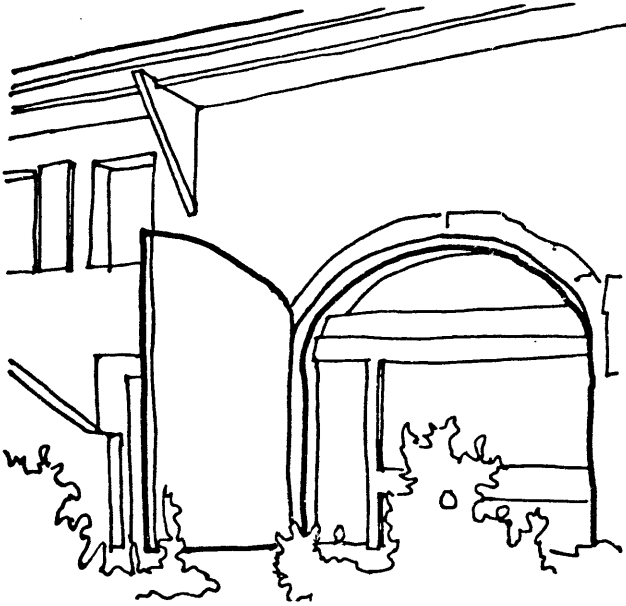
Footnotes.

Once again, individual
ideas are difficult to
isolate and attribute, but
I should say that the
notion of "equipment"
comes from a conversation
with Donlyn Lyndon; the
theme of distortion to
mark intentionality has
its source in a conversa-
tion with Peter Eisenman;
and, although the concept
had occurred to me at an
earlier date, the felici-
tous phrase "building as
palimpsest" comes from
the special European
Heritage Year issue of
the Architectural Review
(11/75).

Other strategies exist, of course, and
examples of some of them (and suggestions
of yet others) will be illustrated in the
following designs.

Renovation

I have said that a building ought to be a
reflection of its situation. As mentioned
in the preceding section, the forms of
a renovation (under this assumption)
ought to be reflective, not of a completely
resolved summation of the new situation,
but only of those aspects of the new
situation that the original building cannot
accommodate. For the purposes of demon--
stration, this hypothetical renovation,
although it is to be seen as taking place
in the present, will take as its starting
point the original condition of the Browne
house. Thus, the major changed aspects of
the building situation are site conditions
and program. As for the site, there are
now houses a few yards to the left and
right (forcing the driveway into a
straight-shot configuration), and the
meadow behind the house is now a pine
woods. The inlet, however, is still
clearly visible, due to the still-apparent
prominence of the house's hilltop location.

But the hypothetical program is the
major change: the house is to be modified
to accommodate two dwelling units for
rental to families on a year-round basis.
It is assumed that occupancies will be
rather long-term and that the tenants will
both share some of the facilities of the
house and cooperate on certain matters of
maintenance and groundskeeping. And (in a
true hypothetical leap) it will be assumed
that both the owner and his tenants fully
realize and value the qualities of this
Richardson house!

First floor.

For reasons that will
be made clear in
the discussion of
the design, I wish
to avoid assigning
the conventional
names to the rooms
of the renovated
house. For now, let
me say only that
entry to both units
is through a shared
hall; the indivi-
dual units are then
entered by separate
doors that open
into a part of the
living space,
beyond which is a
kitchen and an
area that can be
used for eating.
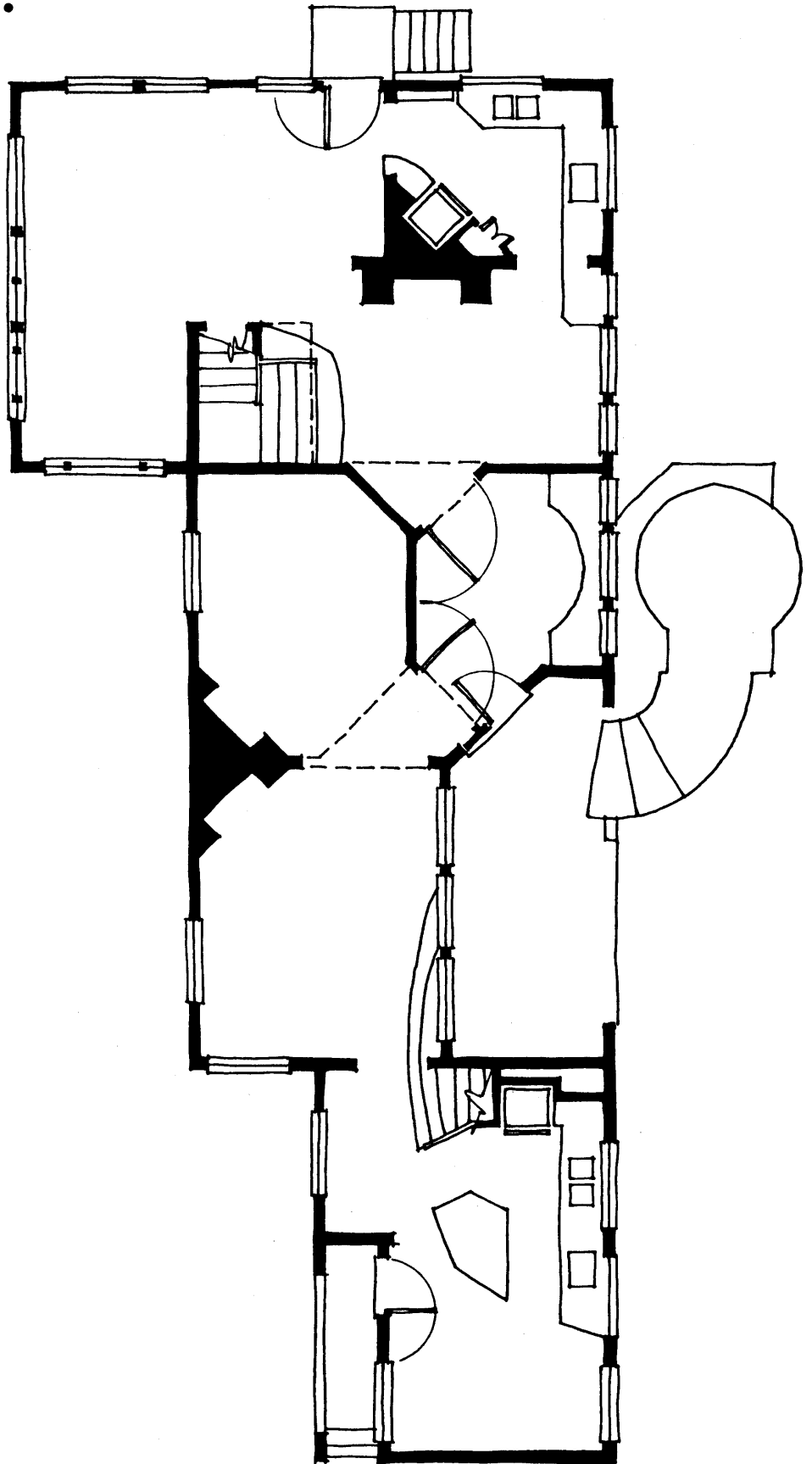
Second floor.

The plan provides
four bedrooms;
the extreme right-
and left-hand
rooms would serve
the units below
them; either of
the two center
bedrooms could be
rented with either
unit by locking
the appropriate
doors.
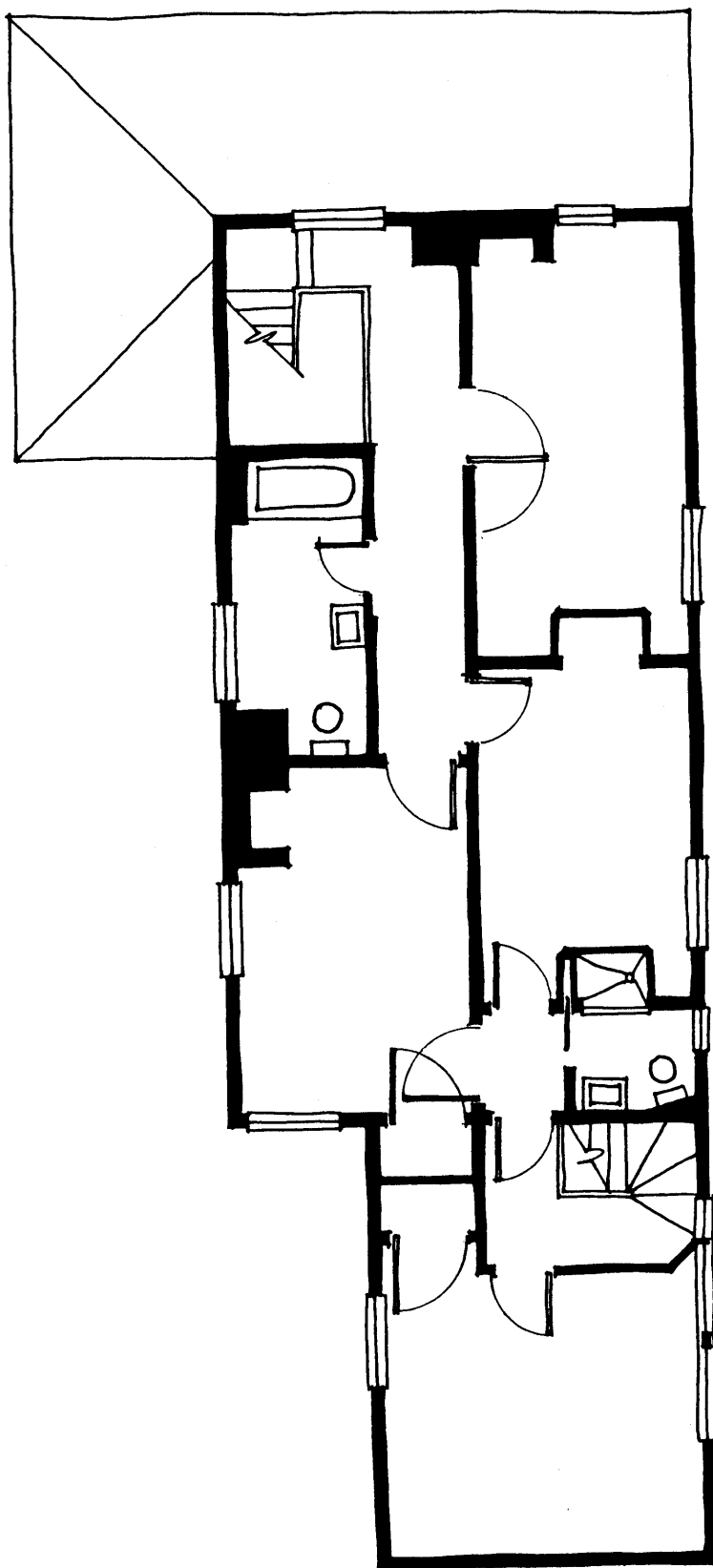
Note that this view and
the sketch that follows
it are somewhat schema-
tized, particularly as
regards the windows,
which represent not
new single sheets of
glass, but merely new
storm windows through
which one could still
view the original
mullioned sashes.
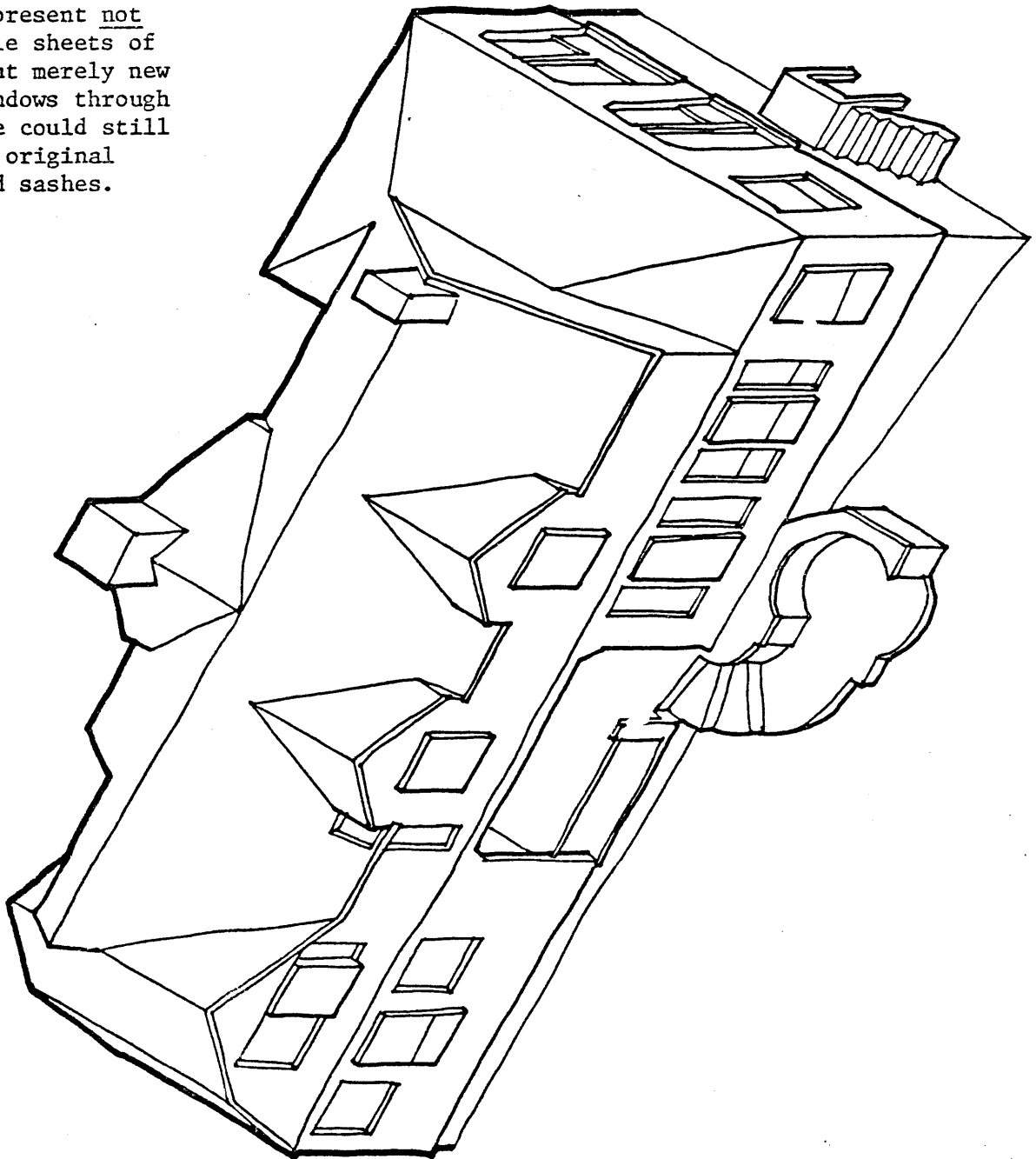
Discussion of the design.

As a reflection of the notion that different mental spaces can be conceptualized at separate times within the same enclosure, the two units share an entry hall on the first floor that is to "belong" to one or the other unit at the appropriate times; that is, a guest of either tenant would be received at the (shared) front door, ushered into the entry hall, his wraps taken, then escorted through the appropriate (and temporarily open) door into the main spaces of the individual unit. The space could likewise (by mutual consent) "belong" to one of the units during, say, a large party, serving as an articulated space, separate from but integral with the rest of that unit.

This condition, combined with that of the two bedrooms which can be rented with either unit, means that on both floors spaces exist that can be seen as claimed by both units. This overlapping is marked, in both cases, by a small distortion of the new storm windows that one might assume would have been required in any case. On the first floor the three large windows on the right-hand side are given
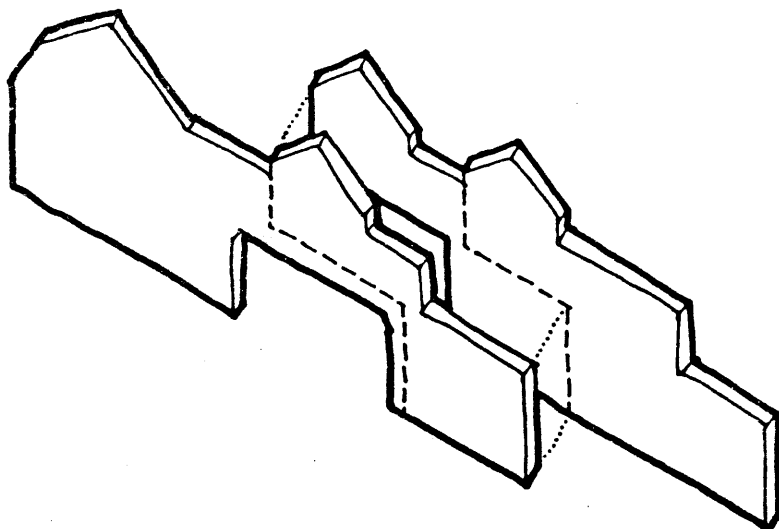
storm sashes that project
from the window-frame,
while the narrow windows
are covered with sashes
set in from the frame.
The projecting sashes can
thus be seen as a group
that reflects the volume
behind it.

Another reading arises
when one notices the
mullions on four of the
right-hand windows: in
the case of the two win-
dows on the extreme right,
these occur at the place
where the kitchen counter
crosses the windows and
separate the clear glass
above from the opaque
glass below. By (inten-
tionally) using this
mullion on the two
adjacent windows, a
second pattern is over-
laid upon the first that
reflects the extent of
the non-shared space of
the right-hand unit.

And a third interpre-
tation suggests itself
when one notices that (for
the same practical reason)
the main window in the
far left-hand group also
has a mullion-bar, setting
up yet another possible
grouping of mullioned
projecting sashes—thus
making the projecting
but non-mullioned window
of the entry hall appear
exceptional, reflecting
in another way the
unique, shared status of
the space behind it.

At the second floor
another triple of projec-
ting storm windows marks
the maximum extent of the
left-hand unit, but here
the interpretation is
more complex. In this
case, the forms available
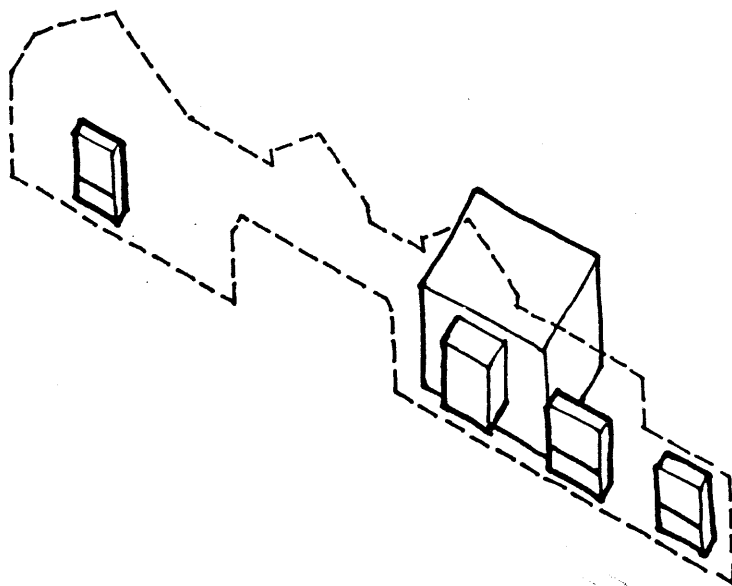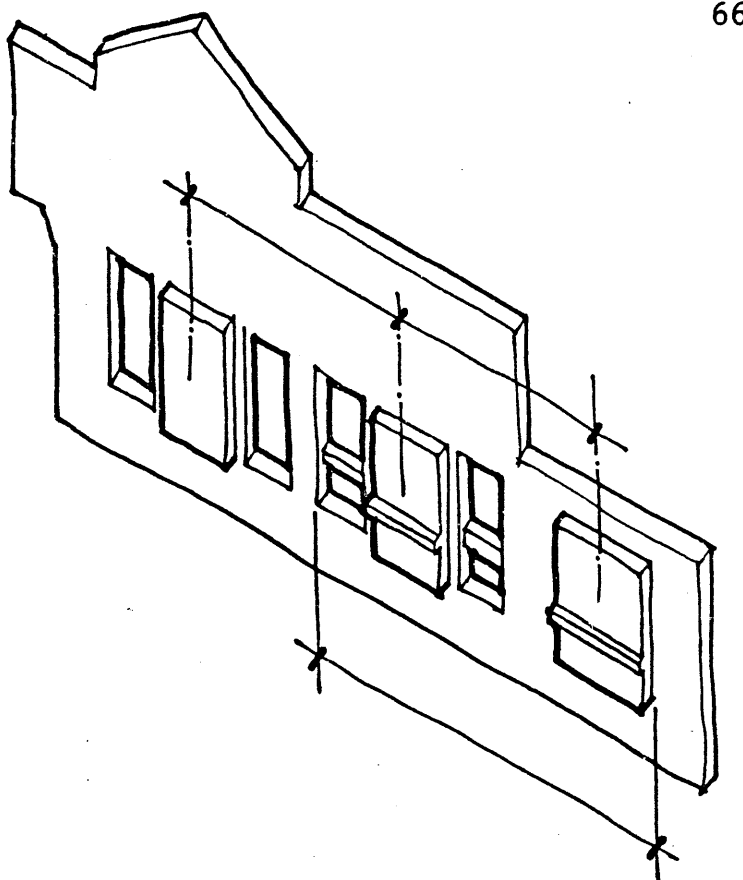
for intentional distortion
include two new windows,
added to light the new
left-hand stairway
(rebuilt to meet safety
codes) and the new bath-
room; these windows, and
the storm sashes of the
left-hand pair, are then
disposed so as to suggest
the following interpreta-
tion: from a base form
of three equally-spaced
dormers (the three pro-
jecting sashes), the
left-hand window moves
left, rupturing both
facade and roof; the
window than stops, but
the facade continues to
move, scraping out a
void (the inset storm
sash) and extending
itself into its final
gambrel form.

(Note that what has
happened here is that the
new forms suggest both
a new base form and a
new set of deviations,
but in such a manner that
the forms that suggest the
original interpretation
are still visible; thus
both readings are possible,
the new forms having been
transparently overlaid
upon the original.)
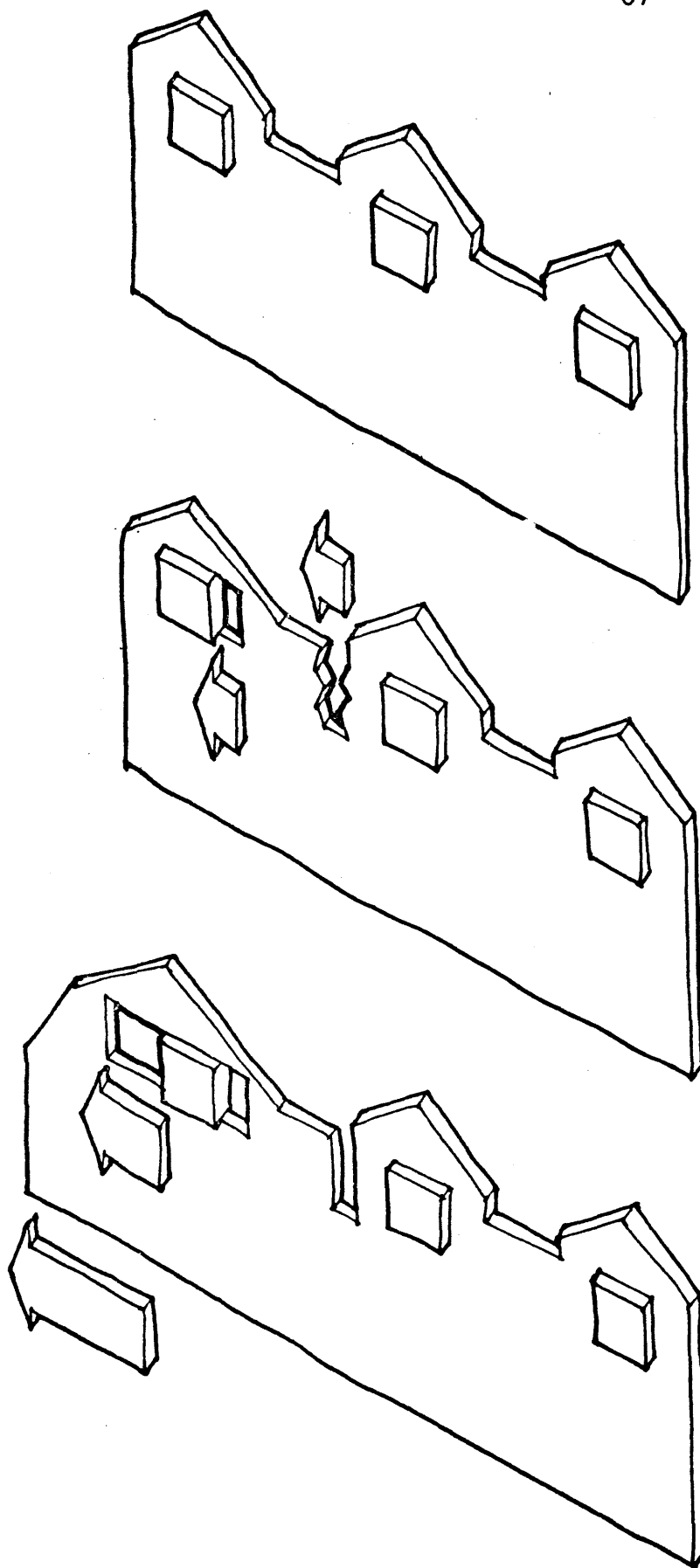
Besides marking the new
divisions of the second
floor, this interpretation
of shifting windows could
also be read as a response
to the wedging-in of the
new bathroom. This
interpretation of inser-
tion is further suggested
by forms inside the house:
here the necessary stall
shower is transparently
added to the adjacent
bedroom, its "ignorability"
being aided by its shape,
which resembles that of
a wardrobe, and by the
fact that it does not
extend to the full height
if the room; further, the
form is kept back from
the front wall--all of
this done so that the
viewer can continue to
imagine the complete
dormer and thus the
original (undistorted)
shape of the room. In
addition, since this
bedroom might be
included in the same
unit with the inserted
bath, the insertion is
marked again in the right-
hand bedroom: the replace-
ment for the closet taken
over by the bath is
presented to the right-
hand bedroom as a wardrobe-
like form that is a twin
of the shower enclosure;
the viewer of this pair
thus might explain the
configuration by imagi-
ning a plug of space being
displaced by the insertion
of the new bath.

The next problem to the
dealt with is that of
movement. The goal here
is to maintain the entry
through the void of the
porch (since it is still
the case that one enters
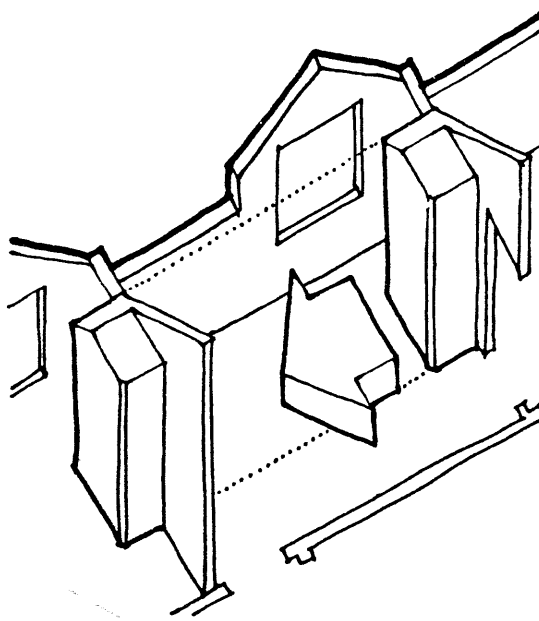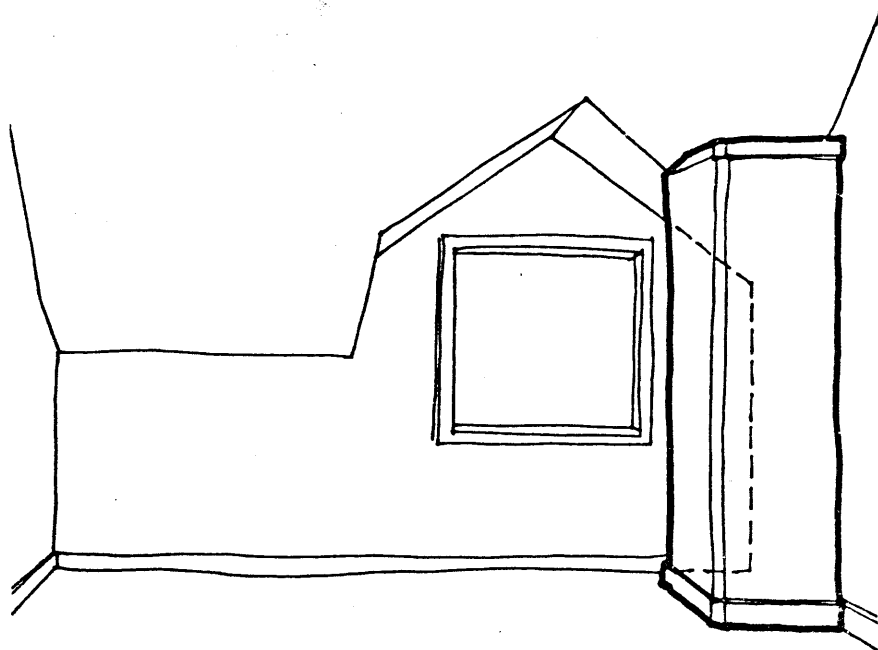
the whole volume) while
overlaying the new sugges-
tion of entry directly
into the shared entry
hall. The problem is
thus two-fold: besides
marking a new point of
(conceptual) entry, the
new design must present
the forms that carry the
actual path of movement
into the house in such a
way that a viewer might
read the path as one
distorted from its origi-
nal course specifically
to acknowledge the new
conditions of entry.

The manner in which the
space of the entry hall
is marked as exceptional
was discussed above, but
the out-thrust storm sash
might also be read as an
acknowledgement of the
pressure of a vector of
entry. The circular
platform directly under
this window can also be
seen as a receptor of
this entry vector due
to its conventionally-
assumed formal predispo-
sition; this same factor
additionally suggests
that the same circle can
receive the diagonal
vector that represents
the direction from which
one would actually approa
approach the building
(the curved drive, from
which one approached
perpendicularly, having
been abandoned). A
viewer might find further
acknowledgement of his
diagonal approach upon
noticing that the base
shape of the porch
extension duplicates the
shape of the original
porch; by suggesting that
the new platform be seen
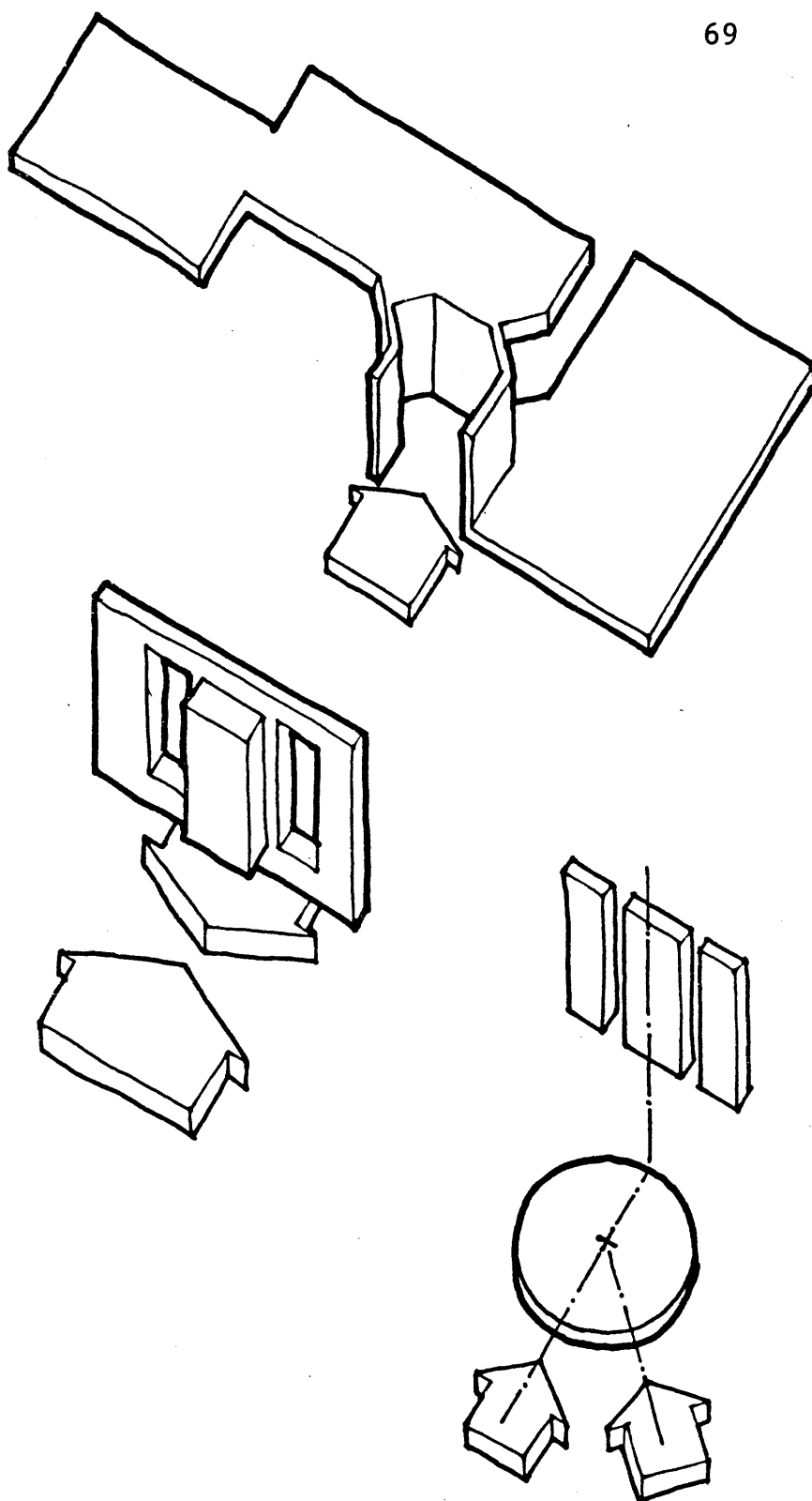
as pulled, drawer-like,
out from the foundation
in the diagonal direction,
one also might imagine
this as a kind of doubling
of the space of the porch
itself, so that, in a
sense, one would continue
to enter the house via a
porch, but now a porch
distorted to reflect the
new conditions of entry.

Now, having gotten the
viewer from his car to
the surrogate porch, the
next problem is to get
him into the house on a
path whose distortions-
from-the-expected can be
seen as reflecting the
new conditions. As with
the original house, the
expected path of entry
might be seen as an
axial movement to and
through a vestibule. The
strategy for reflective
distortion here will be
to suggest a broken or
displaced entry; in effect,
a situation that might be
described by the state-
ment, "My actual path has
to go around this wall
because of new conditions,
but my conceptual path is
unbroken."

Both this displaced
pattern of movement and
the doubled pattern of
the original house involve
a kind of blindfolded
syncopation--the visitor
to the pastor "ignoring"
the portion of his path
that took him through the
family spaces and concep-
tually welding his
passage through the front
door to his arrival in
the reception hall in much
the same way that one
would conceptually attach
the two ends of the
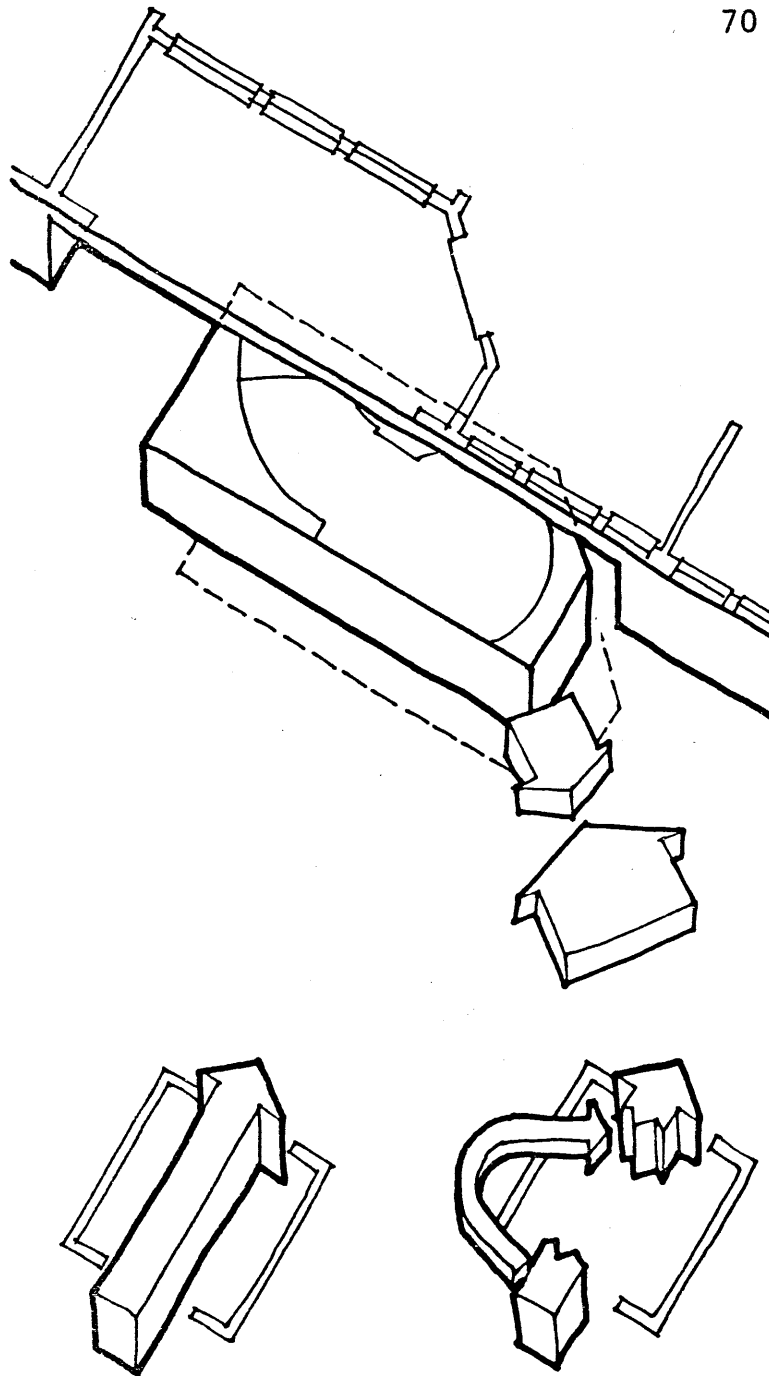
diagrammed entry vector
by "forgetting" one's
path around the wall.
But in order to be "forget-
table" in this sense, the
path must seem unobtrusive,
a natural outcome of the
situation. The shape of
the bench around the
circle aims to engender
this feeling of natural
movement by turning the
path in the one direction
left open. The three
steps then receive the
path and, though incom-
plete, they suggest the
circular movement that
carries one to the front
door. (The spiral path
also suggests another
interpretation of the
porch extension: that it
be seen as pivoted out in
acknowledgement of the
new circular movement
pattern, the center of
the stair serving as an
axle much like the stair
of the original pastor's
house.)
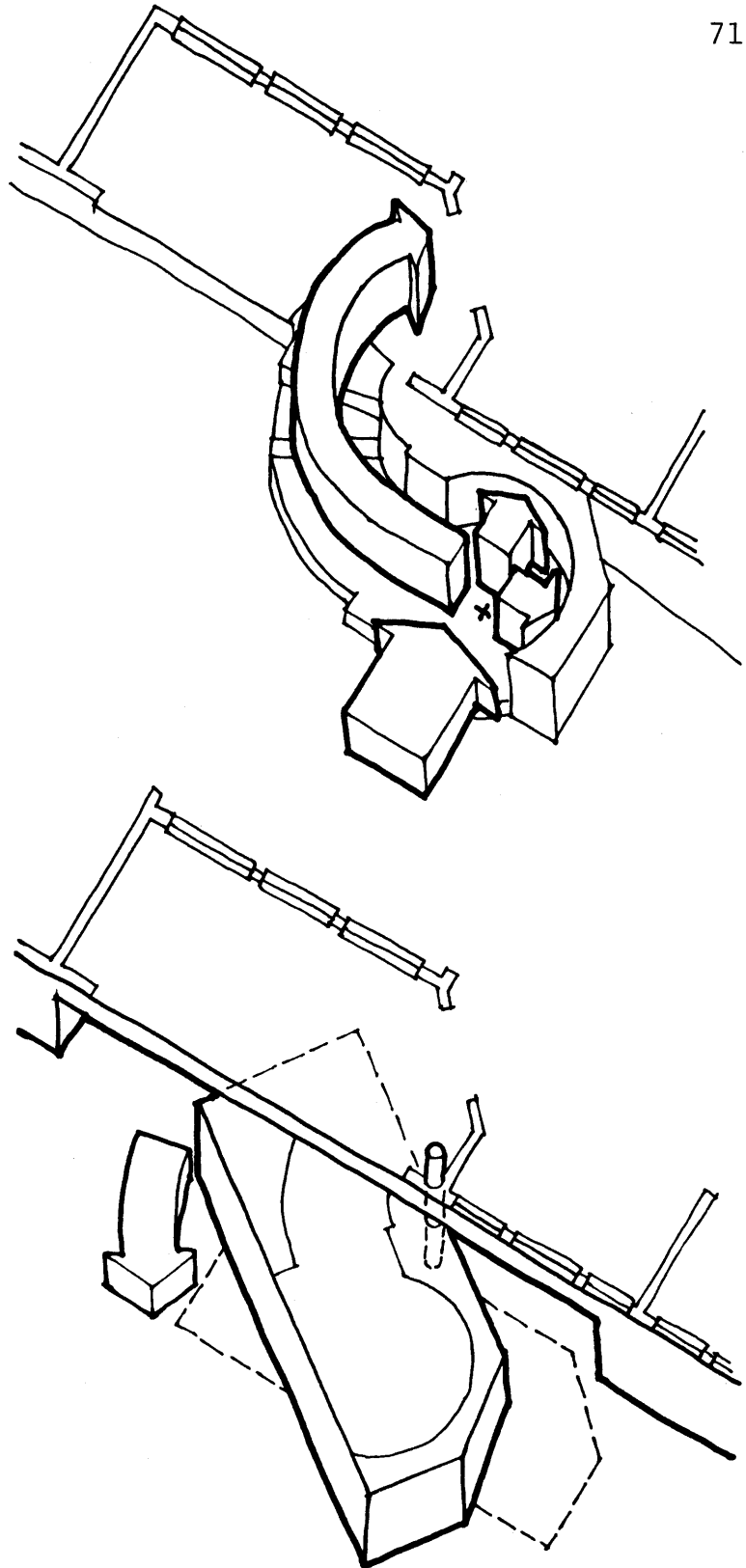
In the (undistorted)
entry sequence postulated
here, the step that
follows one's passage
through the front door is
arrival in the vestibule.
The surfaces and equipment
off this vestibule-space
have been intentionally
distorted to suggest this
arrival in three different
but mutually-reinforcing
ways.

The window seat (besides
recalling the original
bay) has been given a
shape that echoes that of
the bench in the porch
extension, a shape that
can be read as simply a
reminder of where the
entry path was broken or,
in a more drastic analysis,
as the completing portion
of the circle displaced
into the entry hall--
enacting in conceptual
terms the desired but
blocked path of entry.

The flooring pattern
raises the possible reading
that the entry hall has
been racked sideways out
of a rectangular base
shape--a distortion that
can be seen as a response
to the rotational movement
of the actual entry path.
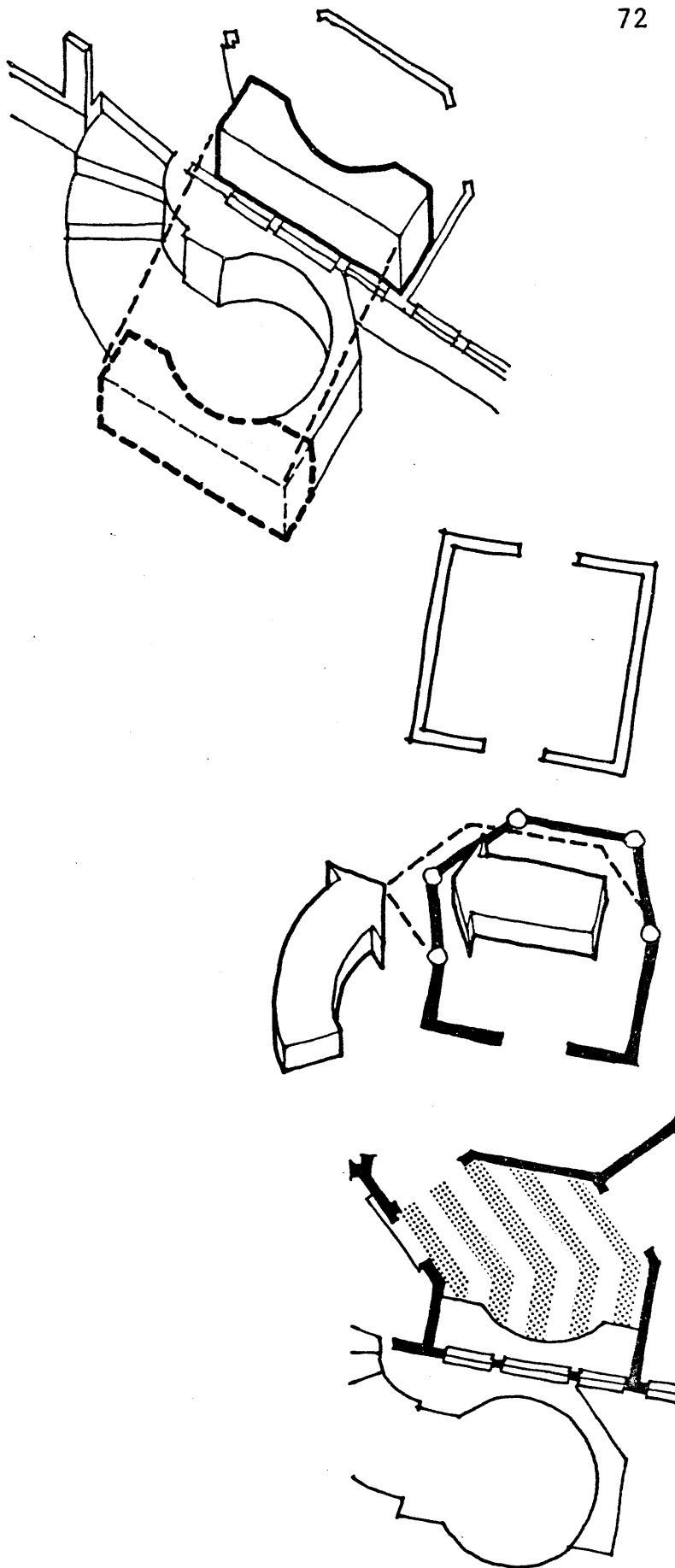
And an acknowledgement
of the complimentary
vector of desired movement
can be read in the sym-
metrical doors to the two
units: their deliberately-
inflected moldings suggest
that one might view them
as a pair of doors pushed
apart by the force of the
movement vector. Or--
alternatively but not
contradictorily--they
might be seen as having
been pulled apart in
recognition of the the
new dual entry condition.

And finally, even the
expected door-swing pattern
has been intentionally
reversed so that these
doors open out from the
units themselves and not
in to them. The intention
here is to suggest that
the original door, because
it does swing inward, be
seen as the actual (shared)
"front door" for both
units, and that each of
the paired doors be
thought of as a door
between two habitable
rooms inside the same
dwelling--in fact, that
the entry hall be seen
not only as a simple
vestibule where wraps
are taken, but also as
a true reception hall,
the place where one is
welcomed into the space
of the home.

Recalling the movement
observed in the original
house, the next pattern
that one might expect
would be the three-branched
cross of paths that led
to the stairs and to the
intimate and more public
parts of the house.
This pattern cannot be
maintained exactly, for
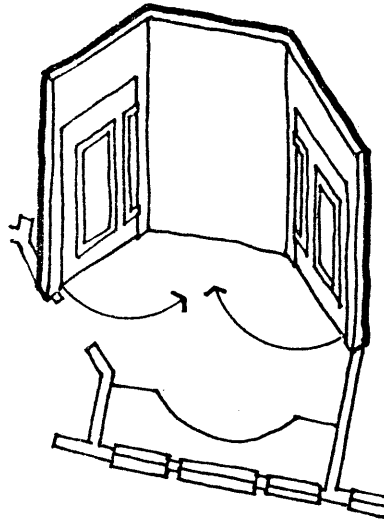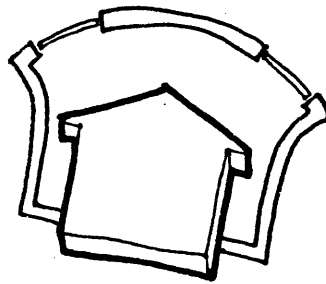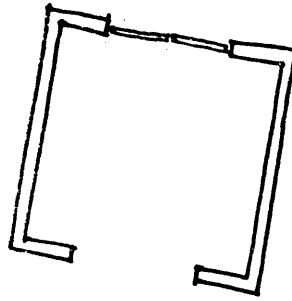
in 1976 the distinction
between "guests-only"
and "family-only" spaces
has become somewhat
blurred; plus, the ideal
of multiple suggestive-
ness for maximum freedom
(and for flexibility in
this rental situation)
would rule out such
rigid classifications.
What is left, then, is
a two-branch pattern, one
branch to the stairs,
one simply to "living
space." But as a reminder
of the original pattern,
I have taken its most
memorable path--the
straight-ahead axial
shot to the stairs--
and intentionally empha-
sized it. Thus, in both
units, upon passing
through the entry-hall
door, one is in a low-
ceilinged (articulated)
space that, in effect,
impels one to "shoot
the gap" into the space
where the stairs land.
To achieve this effect in
the left-hand unit, the
rebuilt servants' stair
has been extended so
that, in effect, the
foot of the stair is
carried into the space
next to where actual
ascent begins.

The distorted foot of
each of the stairs can
additionally be seen as
inflected toward--and
thus recalling--the
diagonal axis of the
total form.
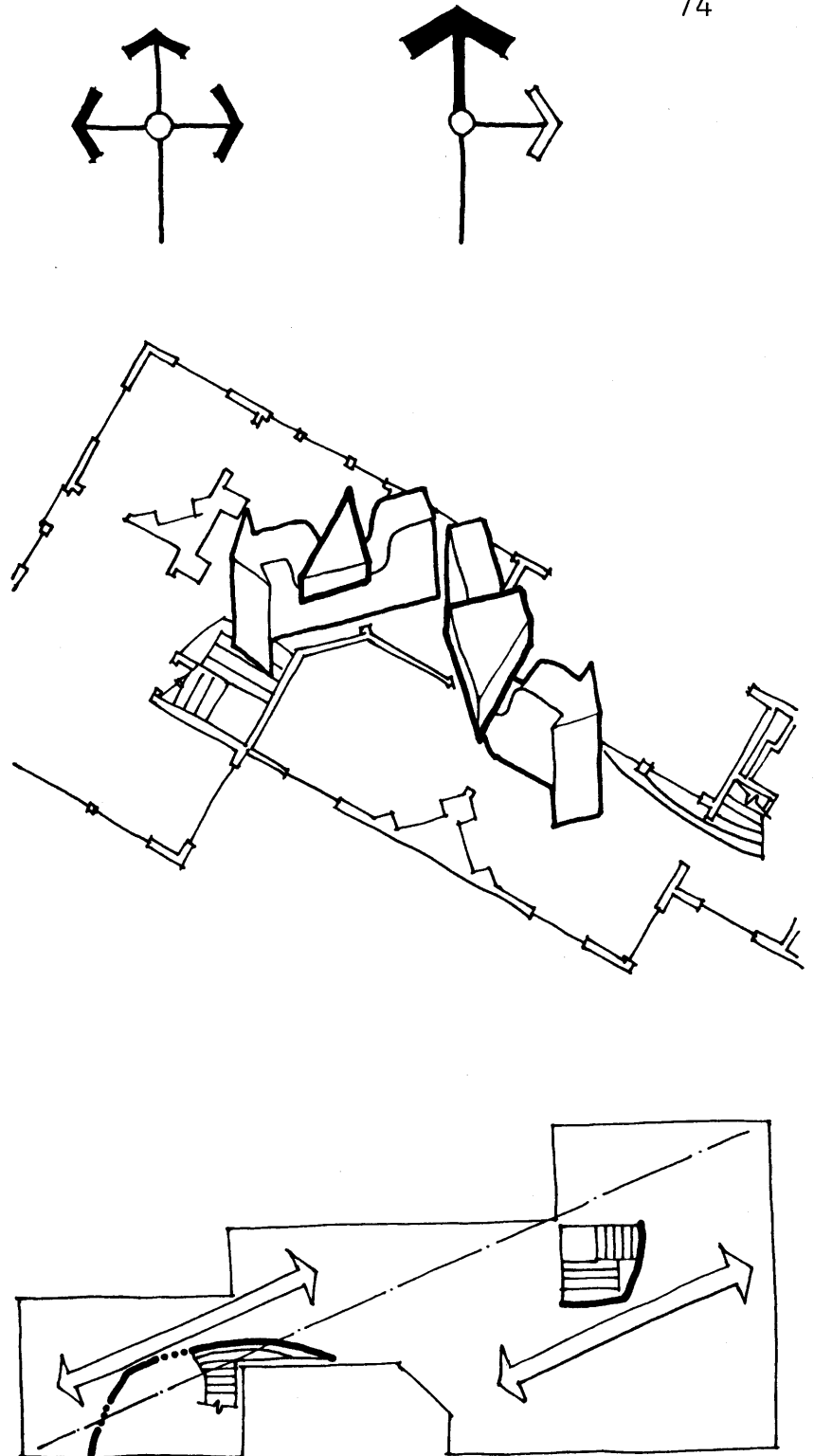
And finally, these distortions can be read as suggestions for the viewer mentally to bridge the gap between the rooms they connect. By exercising this option in the left-hand unit, one could imagine as a single space the stairs, the kitchen, and the nook. A similar combination of stairs, eating, and kitchen is suggested in the right-hand unit by the extension of the kitchen cabinet into the adjacent space as a buffet. (Note in this connection that another, overlaid set of suggested articulations exists in the kitchen/stairs space of the left-hand unit where the original walls have been removed only up to the height of the original door heads--a strategy that also allows the prior configuration to be read through the new.)
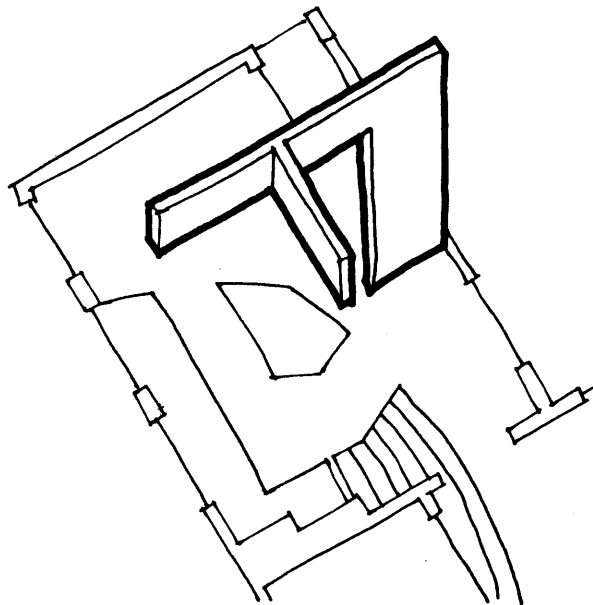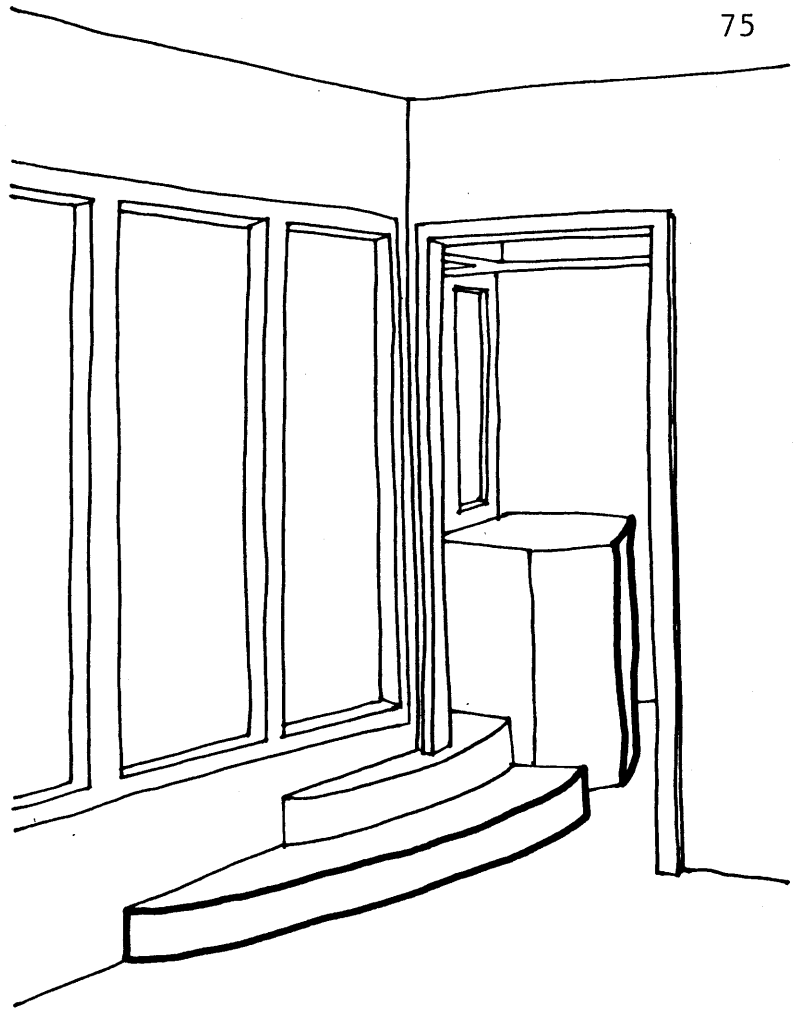
But perhaps most impor-
tantly, this strategy of
bridging the gap can be
the best way of creating
large spaces without
tearing down walls. Take,
as an example, the largest
space in the left-hand
unit: besides the obvious
possibility for linkage
with the adjacent space
with which it shares the
fireplace, by invoking
portions of the arc of
the foot of the stair,
this space can be thought
of as linked to the
stairs (forming the
normal living room through
which all circulation
passes), or as linked to
the kitchen (in which case
the space might serve
as a conventional dining
room), or even as a part
of a combination with
both kitchen and nook
(forming a stretched
version of the suburban
family room).
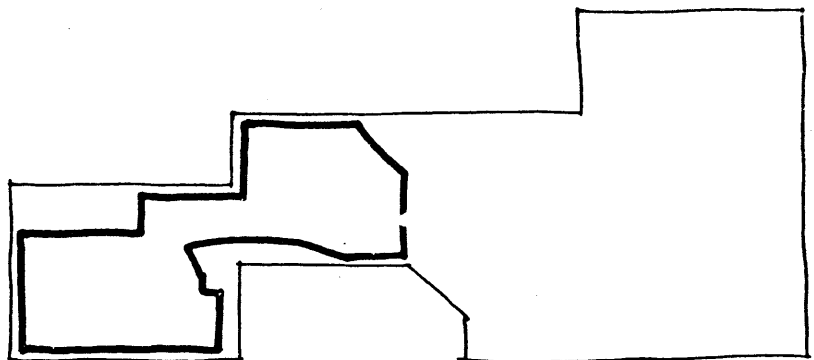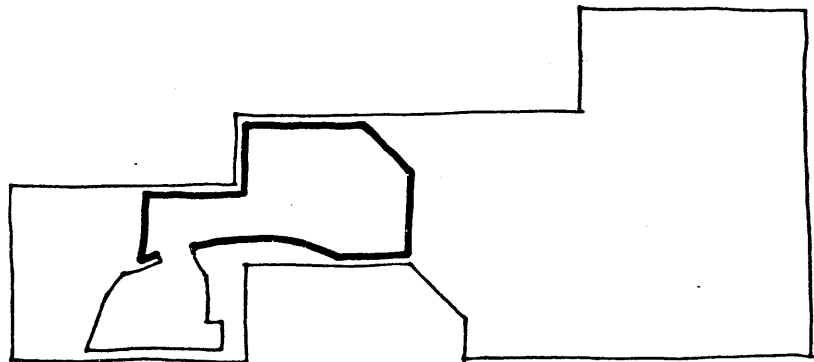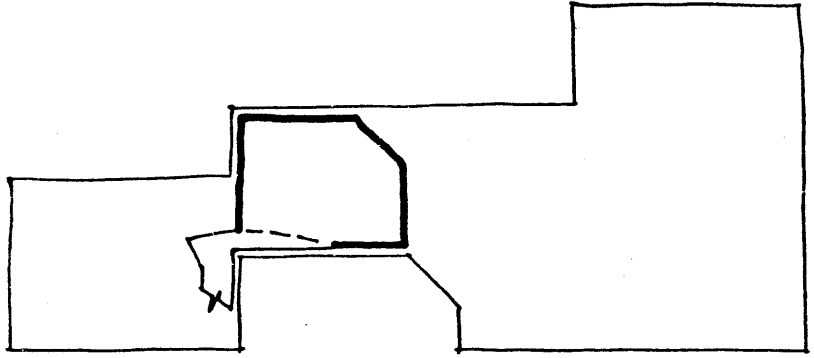
And the same pattern
of possibilities exists
in the right-hand unit.
In fact, yet another layer
of articulations is
possible in this unit, due
to the necessity of
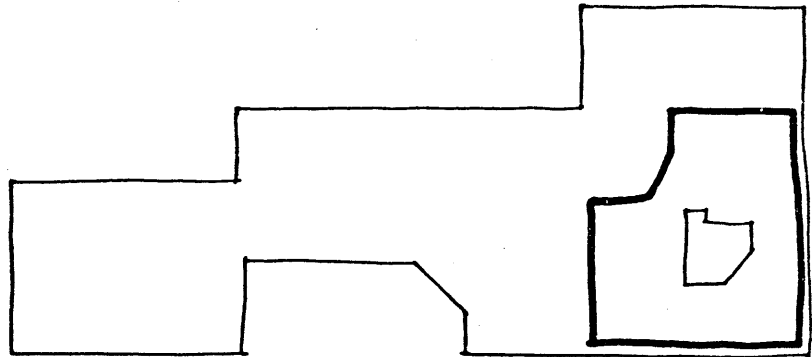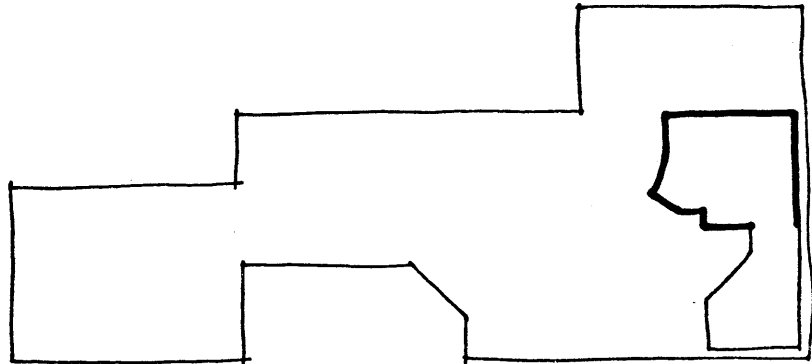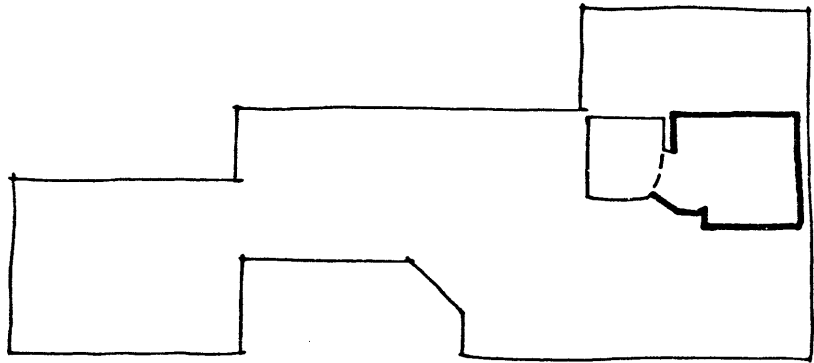
closing in the porch
openings: the large
opening is glazed in
two differing ways,
suggesting two possible
spaces; and the opening
into which the back door
is set is redivided like
the barn door of the
previous section. (In
this connection, however,
note that the back
stairs, though they carry
movement, are meant to be
only function-accommodating
equipment: they are not
meant to be read as
reflections of anything
outside themselves. They
are thus manifested in the
most straightforward,
undistorted, expected form
possible.)
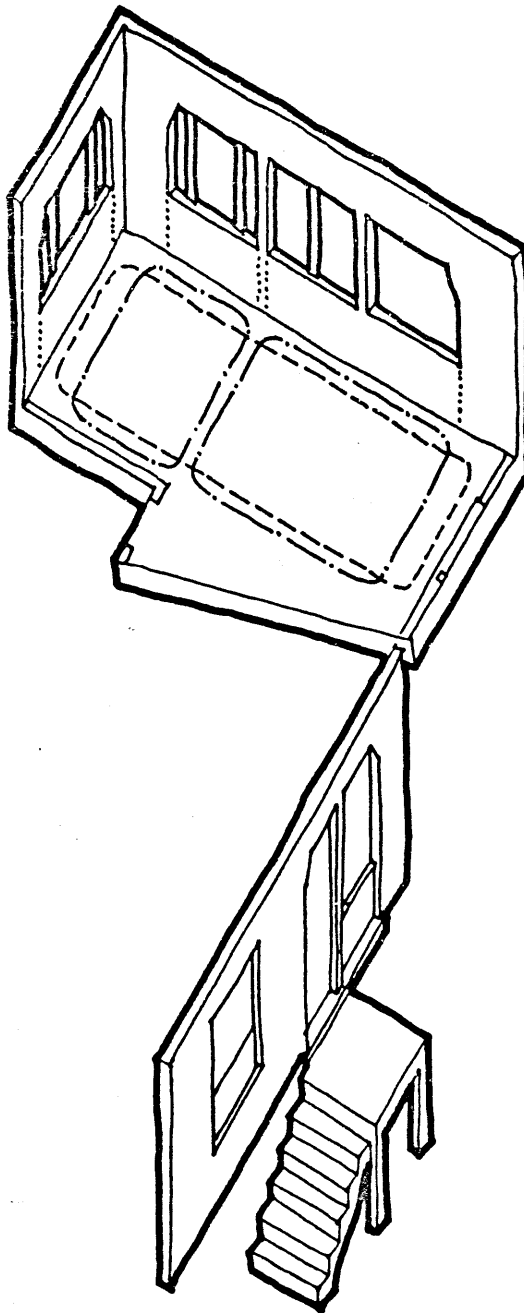
(Returning to the
process of recombination)
note that this way of
reconceptualizing is
aided by the fact that the
equipment (stairs and
kitchen cabinets) is kept
to the edges of the
spaces and can thus be
more easily ignored--
but that countervailing
cues exist (such as the
extended kitchen cabinet)
to suggest that these same
equipment spaces can also
enter into recombinations.
The realization that
grows out of this effort
is that the spaces of the
interior can be articulated
in a manner similar to that
seen in the facade of the
original house: that is,
by setting up a multi-
plicity of suggested
space-divisions, no
division scheme (and
thus no use-pattern) can
claim priority. What is
desired, in fact--and
what I hope I have partly
achieved--is a series of
soft-edged "lobes of
space" which can be linked
in whatever manner is
desired, even enabling
one to ignore, to a
certain extent, the
precise configuration
of the walls themselves.
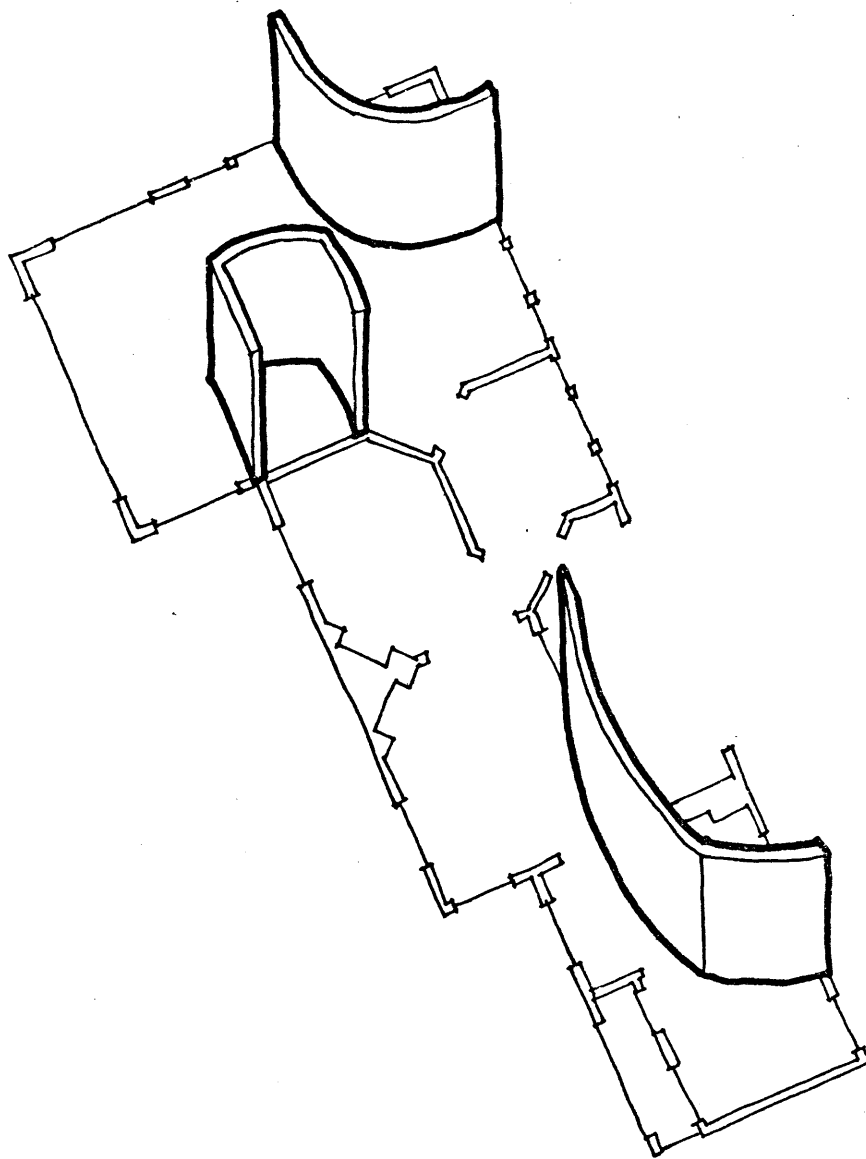
Addition
Prelude

Although the activities of renovation
and addition both make use of the same
realm of ideas, each stresses a different
group from within that realm. With an
intervention like the preceding renova-
tion in which the exterior changes were
relatively minor, there is little danger
that the new forms will destroy the
wholeness of the existing building.
Rather, the new forms will in all likeli-
hood be dominated by the old; the efforts
of the designer thus focus on insuring
that the new acknowledgements will be
visible through the existing forms.

With addition, however, the opposite
danger exists: by their very nature
the new forms are likely to be so very
visible that they will dominate the
existing building and destroy its whole-
ness. The designer's concern thus shifts
somewhat away from efforts at marking
his interventions and focuses more on
ways of <u>integrating</u> them with the
existing forms. This integration is
of two types, and they correspond to the
two levels at which a designer works--
that is, the level of the overall stra-
tegy of composition and the level of the
specific formal relations that carry out
that strategy and make it manifest.

INTEGRATION BY OVERALL STRATEGY

It has been my contention all along
that the ineffable "feel" of a building
is contained at least partly in the
(observed) manner of its composition.
If this is so then the goal of this first

level of integration would be to maintain
that feeling in the existing building and
extend it into the new additions by
emulating the perceived strategies of
composition. That is, if one apprehends
a perceptual effect engendered by a
formal relation and explains that rela-
tion as an acknowledgement of an aspect
of the building situation--then, working
backward, that formal relation can be
seen as a part of an (observed) compo-
sitional strategy for acknowledging that
building aspect. An example is the flat
front facade of the original Browne
house, a composition of forms that was
"explained" as this house's particular
way of acknowledging its SITE CONDITION
of facing the inlet: by manifesting
forms in an intervention that maintained
and extended this enfronting condition,
a new addition would be emulating the
existing strategy of composition.

This type of emulation would be a way
of responding to a situation in which a
particular building aspect that existed
at the time of the original building
continued to exist in the time of the
new intervention. But often the inter-
vention itself will create new building
aspects, in which case simple emulation
of existing compositional strategies
would be insufficient. In this situation,
the analytical method might be used as a
tool for innovation: the designer might
discover emulatable compositional devices
among the existing forms by postulating

relations-between-forms not conventionally
seen (but reasonably "seeable"); he could
then carry these relations into the new
addition.

An example of this way of drawing
solutions from an analysis of observed
composition might be seen in Carlo
Aymonino's project for replacing a
building on the main square of the
Italian town of Fano. Here the new
building has not merely to front on the
square as had the previous building,
but has also to face the street entering
the square at the corner (a street which
the previous building had not acknowledged,
treating it as no more than an expedient
way of access). One might see the compo-
sitional strategy of this design as
drawn from an innovative analysis of the
continuous arcade that runs through all
the existing buildings of the square:
by viewing this arcade not as "a void
behind a screen" but instead as "one
plane behind another," one obtains a

new compositional device: it becomes
possible to fold the outer plane to
enfront both streets while bending the
inner plane around behind to connect and
integrate the two facades.

And analysis can aid innovation in
another way: by viewing a particular
compositional device as an acknowledge-
ment of a certain condition, a designer
might reuse that same device to address
an <u>analogous</u> condition. As an example,
the bent plane and splayed pier of the
Fano buildings were seen as devices for
simultaneously enfronting two streets:
the following design for the Browne
house will use both of these devices to
address the analogous requirement for
sikultaneously enfronting the ocean and
the hillside.

INTEGRATION BY FORMAL RELATIONS

But an addition to an existing buil-
ding should be seen not only to acknow-
ledge the original and new aspects of
the building situation, but also to
address the new condition of integration
itself; the new forms ought to display
a reasonable strategy of composition ·
that could engender a perception of
imagined continuity between old and new.
(In most cases, this seen continuity
will, of necessity, be only a conceptual
one, since usually the "added-on" nature
of the new forms is apparent simply by
their physical attributes. What is
desired is that this imagined continuity
be plausible enough that it can stand

as an <u>alternative perception</u>.) The
analysis of the Browne house showed how
such a perception of integration was
engendered through <u>multiply-suggestive</u>
<u>articulation</u>--by implying so many
division-points that each became viewable
as a roughly-equivalent perception, and
no one way-of-dividing could dominate
one's image of the building. One could
say, then, that this multiply-suggestive
articulation is the observed strategy of
composition by which the problem of
formal integration is addressed in the
particular case of the Percy Browne
house. In the design that follows I
thus try to emulate this strategy in my
efforts at integrating the new addition
with the existing house.

Specifically, there are (at least)
four ways in which this particular stra-
tegy might be applied to the task of
integration:

1. Make the articulated joint between old
   and new no less ignorable than the
   articulations between other parts of
   the building (both old and new). This
   might be done by playing down the old-
   new joint itself or, conversely, by
   playing up the others--emphasizing
   the existing articulations to the
   point that the new one no longer
   stands out (taking care, of course,
   that this emphasizing does not destroy
   the possibility of also perceiving the
   parts as joined to each other).
2. Bridge the gap with parts that overlay

the joint between old and new; that
is, insert elements that can be seen
as claimed by both old and new, much
as in the renovation example the
extended foot of the stairs could
be seen as belonging to both rooms.
Or, if no physical intervention is
called for:

3. Articulate-out parts that consist of
   old and new: compose the forms so as
   to suggest lines-of-division on
   either side of the old-new joint so
   that, if one were to focus on those
   articulations, he would perceive a
   (conceptual) element that, like the
   stair, bridged the (physical) gap.

4. Finally, suggest formal relations
   that involve both old and new elements.
   Recalling the vase-and-profiles situ-
   ation in which either of two forms
   coild be seen as the base against
   which the other would appear a devi-
   ation, a similar relation can be set
   up in which a set of new forms is
   given the appearance of having a rela-
   tion to a set of existing forms; this
   relation can be one in which the new
   forms look like deviations from the
   pattern suggested by the existing, or
   else (more interestingly) one in
   which the old forms seem a deviation
   from the pattern set up by the new forms.
   The use of these four specific devices
for integration--and the governing strate-
gy of multiply-suggestive articulation--
will be shown in the following design.

Addition

As was true in the case of the renovation, the thesis nature of this design results in an inevitable tension between the demands of practical buildability and those of theory-demonstration. As is so often the case, the conflict cannot be resolved in favor of one side or the other, but must instead be balanced only by applying a standard of reasonableness. That is, the situation must be one in which the program requirements are chosen and the design solutions evolved neither solely for their potential applicability nor for their ability to illustrate ideas, but rather for their capacity simultaneously to pose and address certain interesting formal problems while still remaining plausible and possible buildable architecture.

Also as with the renovation, the project for an addition to the Browne house will assume present site conditions but will take as its base not the house as it now exists but the house as originally built. However, for the purposes of demonstration, I have chosen a program for the addition that differs radically from that for the renovation: the house is to be modified to accommodate a semi-retired couple whose children have left home (but who visit occasionally), who entertain frequently and lavishly (with the help of a live-in servant), but who require also the option of intimacy and privacy for their personal activities. Thus, the program implies the need for

both large, open spaces for entertaining and for smaller, more intimate spaces for daily living.

Design strategy.

The solution for this basic requirement draws once more on the theme of reconceptualizing different imagined spaces out of the same actual space. Specifically, the design will try to suggest to the viewer a conceptual framework of two houses interlocked--one, which I will term the Great House, for entertaining, and another Little House for daily living, the two houses sharing actual space to the greatest extent possible. That the two houses cannot be completely coterminous is occasioned by the nature of the spaces they imply: as far as is feasible, the Great House should in actuality be a single, uninterrupted space--a container for general activity foremost, articulated for specific activities only secondarily; the Little House, on the other hand, would consist primarily of specific cellular spaces whose unity could only be secondary and conceptual. The design recognizes this condition and tries to suggest-through-form the specific kind of unity appropriate for each House. Thus, for the
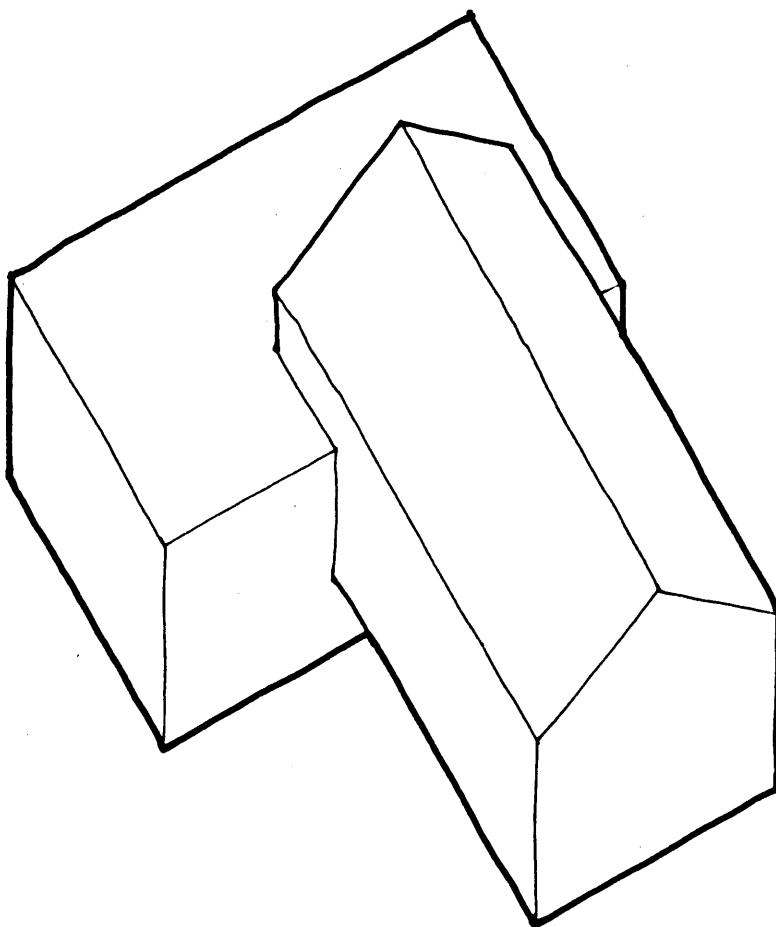
Great House, the design
tries to imply the
existence of a large
space whose imagined
total shape is simple
and easily-graspable
but whose actual con-
figuration is one of
richly-articulated
possible spaces. For
the Little House, the
design tries to imply
the existence of a
clear, simple spiral
armature of circulation
off of which the
cellular spaces hang.
The design then tries
to suggest the inter-
locking of these two
conceptions by having
the two Houses share
certain crucial parts:
first, some of the
cellular spaces of the
Little House are imagined
spaces articulated out
from the space of the
Great House; and second,
the Little House's
armature of circulation--
the conceptual spiral of
movement on a staircase--
is overlaid upon and
intertwined with the
stair that actually
exists within the Great
House.

GARAGE

STUDY

"THE GREAT HOUSE"

FOYER

KITCHEN
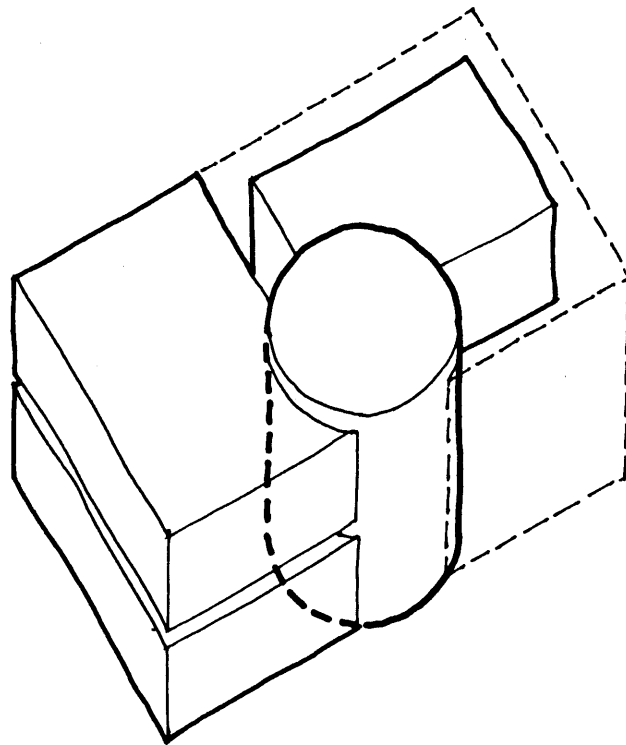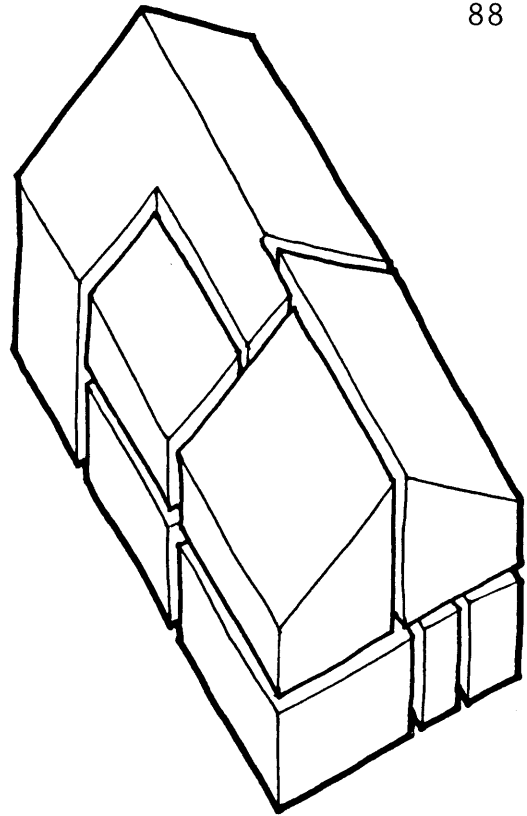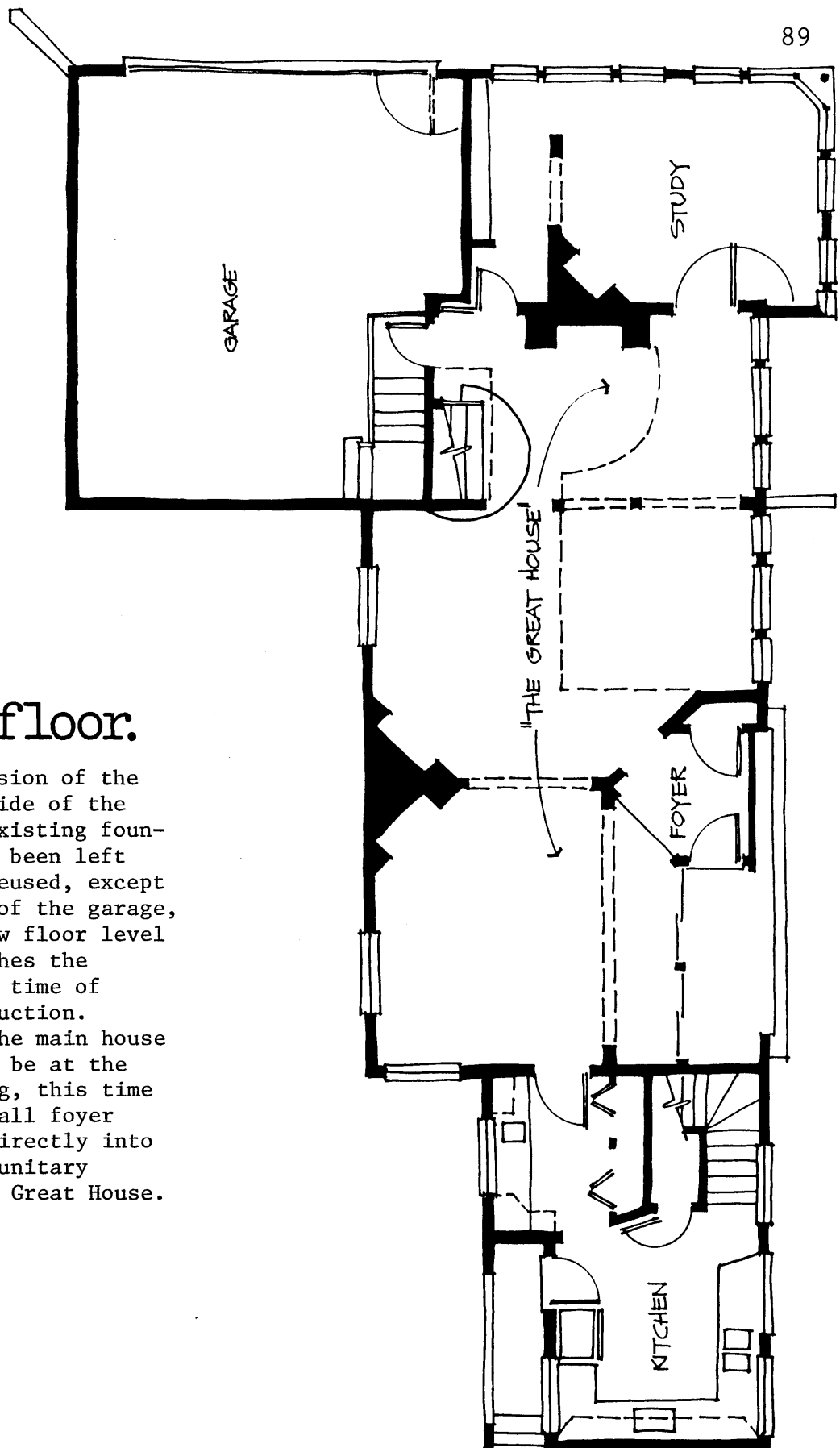
First floor.

In the expansion of the
right-hand side of the
house, the existing foun-
dations have been left
intact and reused, except
in the area of the garage,
where the new floor level
roughly matches the
grade at the time of
first construction.
Entry into the main house
continues to be at the
porch opening, this time
through a small foyer
that opens directly into
the implied unitary
space of the Great House.

MASTER BEDROOM

DECK

GUEST

GUEST

SERVANT
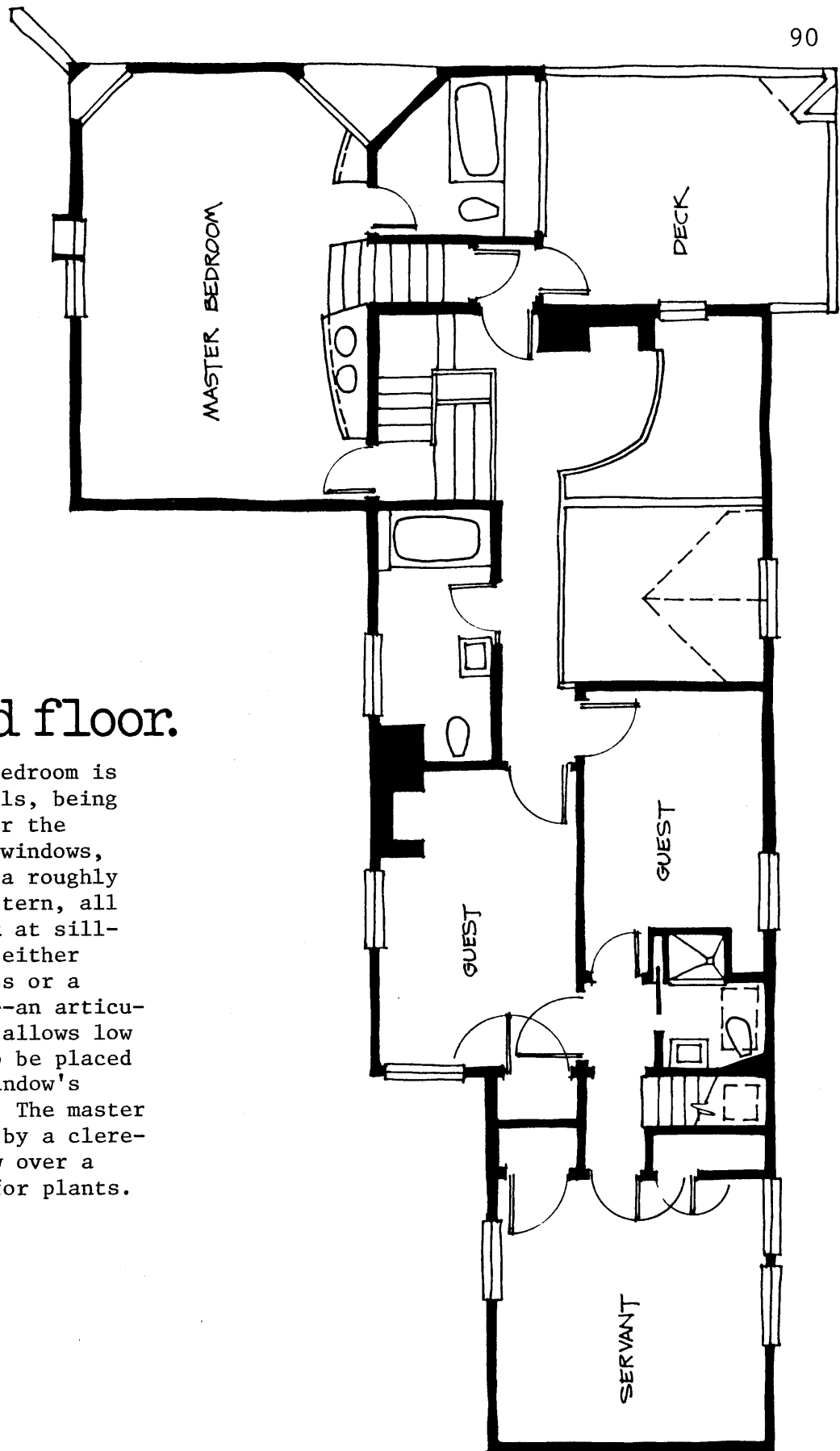
Second floor.

The master bedroom is
between levels, being
directly over the
garage; its windows,
arranged in a roughly
bi-axial pattern, all
have a break at sill-
height with either
obscure glass or a
panel below--an articu-
lation that allows low
furniture to be placed
over each window's
lower part. The master
bath is lit by a clere-
story window over a
wide shelf for plants.

Views.
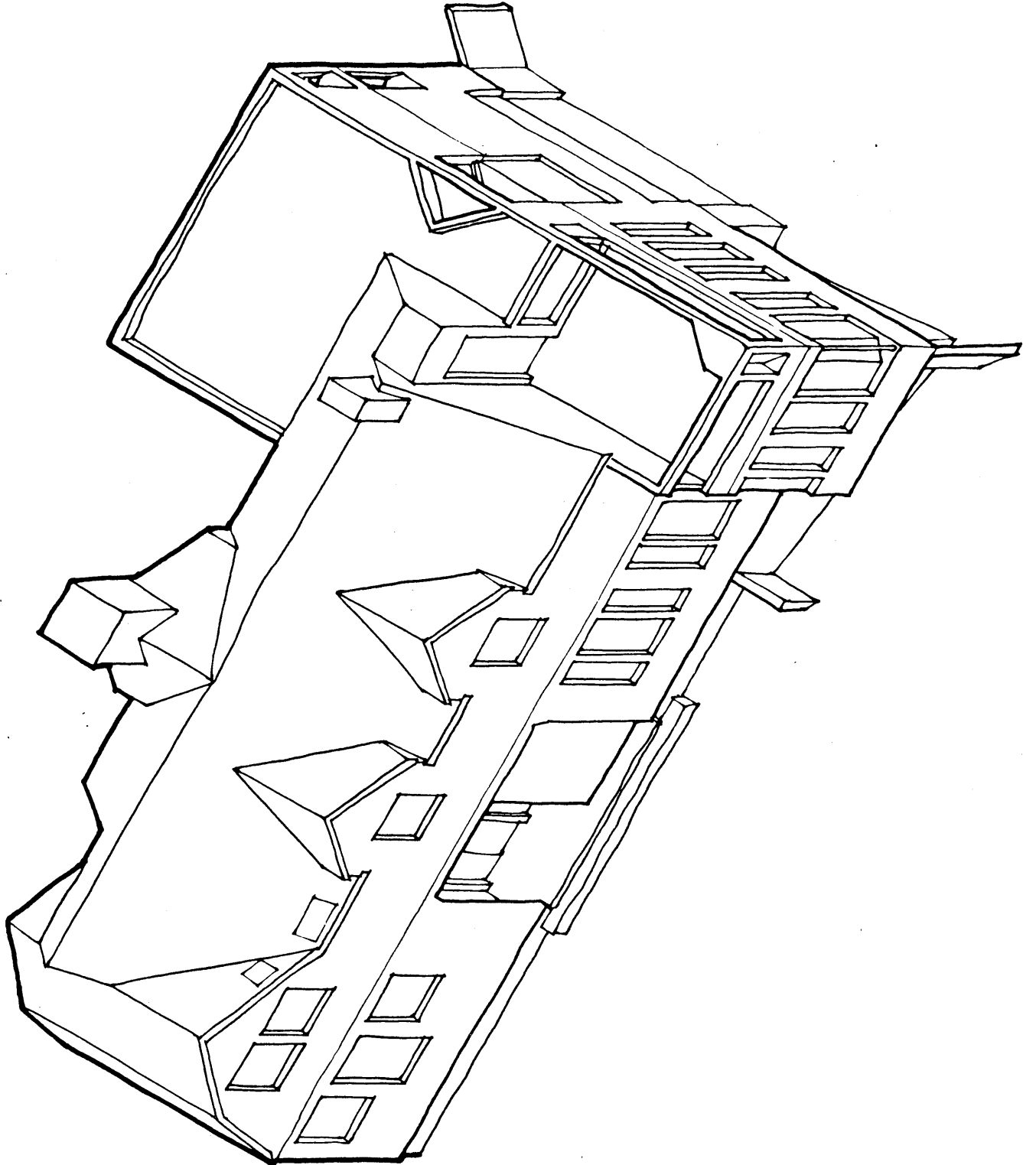
Note that, as with the reno-
vation sketches, these views
are somewhat schematized--
as for example with the
windows, which are shown here
as blank recesses, but which
are to be conventional
double-hung sashes, multi-
paned in the original house,
and of a matching single-
light size in the new.
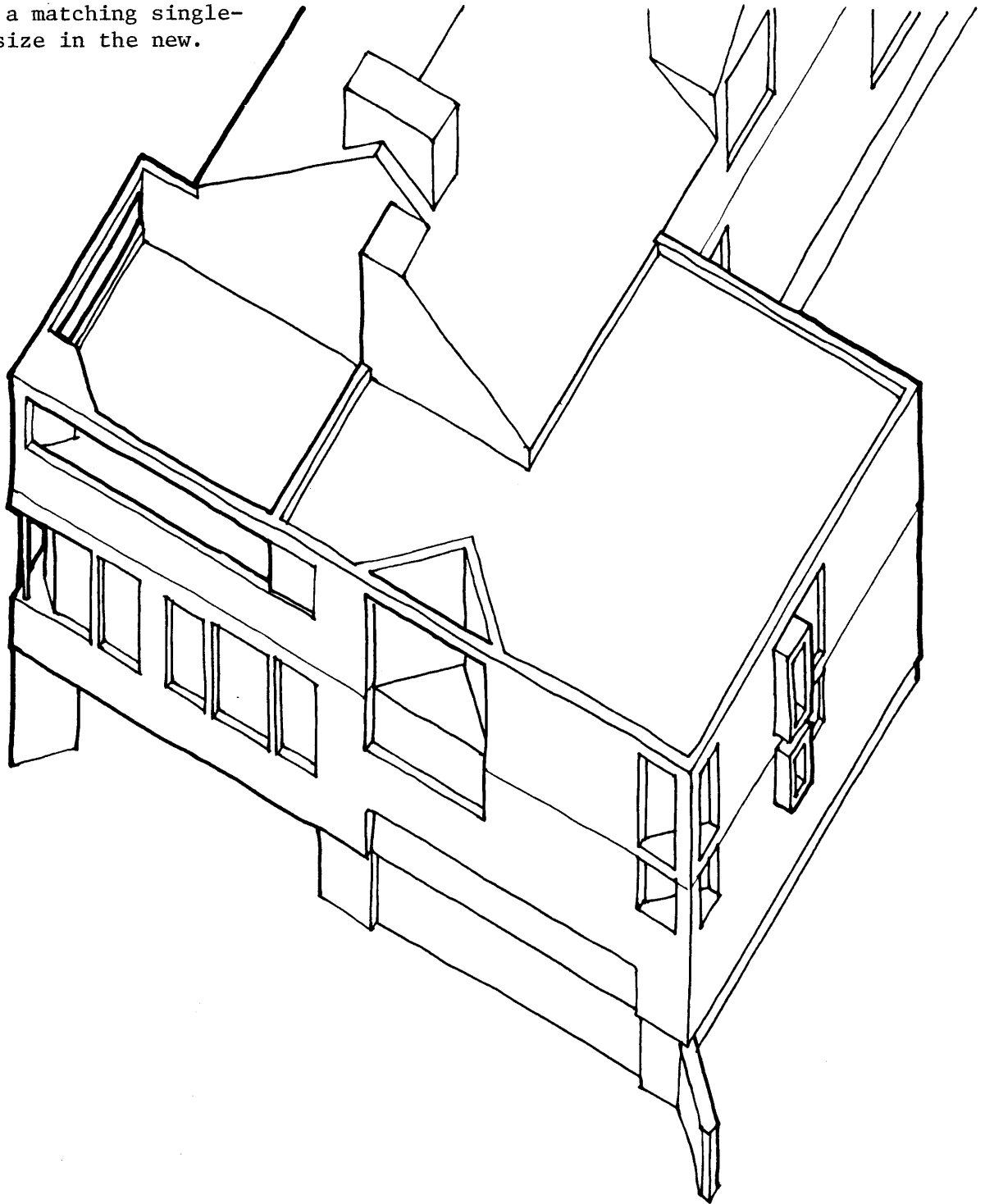
This cutaway shows more
clearly the portions
of the original walls
that have been left to
articulate the spaces
and to give tell-tales
of the previous
conditions.
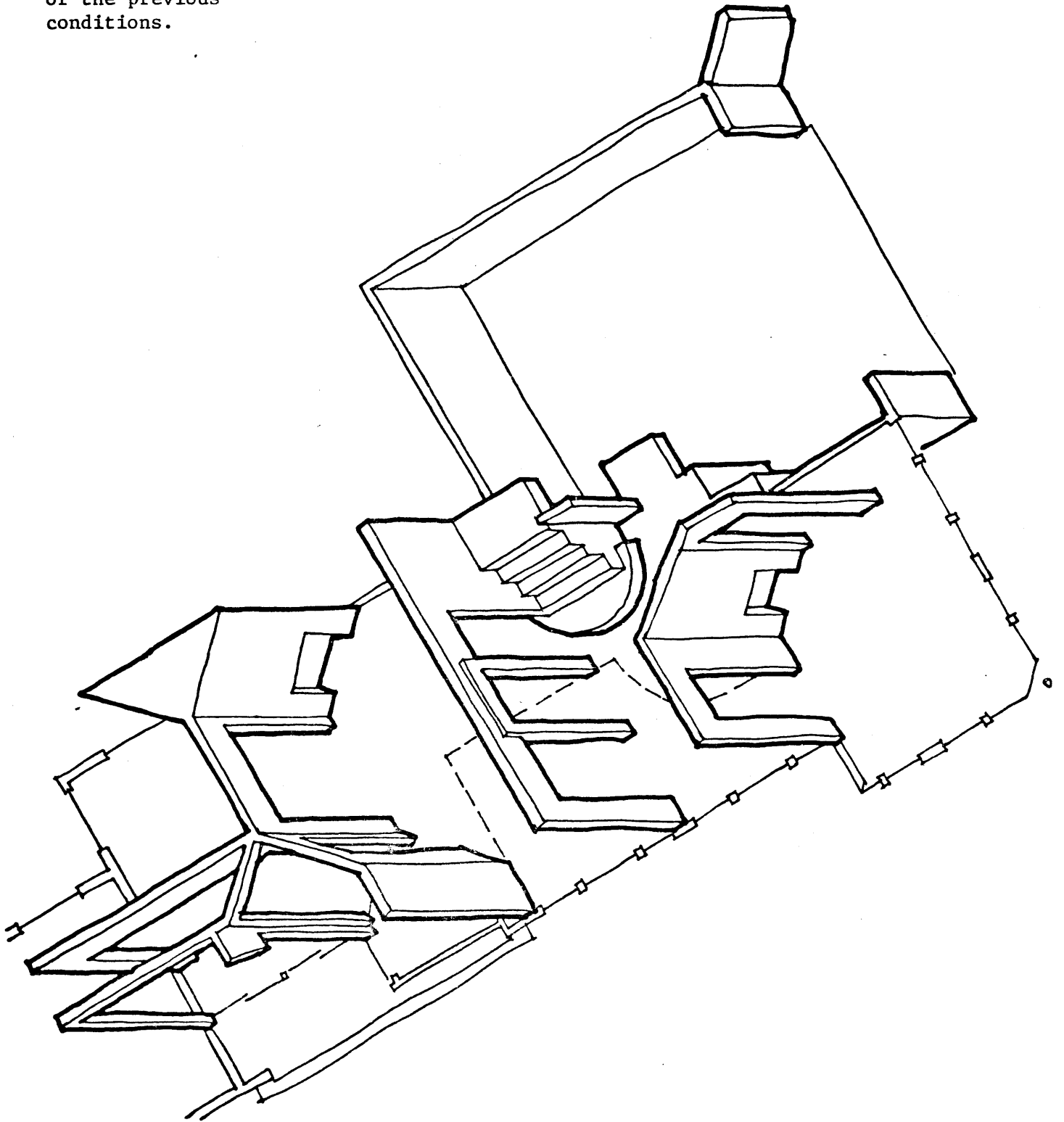
Discussion of the design.

Before describing the
specifics of the design,
I should first clarify
the field of interven-
tion by defining what
has not been changed
from the original
building. The servant's
wing of the house, here
looked upon as merely
an appended piece of
equipment, has been
left basically intact,
with only those changes
required for efficient
functioning: reorga-
nizing the kitchen and
pantry, rebuilding the
stairs to code, inser-
ting a new bath and
closets in the maid's
quarters--all done
expediently and (as with
the case of the outside
stairs of the renovation)
with no distortions to
express intentionality.
Thus the bath and new
stairs, although inserted
in much the same way as
in the renovation, here
merely receive new
skylights and the windows
windows are left as they
were.
    Since (due to the low
ceilings of the existing
bedrooms) the master bed-
room is to be located
in the new wing, one
of the bedrooms is
rendered superfluous.
Exploiting this oppor-
tunity, the floor of the
front right-hand bedroom
has been removed,
revealing to the viewer

the shape of the under-
side of the roof.
This move achieves two
goals: it suggests the
total shape of an imagi-
nable Great House, and
it encloses the original
spiral of the stair
fully within this
space. In other terms,
by exposing the simple
roof shape, enough of
the total form is
revealed that one can
reasonably view the
stair and the bedrooms,
bath, and (created)
balcony as intrusions in
into a complete shape,
and thus as (articulated)
parts enclosed within
a whole.

    At the same time, in
keeping with the concept
of building-as-palimpsest,
I want to maintain the
possibility simultaneously
of experiencing the
building as it was
before the modifications.
Thus in the dining area,
the wall which held the
former band of windows
is removed only up to
the 6'-6" door-head
height, and likewise
with the short piece
of wall next to the main
stair. As for the
removed ceilings: in
the former parlor, the
ceiling was plain white
plaster, and thus would
have engendered a spatial
experience essentially
similar to that of the
original dining room;
but the former hall had
a dark beamed ceiling
that would have been a
major factor in the
space-experience and
would have focused
attention on the
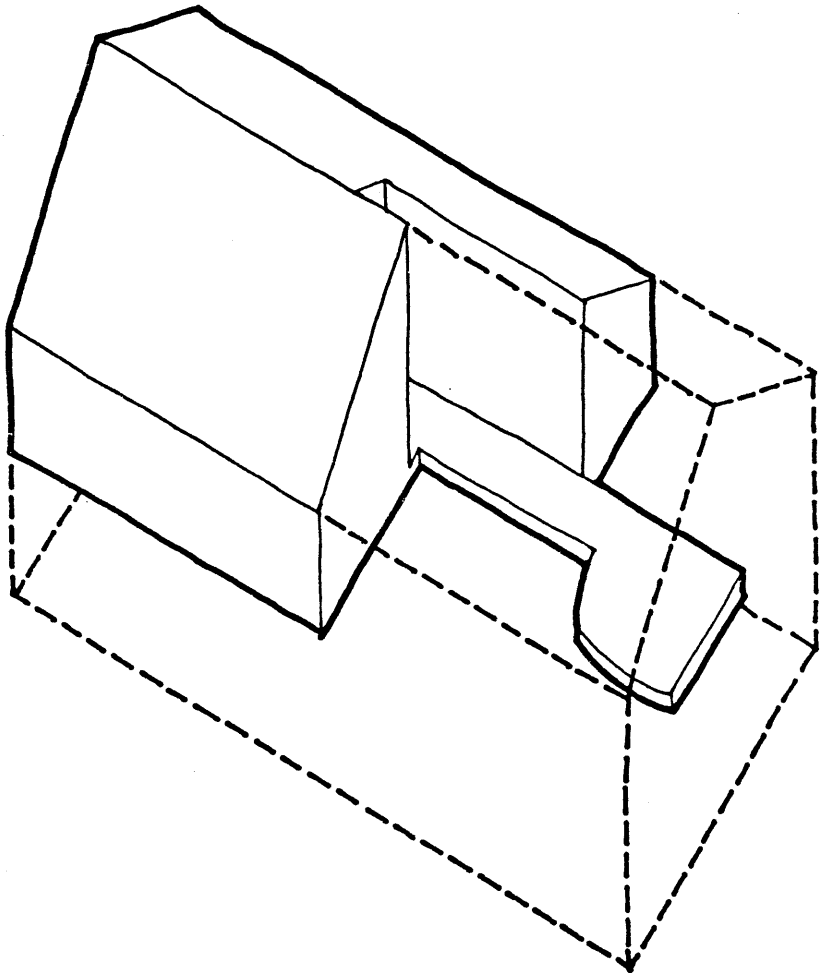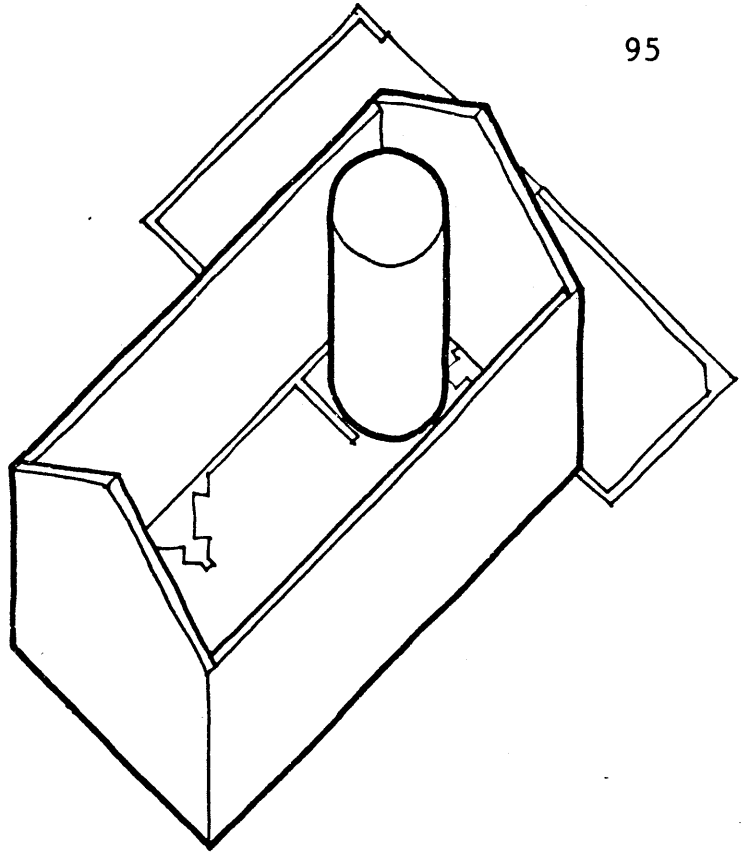
fireplace; a sizable
portion of this ceiling
has thus been retained
around the fireplace in
an attempt to maintain
the possibility of
huddling around a fire
in a low, cozy nook. As
for the original pastor's
study, its configuration
and dimensions (8 by 10,
minus the fireplace and
doors) practically
limited its contents to
a desk and single lounge
chair--quite sufficient
for the needs of the
Rev. Browne, but inade-
quate for the library/
den/office of an executive
still somewhat engaged
in business. Thus, if
the space were maintained
as built, the required
study would have to be
elsewhere, and this room
would become only an
additional (albeit
pleasant) fireplace
nook. So, to maintain
a linkage of space and
use analogous to that
of the original situ-
ation, two of the room's
walls have been pushed
out, but two have been
kept so that the room's
original extent is
hinted at, and attention
still focuses on the
fireplace.

Now, entry into the
(imagined) volume of the
Great House, like entry
into the shared foyer of
the renovation, involves
a tension between the
ideal conceptual pene-
tration of the form
and the expedient path
of actual movement.
Entry into an actual
great, simple space such
as is here implied would

occur most naturally upon
the centerline: to
suggest this centerline
entry as a base condition,
a box is given the look
of having shifted off-
center into the porch
void. Upon entering
this vestibule (via a
stuttered movement) and
closing the door, the
now-closed and symmetri-
cal "U" suggests the
(natural) straight-in
entry one might expect.
But again, the path of
movement is directed
elsewhere--thus the
actual opening through
which one enters focuses
one's attention (as in
the renovation) upon
the staircase, whose
bottom step again
inflects in acknow-
ledgement of this
approach.
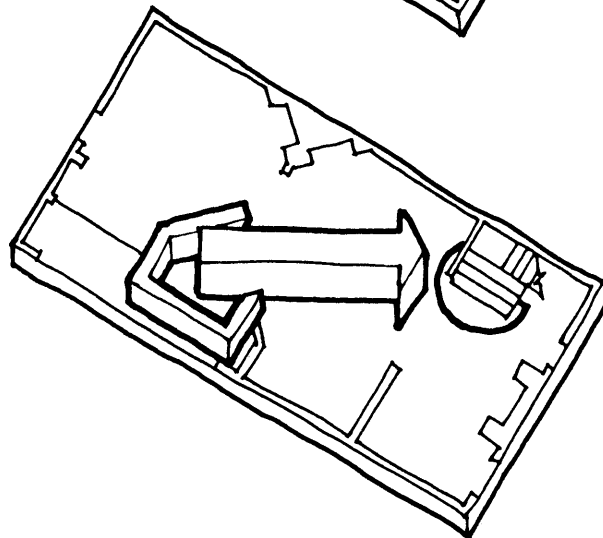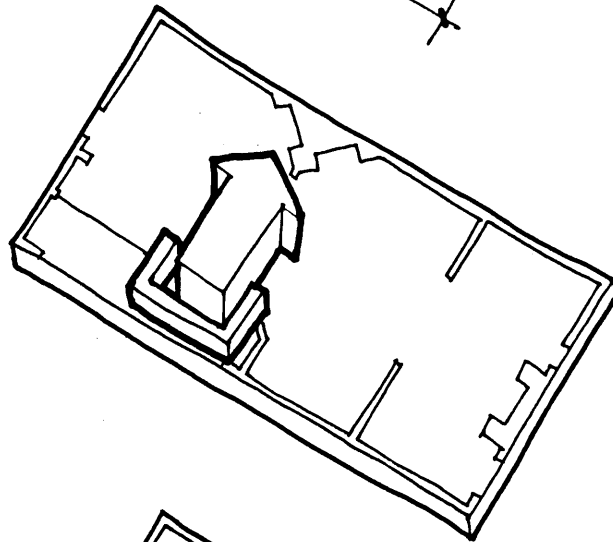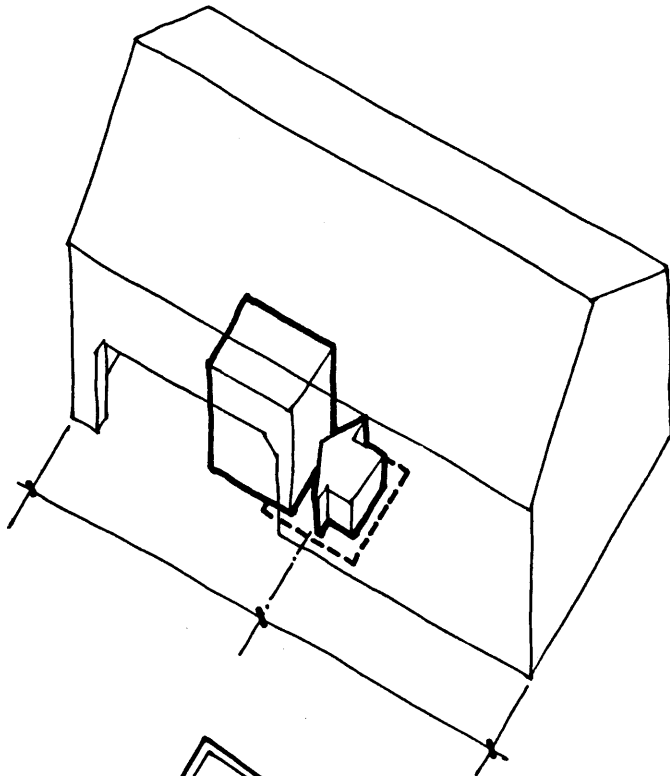
Now, there is an
additional dividend
from the efforts,
mentioned above, to
retain as much of the
original house as pos-
sible for its value as
palimpsest: by leaving
implications of all its
former divisions, the
Great House is provided
with a rich variety of
articulated parts. From
among these sub-spaces
the couple could choose
those they required for
their private activities--
two likely choices being
the low-ceilinged space
between the stairs and
fireplace for a living-
room area (that would
additionally recreate
the relationship of the
two basic elements of
a Victorian living hall),
and the extension into
the porch for a dining
nook (that would face
east for morning sun an
and allow the possibility
of opening the sliding
glass doors in warm
weather).

But whichever spaces
were chosen (and, of
course, ideally all of
the potential spaces
would be chosen for some
activity at one time or
another), the design
intention here is twofold:
first, that these
imagined spaces be
viewable as, in a sense,
equivalent to the actual
defined rooms that make
up the rest of the Little
House, this relation
being made concrete by
their common connection
to the spiral of circu-
lation; and second, that
this spiral of (real and
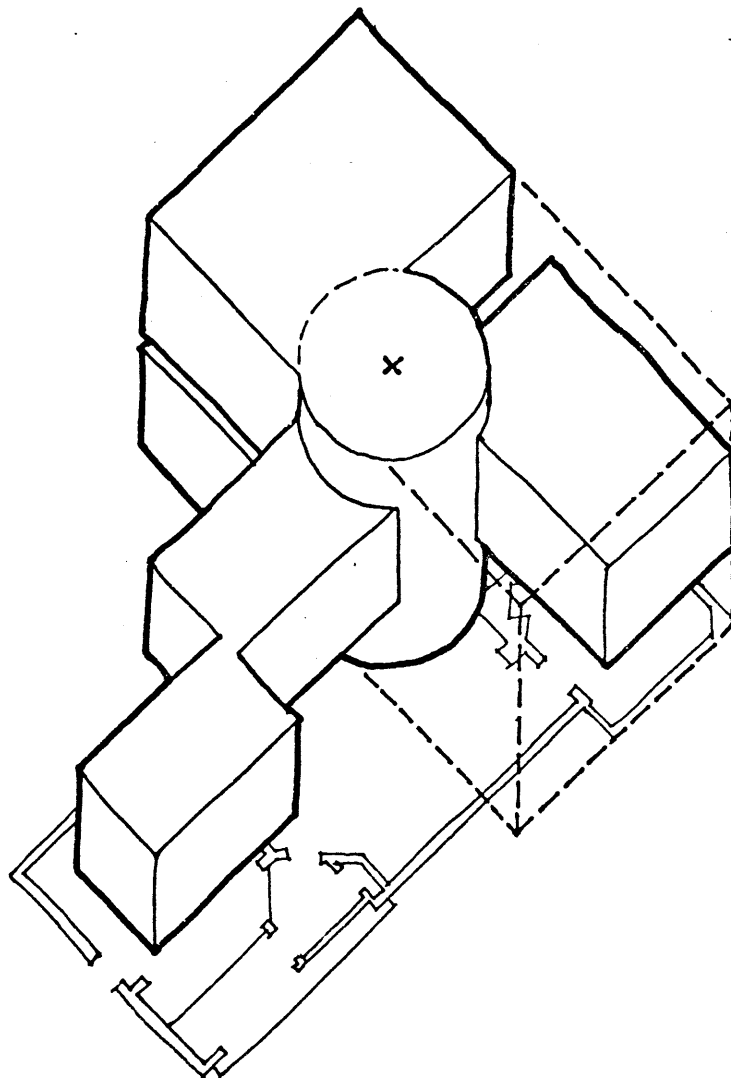
imagined) Little-House
spaces and the space of
the Great House be
viewable as integrated
into a combinatory whole--
this relation being
suggested by the over-
lapping and intertwining
of their respective
circulation armatures.

The spiral of movement
of the Little House
begins at the garage--the
space that would be the
primary entry for the
family and its cars (a
new relation acknowledged
by treating the garage-
door opening in a manner
similar to that of the
front-porch entry for
guests, but seen primarily
as an acknowledgement of
automobile entry: the
small pilot door for
entry on foot is merely
expediently cut into the
garage door and not
distorted to acknowledge
a major pedestrian move-
ment). Moving up the
spiral, the door to the
study opens directly onto
the landing; here the
original Richardson-width
four-foot door has been
kept, but new demands
allow only the now-
conventional 32 inches
of it to open, and upon
entry one must immediately
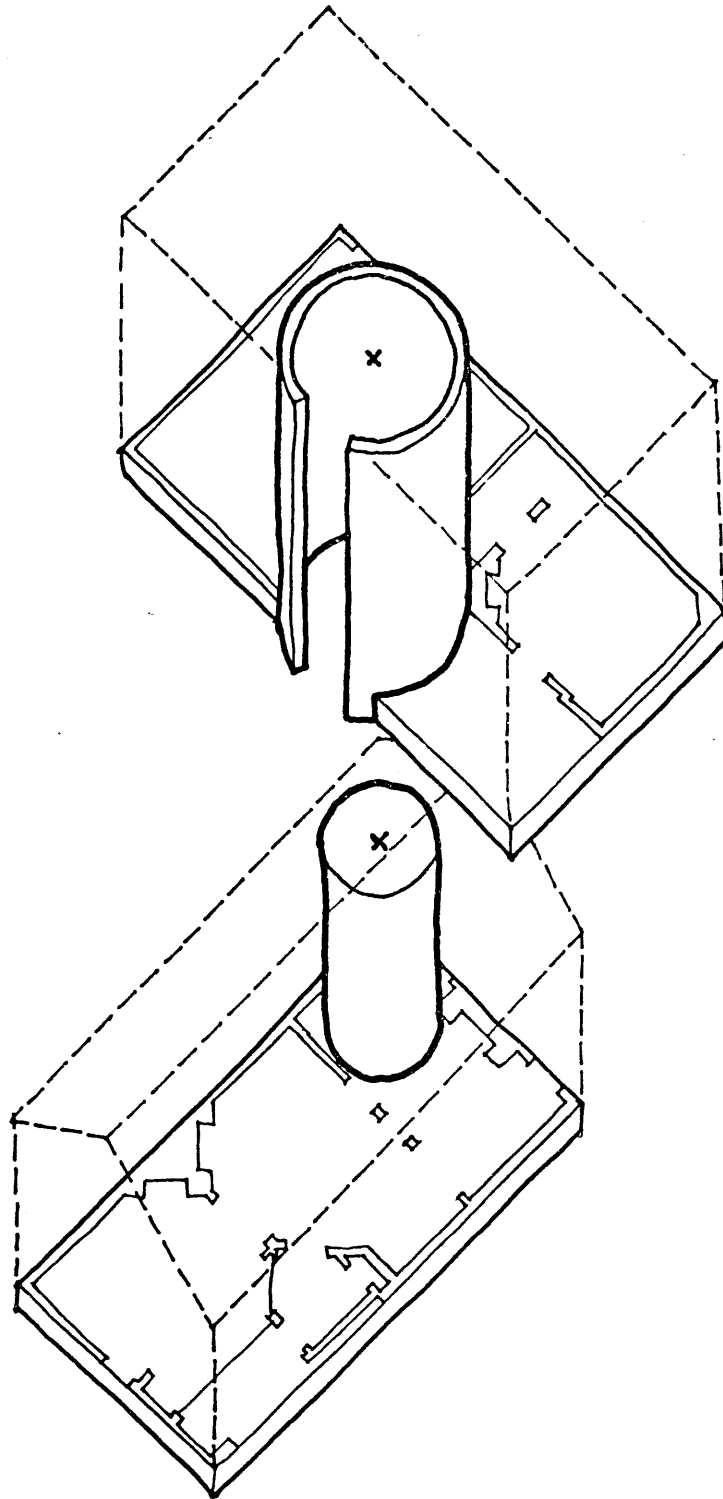
jog to the right. This
combination of moves
might suggest the
(desired, natural) base
relation in which the
study would open directly
onto the landing through
the total four-foot
opening, but which connec-
tion has been bumped
forward in recognition
of the pressure from
the garage through
which one has just
passed.

The spiral continues
on and joins the spiral
of the Great House, the
pattern of movement around
the newel post echoed in
the shape of the suspen-
ded fireplace nook above.
The two spirals together
ascend to the first
landing (raising the
possible reading of the
extra width as an
acknowledgement of
doubled circulation)
where they come untwined,
the private circuit
outside but concentric
with the public.

The Great House
armature then proceeds
up and around to the
balcony (suggesting that
the shape of the fire-
place nook could be
explained as stretched
by the now-released
spiral vector) where it
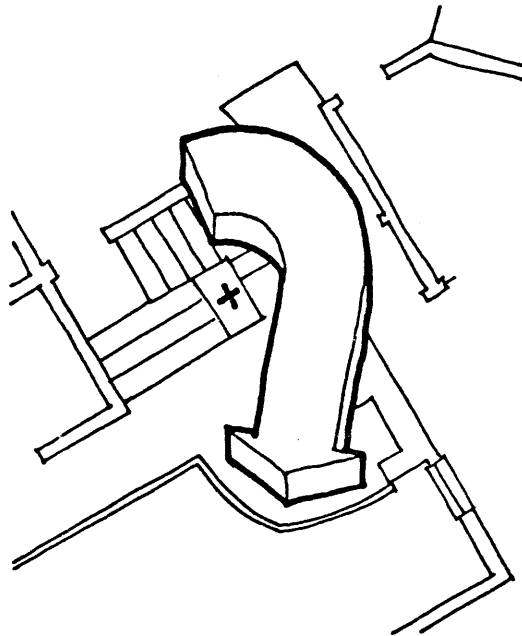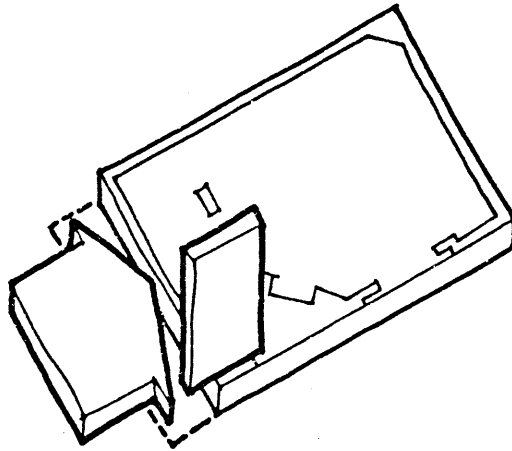
connects (literally and
conceptually) the bath
and the two guest rooms--
all of whose openings
look back into the
double-height volume
that suggests the limits
and shape of the space
with which they are
(conceptually but not
actually) coterminous.

The Little House
spiral moves from the
same landing and goes
through the master
bedroom where the stair
leading up to the deck
can be seen as inflected
to one side in acknow-
ledgement of the spiral
path. The path finally
ends at the roof deck
(whose height gives one
a greater view of the
inlet than is possible
from the front porch),
where the space of the
deck itself extends
outward, stretched (in
a reading suggested by
the railing's connection
to the main house) in
response to the force of
the movement vector.

Inside the bedroom a
wedge has been opened up
to provide morning sun
at the dressing table
and a view of the ocean,
but the intentional dis-
torting of this program-
matic accommodation
suggests other readings.
If the window is seen
as a continuation of
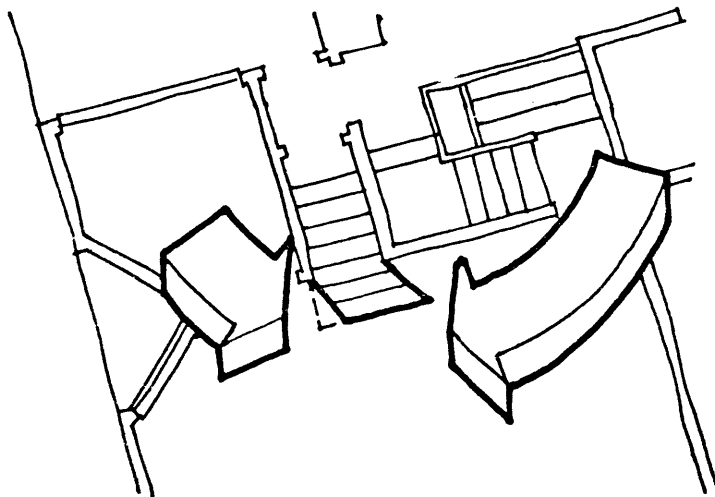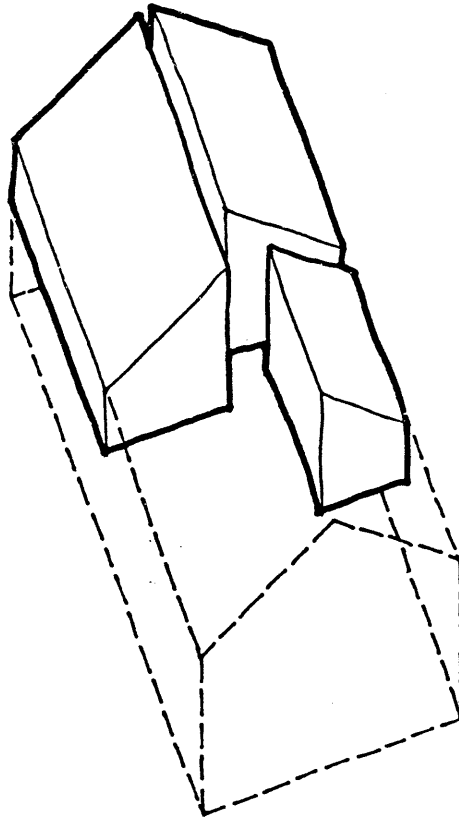
the mirror that extends
across the front of the
room, the "unnatural"
off-center placement of
the deck stair is given
a rationale by an
imagined base condition
in which the mirror
split at its centerline
and half of it moved
left, allowing the stair
to cascade down and spill
out through the resulting
opening, a spilling
suggested by the fact
that the curved dresser
assembly sits on the
extended first riser of
the stair. (The con-
figuration also gives
the necessarily-narrow
stair a grander scale,
more reflective of the
space to which it leads,
as in the stair in the
Lautentian library
vestibule.)

The shape of the arc
further suggests the
original (pre-wedge)
width of the room. But
even more, the dresser
and the continuous
mirror above it figure
in a bridge-the-gap
strategy like that of
the left-hand stair in
the renovation study.
Since a large master
bedroom like this one
will naturally contain
areas for (at minimum)
sleeping, lounging, and
dressing, this articu-
lation can be aided (and
a functional requirement
met) by providing eye-
height wardrobes to be
used like the closet-
headboard shown earlier.
The continuous arc of
the dresser provides
the reminder-of-the-whole
that allows this cutting-

up process to proceed
freely. Further, it
tames the requirements
of the equipment of
vanity and sinks; that
is, first, they can both
be ignored because the
arc serves as a container
out of which they are
mere articulations; and
second, by being part of
a continuous element,
the placement of sinks
and vanity does not
determine the position
of the wardrobes--that
is, they need not be
bunched together to
form a defined dressing
area, but can be spread
apart at will, linked
conceptually through the
intermediary of the
continuous arc of the
dresser.
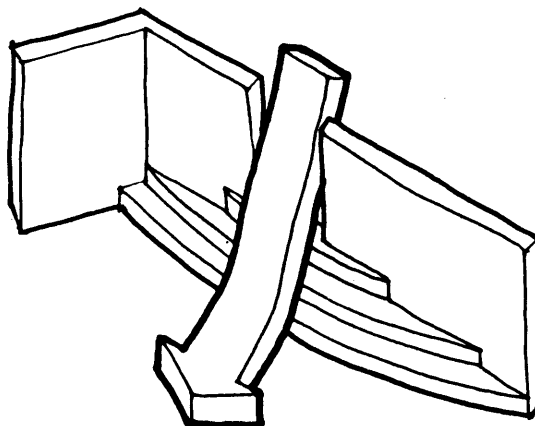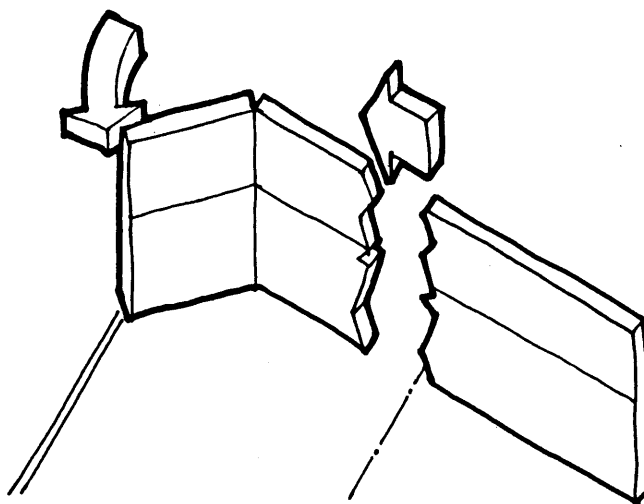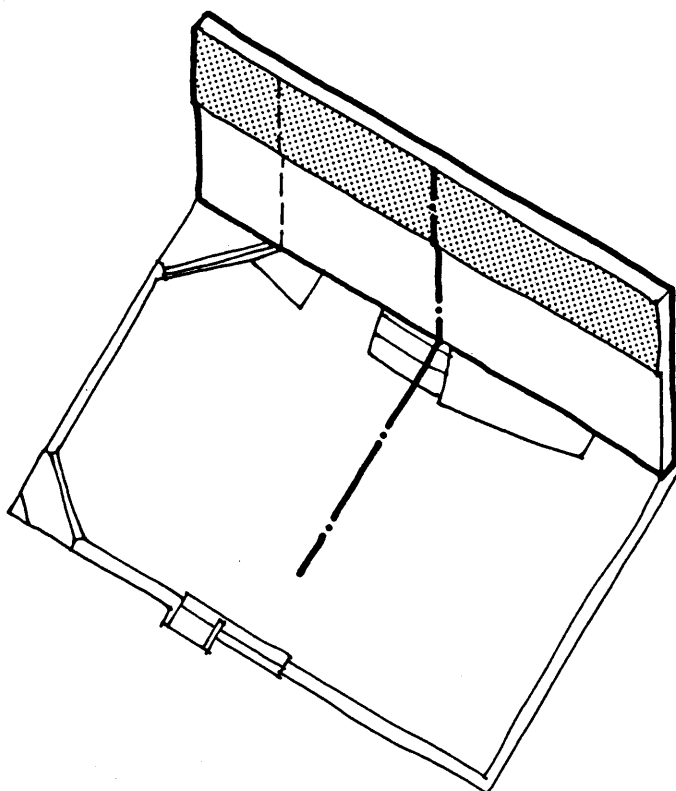
But all of the above
has to do with the con-
ceptual integration of
volumes as experienced
from the inside; there
is the further problem
of integrating the
new additions with the
existing house as seen
from the outside
(remembering also
that these two modes of
integration should, when
seen with some subsuming
understanding, reinforce
each other). As sug-
gested in the prelude to
this section, one of
the ways in which this
design attempts this
integration is by
emulating, as far as
is reasonable, the
compositional strategy
of multiply-suggestive
articulation observed
in the analysis of the
original building. To
accomplish this, the
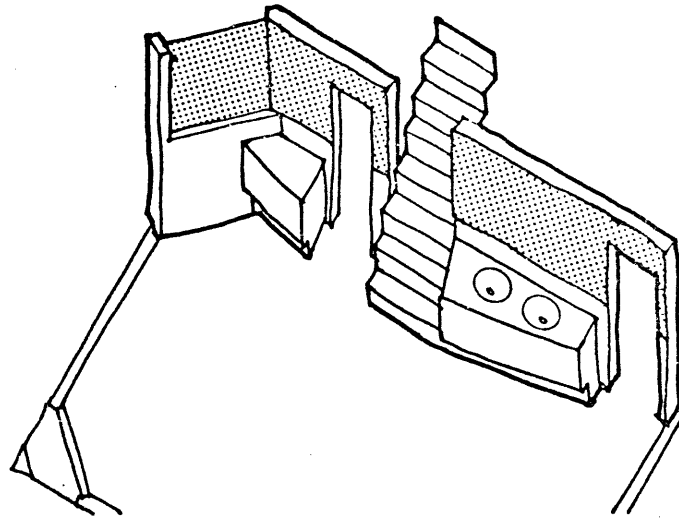
design attempts to
manifest its forms in
such a way that, by
focusing attention on
different aspects of
the forms, a viewer
could apprehend three
different patterns of
formal relations, each
pattern internally
consistent and each
analyzable as an acknow-
ledgement of a particu-
lar aspect of the
building situation.
More specifically, one
set of formal relations
tries to suggest that
the new addition be seen
as a complete, contained
shape whose completeness
points up the contained-
ness and self-sufficiency
of the pattern of PROGRAM
requirements it houses
(as the complete hip-
roof cottage contained
and acknowledged the
complete pattern of the
pastor's activities).
A second set of formal
relations then tries to
suggest that the new
addition be seen as a
dependent shape, as only
a part of a larger whole
whose disposition can
be seen as acknowledging
SITE CONDITIONS (just as
the walls of the pastor's
cottage could be seen as
dependent parts of the
two flat facades that
acknowledged both ocean
and hillside). And
finally, a third set of
relations will try to
suggest that the new
addition be seen as a
dependent part of an
alternative whole--a
whole which, in this
case, can be seen as a
dual resolution of both

MOVEMENT and FORMAL
PREDISPOSITION (just as
with the analysis of the
original house's stair-
case: recall that the
spiral of the stair
marked-out a conceptual
whole whose axis of
symmetry reflected the
vector of approach [MOVE-
MENT], and that the
resolution of movement
through the house in
turn supplied a reasonable
rationale for the stair's
location [FORMAL PREDIS-
POSITION]).

THE ADDITION AS A
COMPLETE SHAPE

By "complete shape"
I do not mean the actual
physical extent of the
new addition: that
shape would be apparent
to any observer merely
through the expedient
tell-tales of its con-
struction, no intention-
ality involved. Plus,
its actual shape is
merely the outcome of
providing spaces for the
individual parts of the
program: it does not
represent the kind of
resolution of the
program that subsumes
the individual parts
into a convincing,
informing whole. In the
case of the original
house, the complete
hip-roofed cottage was
the whole shape that
encompassed the public
activities of the pastor.
Here, a new complete
shape is wanted as a
similar conceptual
container, in this case
for the intimate acti-
vities of the owners.

The complete shape
for this container is
the almost paradigma-
tically-modern "shoebox"--
a shape (like the cottage)
familiar enough that
seeing a part of it would
allow a viewer mentally
to "complete" it and
imagine the total form.
This possibility of
conceptually completing
the form is important,
because, if the conceptual
shape could be conveyed
only by revealing all
of that shape, this
completeness would prevent
the necessary simulta-
neous perception that
the form is an incomplete
part of a greater whole.
Thus, to suggest this
condition of simultaneous
wholeness and part-ness,
the formal relation of
interlocking that was
seen in the original
house is used; that is,
the intention here is
to suggest that the
shoebox of the Little
House be seen as both
penetrating and being
penetrated by the gable
box of the Great House.
The manner in which
this relation is
suggested emulates the
condition observed in
the original in which
the two side-forms of
barn and cottage appeared
to overlap the center
gable box when viewed
from the rear but were
themselves overlapped by
the same gable box when
observed from the front.
With the shoebox, the
suggestion of overlapping
at the rear is simply
an outcome of its
physical disposition,
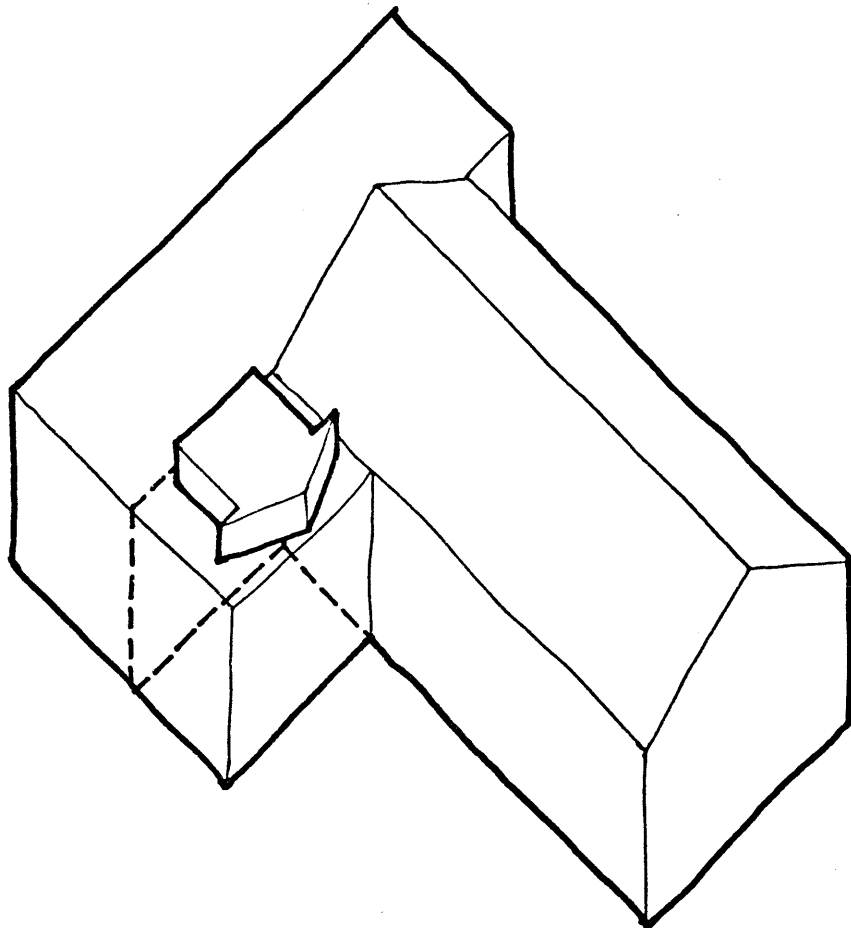
but to imply being
overlapped in the front
is more difficult, since
the box extends beyond
the face of the form
that is to overlap it.
But the same problem
occurs at the rear of
the original house where
the barn must appear
to overlap the gable
box even though its
face falls behind that
of the larger form: the
perception desired here
is one in which the
receded form penetrates
half-way into the
extended form, "erasing"
half of that form as it
moves; with the barn
this perception is
implied by, first, giving
the overlapped gable-box
form a look of "something
missing" and then sugges-
ting how much is missing
by supplying a tell-tale
of an imagined original
extent. Here the pattern
of windows gives a look
of incompleteness; by
attending to only those
windows in the plane of
the front of the box,
one might discern the
beginning of a base
pattern of three pairs
of windows--a perception
that would be confirmed
by restoring the (erased)
box back to the edge of
its imagined original
extent marked by the new
tell-tale retaining wall,
the hypothetical twin
of the pier supporting
the opposite corner of
the box. Further, by
viewing the rear facade
with this schema of the
gable penetrating the
shoebox, the simple
physical overlapping
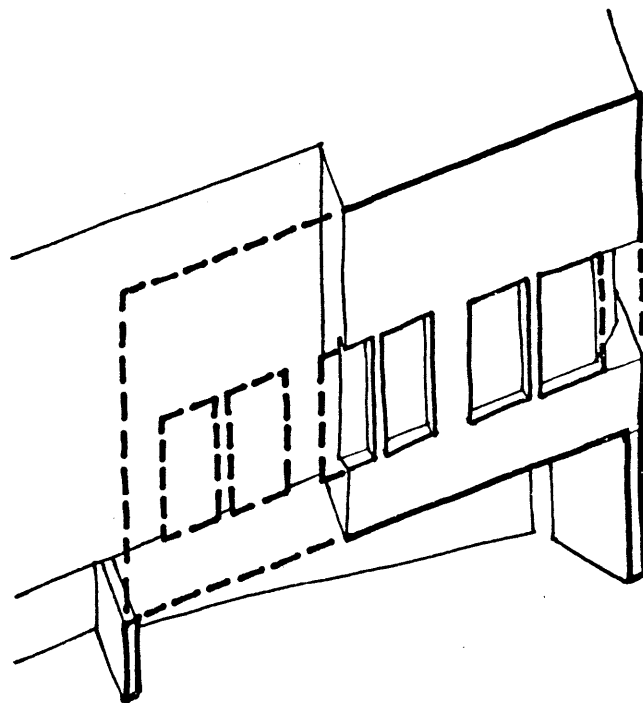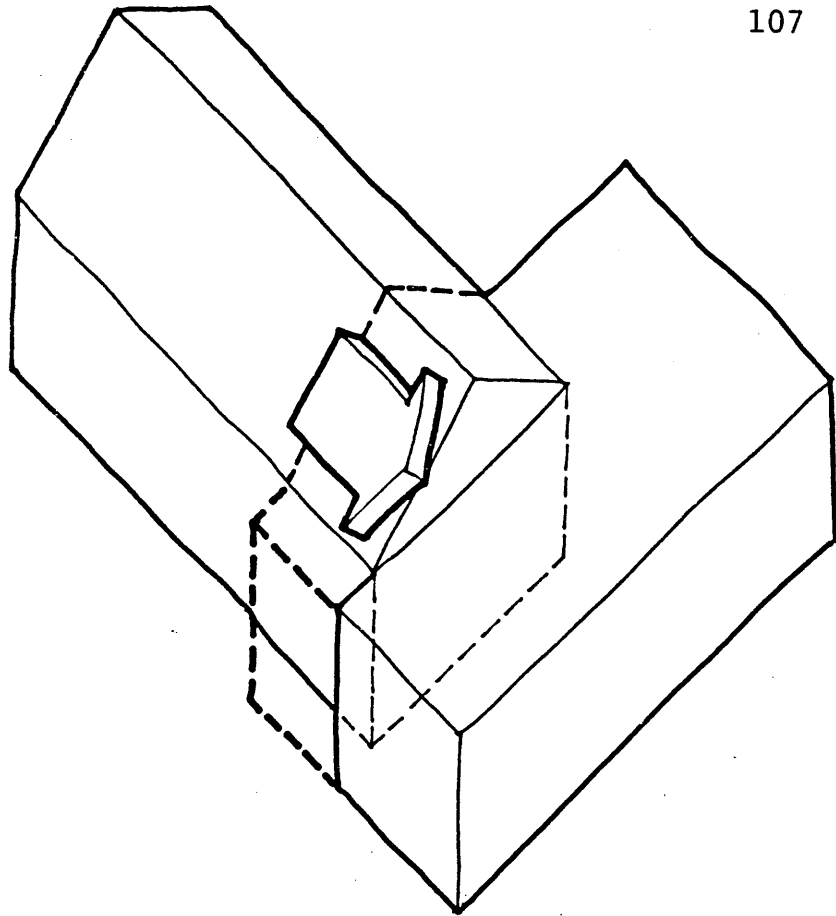
takes on another aspect:
the boxed window at the
middle of the facade
(actually a shade against
summer sunsets) can be
seen as having moved to
the left, off its natural
centerline position,
gouging out the surface
as it passed--this in
acknowledgement of the
extension of the back
slope of the gable (an
extension made apparent
by holding the peak of
the new roof back from
the ridge).

(As an aside, recall
that the pastor's
cottage showed another
level of completeness
in that the centering of
the front window in the
facade of the extension
implied the imaginary
existence of a complete
form centered on the
window as an axis.
Likewise here, the
suggestion of a complete
form can be discerned
in the I-shaped pattern
formed by an imagined
pairing of window-and-
a-half's, the lateral
extent of which is
intentionally marked by
the opening of the
railing. In this case,
this additional reading
can be seen as a recog-
nition of the original
foundation--upon which
the box sits and which
aligns with the right-
hand edge of the implied
"I." This base form
thus also contributes to
the suggestion--used in
another interpretation
below--that the form of
the box be seen as
extended sideways, a
perception reinforced
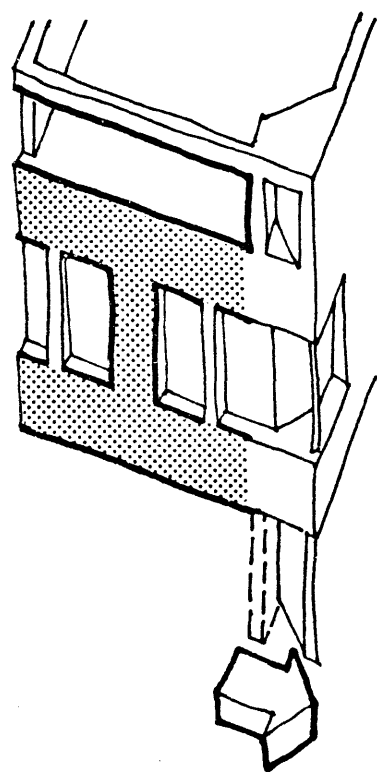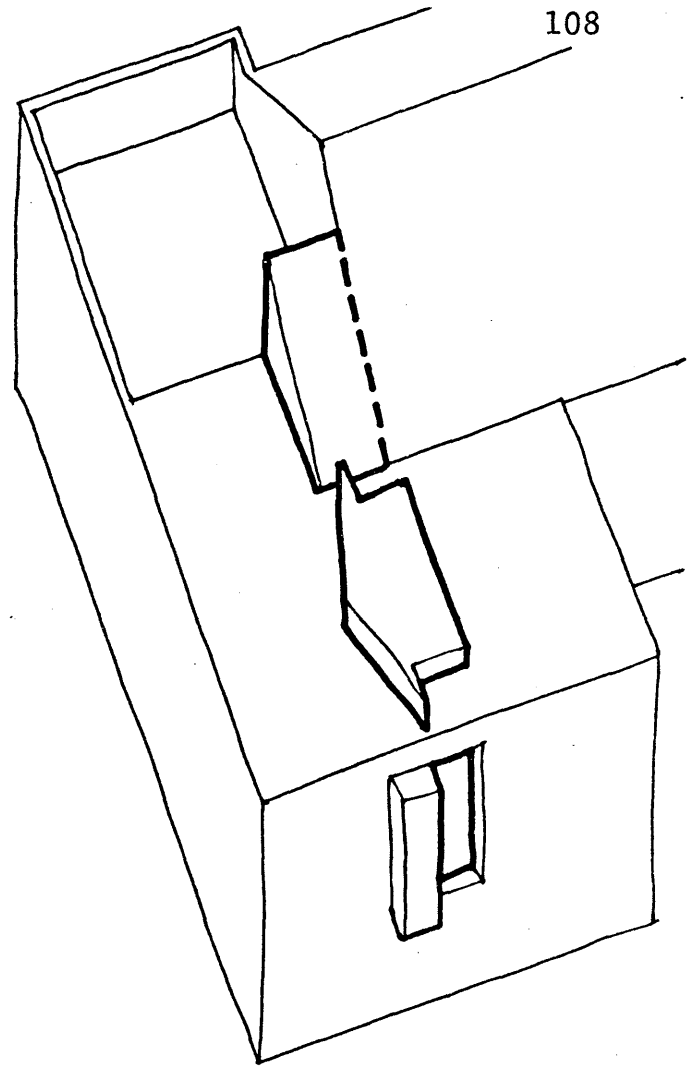
by the sideways twists
of both the pier below
and the rail-support
above.)

THE ADDITION AS A PART
OF A LARGER WHOLE

The second perception
that I want to engender
is that of a base con-
dition in which the
facades of the new
addition are integral
parts of an "L" of two
planes that enfront the
ocean and the hillside,
in this way maintaining
another of the observed
compositional strategies
of the original house.
Working against the
maintenance of this per-
ception is the fact that
the front facade is no
longer a continuous
plane but is broken
forward by the new
addition. In order for
the viewer to imagine
a base condition in
which the facade is
again a flat plane, the
facade of the addition
must suggest that it
has been displaced
forward. This it does
by suggesting that a
break has occurred
right across one of the
windows (a displacement
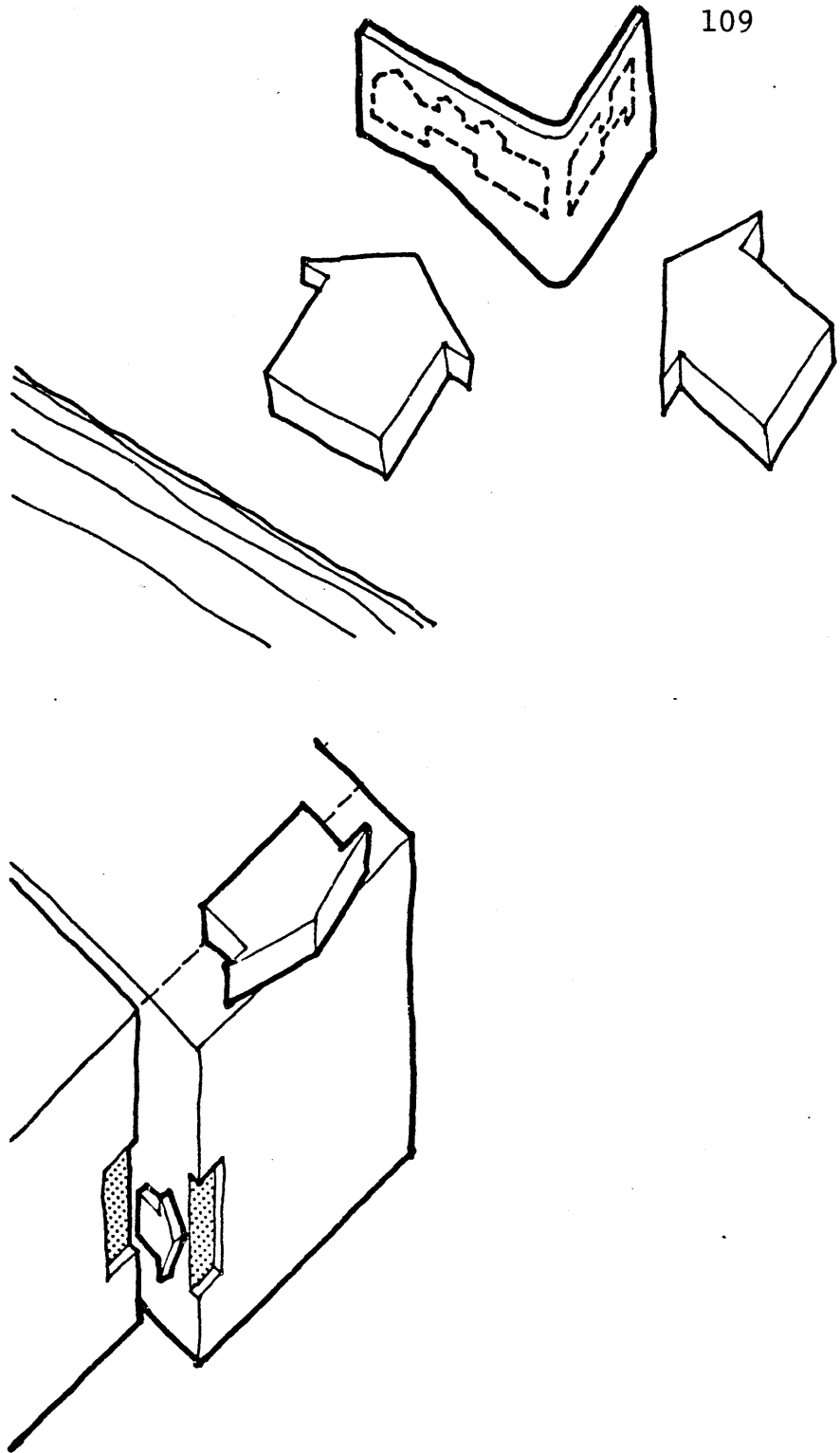
that is echoed in the
side facade by the
implied shift forward
of the railing opening).
By imaginatively pushing
this piece of the facade
back to its base position,
the result is a continuous
window rhythm (overlaid
upon the original) that
extends around the
corner, linking the two
facades. But by
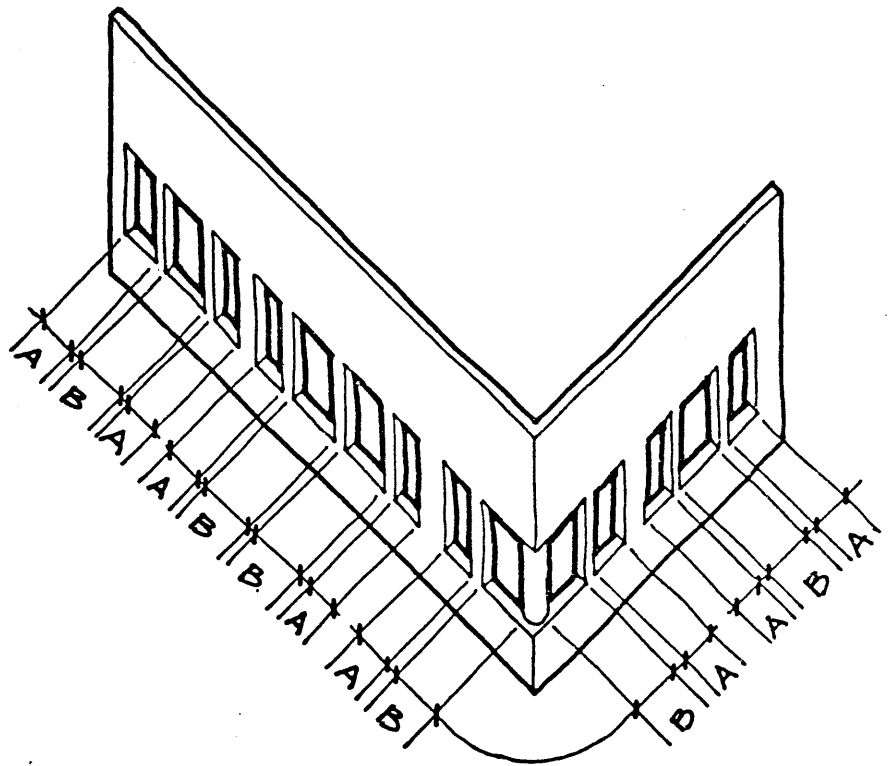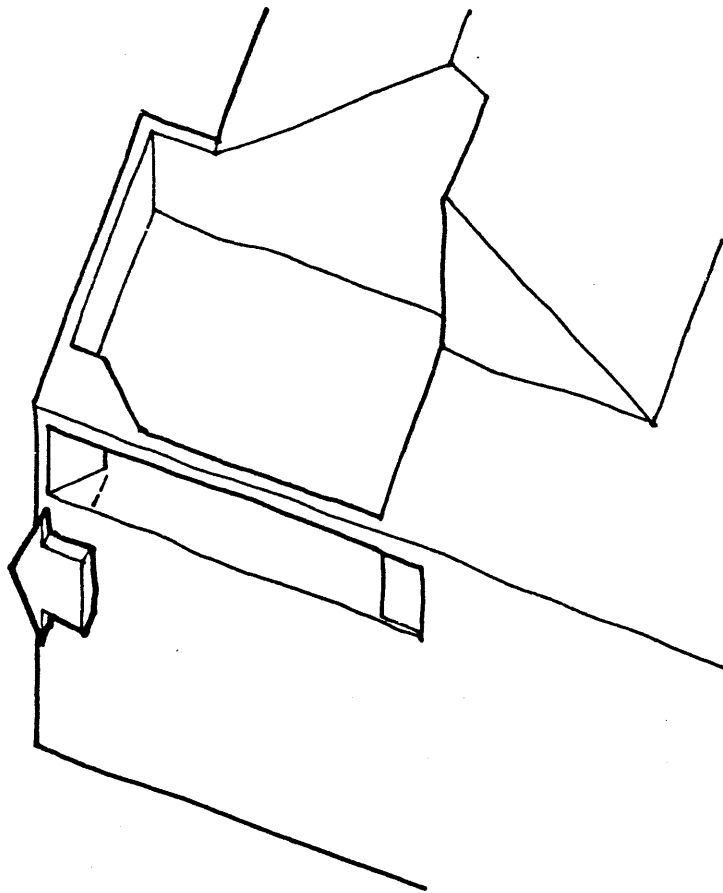
following the rhythm-
pattern to its ends,
one notices the two
similarly-shaped
voidings of the porch
and the garage door--
both only partly
covered with a plane of
diagonally-grooved
plywood. By being only
partly covered, both
openings can be seen as
shifted out of an ori-
ginal, fully-covered
position: that is, the
perception is engendered
that, while the diagonal
second skin has remained
in place, the garage
door has been pushed
down and the porch
opening displaced to
the left. The impelling
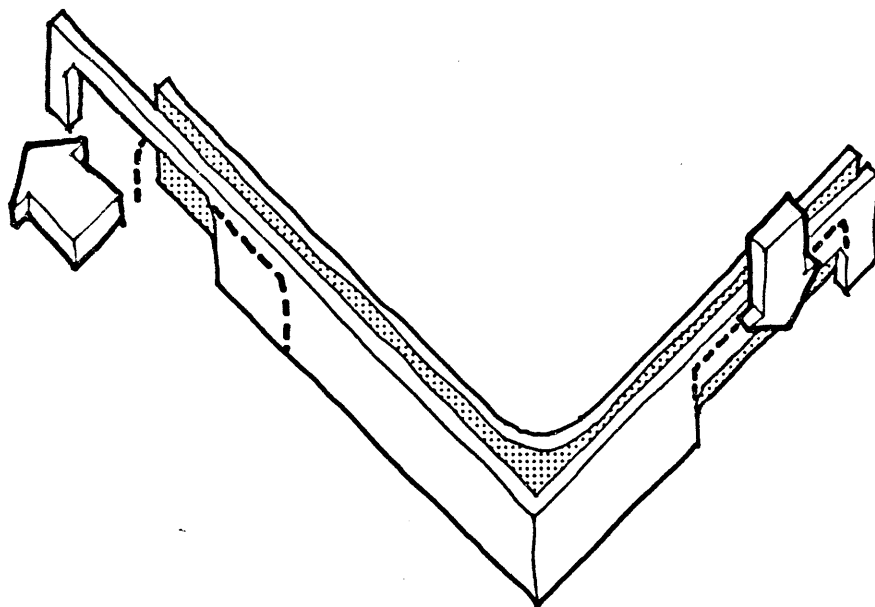
force for all this move-
ment appears to be the
wedge that has split
open the side facade (a
perception that is
reinforced by the banded
void that appears to
have been shoved to the
extreme right-hand
corner--in actuality a
diagonal window to
balance the diagonal
of the inside wedge-
window). By its
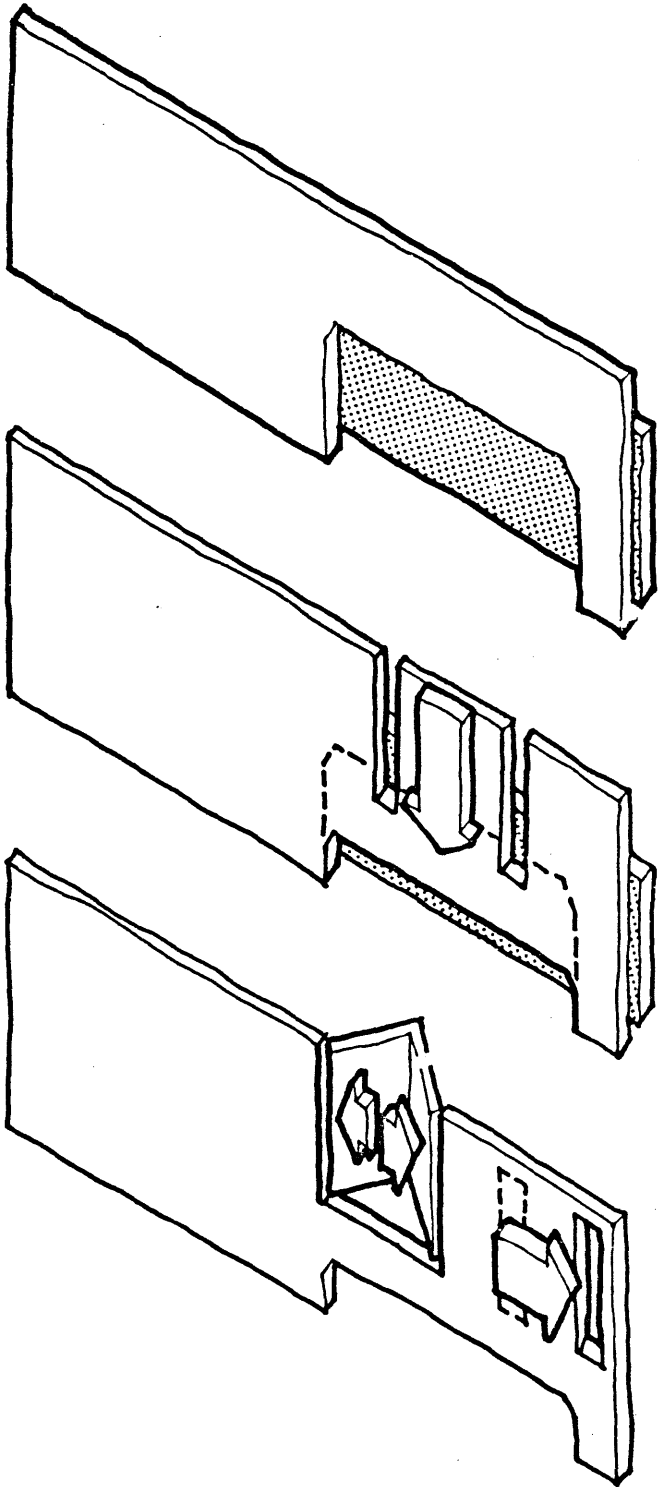
imagined driving-down
and spreading-out, the
wedge can be seen as
having displaced around
the corner a continuous
band of openings (whose
axis of symmetry would
thus have been shifted
from its natural position
on the corner to its
new place--the center
of the above-noted
I-shaped pattern--on the
addition's front facade).
This leftward shift-
around-the-corner implies
the continuity of the
two facades in much
the same manner as did
the similar rightward
movement of windows
viewed in the original
analysis. Further, note
that these movements are
suggested when the
observer views the
facades frontally--that
is, when he places
himself in the positions
of the ocean and the
hill slope, the two SITE
CONDITIONS that these
two linked facades
acknowledge.

THE ADDITION AS A PART
OF AN ALTERNATIVE WHOLE

But when viewed
obliquely, different per-
ceptions are suggested--
perceptions that (if the
above pattern holds)
ought to be analyzable
as acknowledgements of
the likewise oblique
vector of MOVEMENT
toward the building.
And further: in keeping
with the ideal of
multiple suggestiveness,
the design ought to be
such that the same
elements that implied
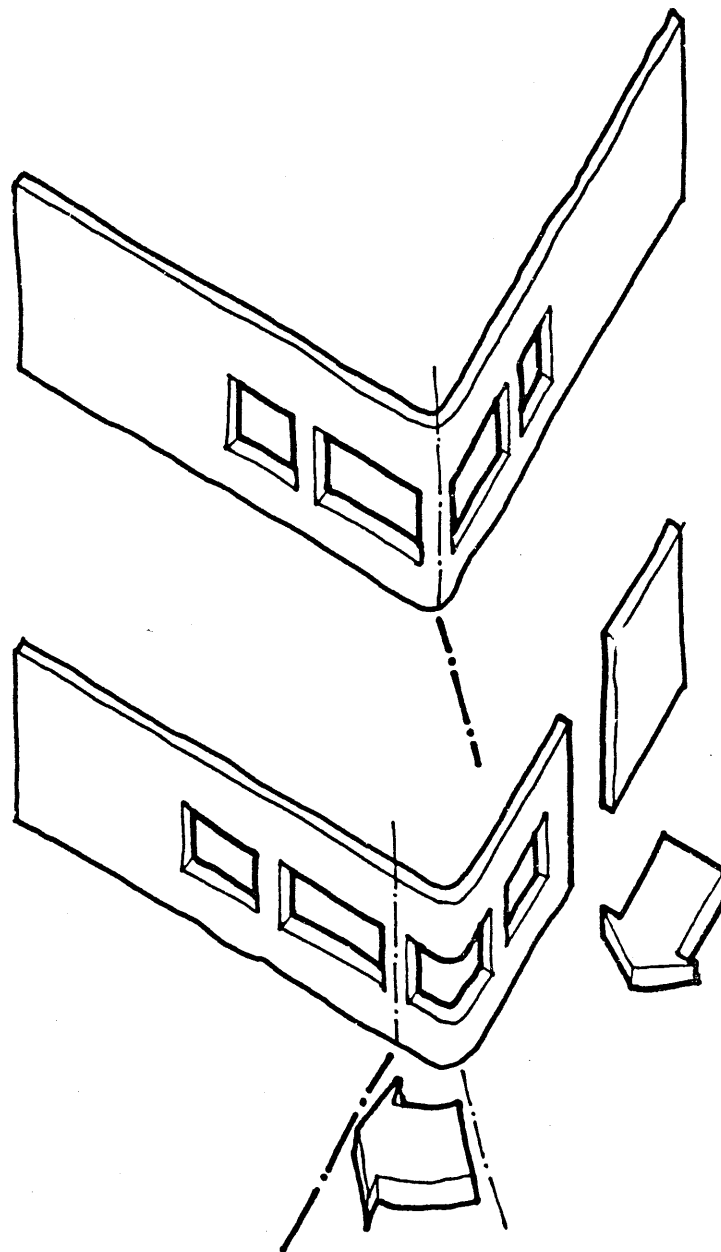
one set of perceptions
to a frontal view will
suggest an alternative
set of perceptions to
an oblique viewpoint.
Thus when viewed from
the northeast corner,
the original foundation
reads as a base from
which is extended, toward
the viewer, a form whose
extent is indicated by
the (open) corner of
the addition and the
front edge of the wedge.
This perception of dia-
gonal displacement is
reinforced by the
window pattern, which
(by ignoring the pipe-
support at the corner
of the new addition) can
be seen to have a
continuous rhythm
different from that
observed in the frontal
view. And the diagonal
pier likewise gains
an alternative inter-
pretation, contributing
to this perception of
displacement.

Diagonal displacement
is also suggested in the
view of the addition
from the northwest,
where both the corner
window and a short
retaining wall orient
toward the viewer. And
once again the wedge
figures in the perception,
this time working in con-
junction with the middle
window of the back wall
to suggest that the
previously-mentioned
movement of the split box
be seen as a diagonal
shift.

Now, if one imagines
these two diagonal
extensions as taking
place simultaneously,

A B A A B A A B' A A B A
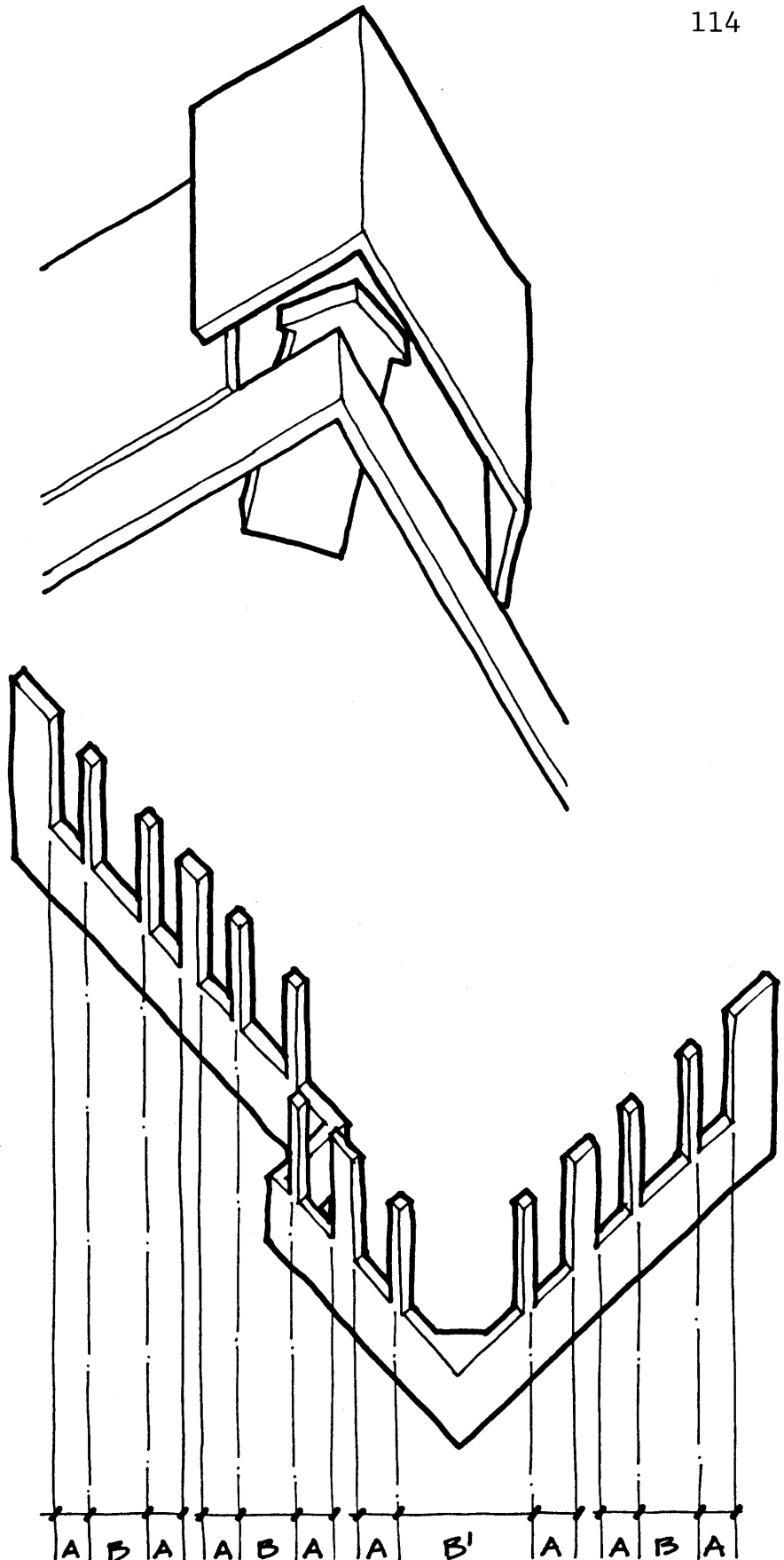
the resulting perception
would be one in which
the volume inside the
shoebox form expands
to the point where it
cracks the skin and
opens up a wedge into
the volume. This double-
diagonal expansion could
be analyzed simply as
a reflection of the
increased volume of the
new addition, but a
more intriguing inter-
pretation results when
one recalls that, in the
original house, oblique
elements were tied into
the house's orthogonal
axis-system through
their relation to the
center of the conceptual
cylinder of the main
stair. And indeed, the
two diagonal piers, the
deck's rail-support, and
the corner windows all
do tie back to the stair.
But one could also
imagine that, by being
encircled by a new
overlaid spiral, the
cylinder of the stair
can itself be thought
of as having expanded--
and more, as having
expanded in the direc-
tion of the "crack" at
the wedge. Seen in this
way, the stairway might
be said to emulate the
centralizing role of
the stair in the pastor's
cottage. That is, the
condition of being pinned
to the stair-cylinder
allowed the spaces of
the L-shaped visitors'
realm to be pivoted
into their final
positions; the spaces of
the Little House can
likewise be seen as
pinned to the stair-

cylinder (a perception reinforced by one's actual movement), and because of this attachment they would naturally crack apart when that cylinder expanded.
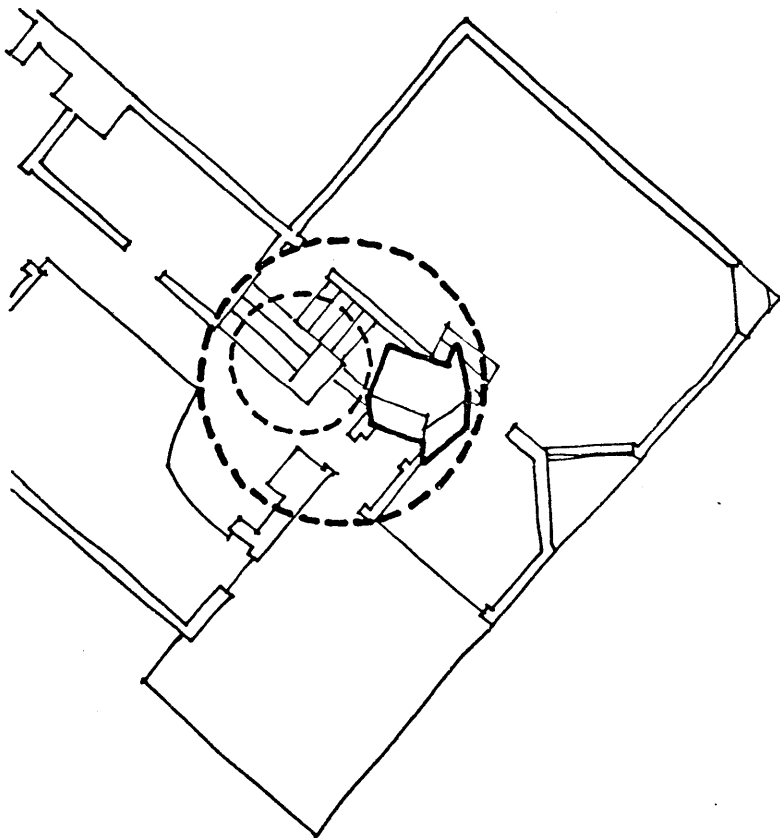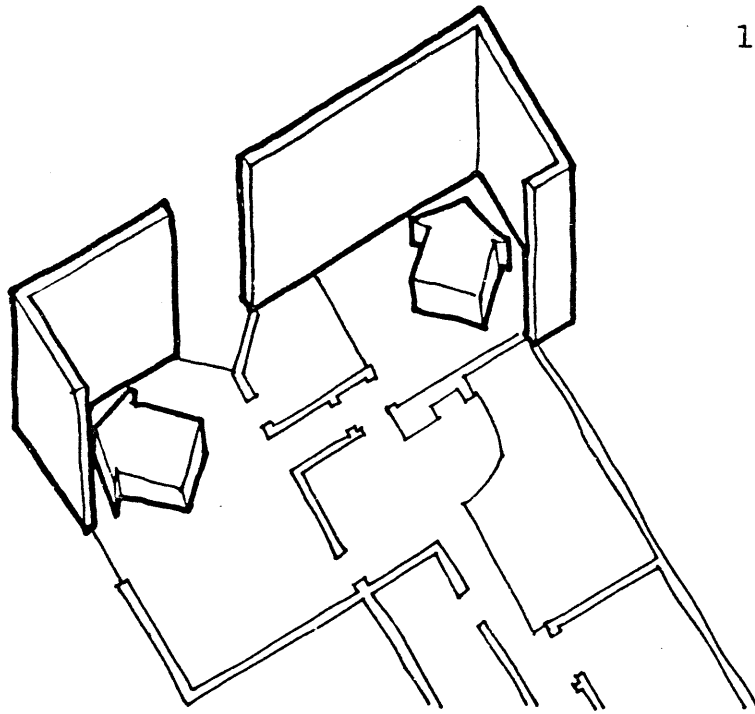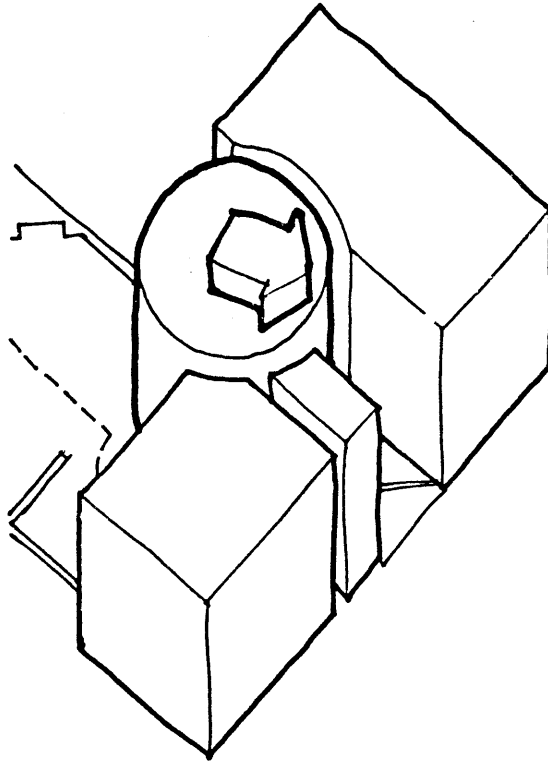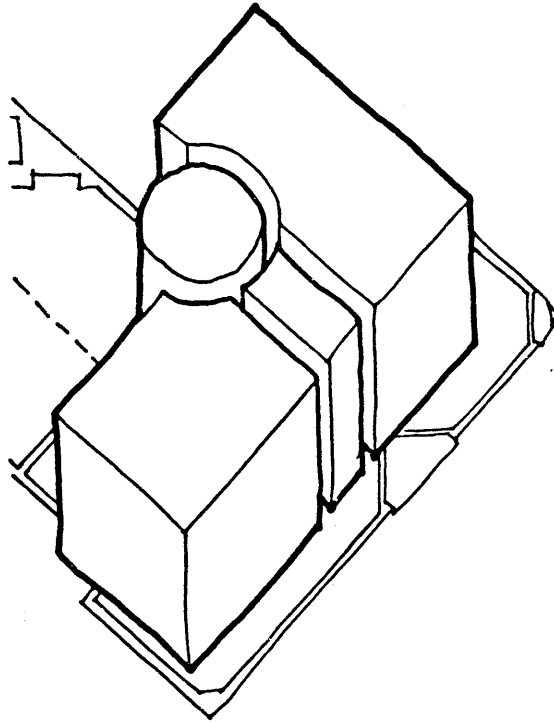
But this cracking can
also be seen as
addressing the fourth
and final building
aspect, FORMAL PREDISPO-
SITION. The most basic
formal problem with the
shoebox shape is stopping
it, providing the sugges-
tion of a convincing
reason why the box is
not more extended in
either direction. By
several formal relations
discussed above, the
perception is engendered
that the space of the
shoebox is contained by
a continuous skin. By
suggesting that this
stiff skin has spread
apart along a crack, the
wedge reveals the
(imagined) original,
uncracked extent of the
box; thus, by simul-
taneously splitting the
form and holding it
back from further
expansion, the wedge
tells both how the
box got to be the size
it is and why it can get
no bigger. Easily its
most striking feature,
the wedge rationalizes
the shape of the box,
ties it back to the
cylindrical stair, and
articulates the form,
providing yet another
place where imagined
parts are simultaneously
linked and separated.
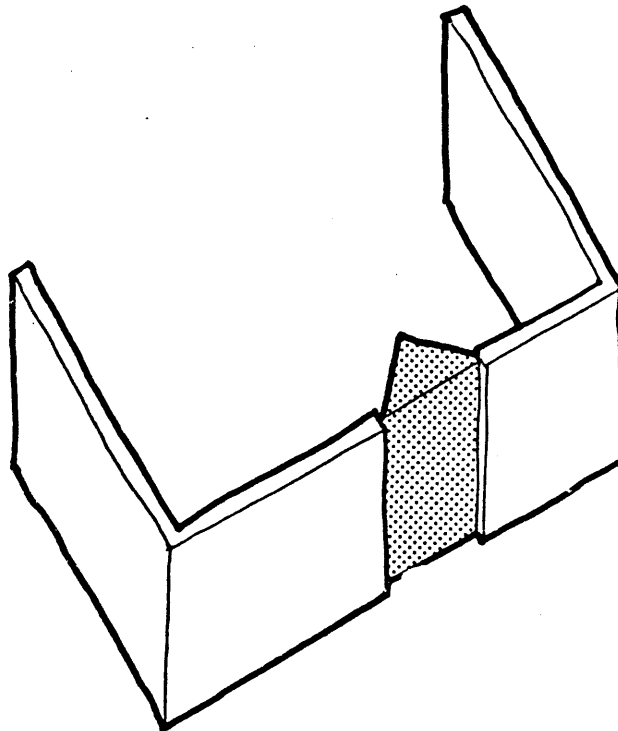
Second Presentation

Insofar as there is any polemical motivation behind this second presentation, it is only this: I believe that back of the phenomenon of popular perception there is a kind of systematic rigor that is appropriate for and sufficient to the task of that type of perception; but I further believe that, if one reveals the nature of this rigor, making its structure overt and understandable, then it would be possible to construct a sophisticated analytical system upon the base of that structure. The immediate and natural reaction to this assertion is that analyses based on "naive" perception could only produce trivial results. This presentation takes the opposite view—that one can indeed construct an analytical framework of precision and depth that nevertheless remains faithful to its base in popular perception. Recognizing the onorthodoxy of this view, this second presentation will, at times, take on the character of a pre-emptive defense, a response to objections that might be raised about its assertions. As such, the first section will try to show why several existing analytical systems are inadequate for my purposes; the second long section will then show how the analytical model is structured to reflect the logic of popular perception; and the sections following this (the "defensive" sections) will try to show, first, how the system's structure parallels that of two other constructed systems; then,

how its particular analytical perspec-
tive reveals opportunities foreclosed
to other critical systems; next, how its
structure avoids some of the dangers of
excess that other systems pose; and
finally, how it might open up possibili-
ties for knowledge in areas outside its
own field.

To focus the presentation of these existing
analytical systems, I want to concentrate
attention on the way each handles two
relations: first, the relation between
architecture's nature as object for use
and its complimentary quality as an
object for meaning and association; and
second, the relation between the making
of the object (here treated as the
abstraction "the architect") and the public
at large. The questions of proper rela-
tion raised here are, of course, not
new; and my answers cannot hope to settle
controversies that are no doubt as old
as institutionalized architecture itself.
But these relations do supply a revealing
framework upon which to mount the ideas
of the first section. Specifically, I
will first try to show how the ways in
which four current movements have dealt
with the relation of the artist to the
public are inadequate; I will then show
how the model employed in the previous
design sections handles the artist-public
relation in a way that both meets these
inadequacies and, in so doing, also
supplies an answer to the question of

the dual nature of the object.

To a conventional Fine Art view (in
an extreme form) the question of art's
relation to the public simply does not
arise: art's primary responsibility,
this view would contend, is to itself,
that one makes art in order to maintain
and develop certain historical values
that have an existence apart from those
of the world, though not necessarily in
opposition to them. The outcome of
this is that--except during those rare
times when the values of art and those
of the world happen to coincide--the
products of art will be meaningless to
those not attuned to the latest state
of developing art values. But more:
since these values must inevitably con-
stitute an ideology, a viewer of art might
find the products of these values not
merely meaningless but actively offensive--
that is, such a work might espouse values
not merely without connection to his own,
but actually in opposition to them, a
situation that might produce an expansion
of awareness on those occasions when one
is ready for it, but which is hardly appro-
priate for an environment in which one
must spend considerable amounts of time.

If this position of ideology might
be said to describe that of art, than a
position against this would shun any
ideology; and indeed the tendency most
conventionally characterized as anti-art
is the Pop sensibility (or, if one insists,
"ideology") in which one merely catalogs,

without comment, the world as (selectively)
observed. That is, certain portions of
the environment are brought to the viewer's
attention by being bracketed--by being
made more noticeable than the unchosen
portions by virtue of a move such as
enframement, a change of scale, or a
change of context. But the inadequacy
of this approach as a model for the
artist's relation to the public springs
from this very bracketing process. For
bracketing, at base, merely involves the
declaring of a distinction between "the
chosen" and "the rest of the world:" it
does not tell us anything about the
character of the relation between the
two--the result for architecture being
that, once one has drawn out from the
world this repertoire of elements familiar
to the public, one is still left with the
question of how to redeploy them back
into the world in built form. One might,
of course, play up this condition (as in
the work of Hardy Holzmann Pfeiffer where
familiar objects appear in unusual contexts),
but this move of making the familiar
strange again confronts the viewer with
an ideological environment from which he
might not be able to escape.

The flaw of the bracketing sensibility
as a model is that it makes no effort to
understand the forces behind the physical
manifestations it highlights; in effect,
it amounts to playing a spotlight over
only the surface features of the world,
producing vivid but global and unspecific

impressions of relatively broad portions
of the environment.

An alternative to this spotlit view
of the world could be the model of Claude
Levi-Strauss' anthropology--which might
be said, conversely, to view the world
through a microscope. This approach
recognizes that there is a logic behind
such phenomena, but it contends that that
logic either cannot be known or else, if
known, would be of a kind that would not
make sense to our normal way of (con-
sciously) thinking. Thus, this approach
focuses in on the phenomena of the world,
breaks them up into the smallest possible
elements, and then reassembles them
according to a constructed logic. For
the architect and his relation to the
public, this model would imply that the
process of designing new environments
for the public would be one of isolating
the relevant elements from existing
analyzable environments and recombining
them according to a constructed archi-
tectural logic. Whether this can indeed
be done remains to be seen, but the idea
itself raises the spectre of design
decisions from which there is no appeal,
the decision being based on unassailable
"scientific law." We have all witnessed
the results of this sort of scientific
determinism in the case in which psycho-
logical studies declared pale green to
be the most desirable color for office
walls.

But more revealing, I think, is the

realization that all three of these models
hold the world of the public at arm's
length, either by ignoring its presence,
by confronting only its surface features,
or by denying the validity of the logic
that underlies it. The alternative to
this detached attitude is one of total
immersion in the popular and the verna-
cular. In this model the architect
pursues an understanding of the public's
environment that will avoid the pitfalls
of detachment: by abandoning all prior
ideologies, he opens himself fully to
the desires of the public as expressed
in their words and artifacts. In his
role as a designer, then, his relation to
the public would ideally be as a transpa-
rent conduit for translating their desires
and values into form, directly and without
intervention. To me, however, there are
several disturbing features of this
model. First and most obviously it views
the values of the public as practically
unassailable--almost as if they were
phenomena of nature, subject to immutable
laws, either those of an supposed authentic
human nature or else those of mass proba-
bility. This tendency not to question
the values and manifestations of the
public (however defined) raises the con-
siderable danger of a non-judgemental
endorsement of any existing condition.
For the architect trained in the values of
high art, it also betrays a certain
nostalgie de la boue, an acute realization
of the contingency of the created world

that leads to a yearning for a certitude
of less articicial values. But most of
all, this attitude ultimately patronizes
the very public it seeks to emulate: by
not questioning the values and "giving
them just what they ask for," the designer
implicitly discounts the possibility that
popular values can change and develop
in response to challenge. For ultimately
the total-immersion designer is not really
one with the vernacular at all: once he
has opened the Pandora's box of high art,
he will not--probably cannot--experience
the vernacular world as a participant does,
as the ongoing and adjusting flow of time
that constitutes the whole of one's daily
life. Instead, inevitably, his view of
that flow will be like an album of snap-
shots: a series of images, each of them
full of meaning and intensely felt but
inevitably detached from the flow of life,
frozen to a specific point in time.

In fact this stance of estrangement
characterizes all four of these models:
they all betray a tragic/heroic view
of "a world beyond my influence;" either
through indifference, unwillingness, denial,
or choice, all four avoid confronting the
world and working their will upon it. But
by the nature of his product the building,
the architect will act both in the world
and upon it, and the world will react to
his actions. This may sound trivially
obvious, but a crucial point turns on the
nature of the world's "reacting:" for,
except on the rarest of occasions, the

architect and the public never come face
to face in the roles of building-maker
and building-user; in a real sense, the
only way an architect (qua architect)
can act upon the world is through his
buildings; likewise, the only thing to
which the viewer can react is the building.
Any "reaction" therefore must be of a
specific, almost metaphorical kind. What
I want to postulate here is the idea that
this special kind of reaction occurs when-
ever a viewer has thoughts as to why a
form is a certain way--that, is, when he
looks at a form as an intentional creation.

It is important that I stop at this
juncture and emphasize the importance of
this definition. At the outset of this
presentation I stated that I wanted to
ground this system of analysis in popular
perception. Now, the core of any system
that hopes to analyze phenomena should
be its particular vision of the activity
of interpretation; the interpretation done
by a system based on popular perception
ought to be of a kind that is in some way
congruent with the way ordinary people
see. Popular Culture studies have claimed
to do this, but these studies have failed
to produce any rigorous analysis of the
public's view of the world; and the
reason, I believe, is that they assume the
public sees in only one "common-ordinary"
way: these studies forget that each of
us has myriad schemata with which to view
the world, some systematic and focused,
others more diffuse (even art critics do

not view everything with the perspective
of esthetic analysis). One of these ways
is that mentioned above--looking at a
form, deciding it was deliberately made,
and asking why it was made in that par-
ticular way. What I have done, then,
is to take as a base this most contempla-
tive and analytical of the ways of seeing an
ordinary person might use and then recon-
struct that perspective into a systematic,
manipulable model. The remaining parts of
this section will show how this basic per-
spective can be developed into a system of
some sophistication while still remaining
consistent with its original purpose of
systematizing one popular way of viewing
buildings--that particular way that looks
at form as an intentional creation and
contemplates why that form is the way it
is. Thus, when I use the term "interpre-
tation," this is the type of activity I
mean to refer to.

By thus redefining interpretation, I
hope to avoid many of the problems more
conventional systems present. For example,
note that under this system's definition,
interpretation would only provide an
account of why an intentional form had a
certain configuration: it would not
concern itself with why the maker of the
form fashioned it in that way. Far from
being a diminution in explanatory power,
I think this stance focuses the attentions
of the analyst in a direction that is
potentially more fruitful for the analyst
and certainly more useful for the public.

Specifically, by demanding that interpre-
tation attend to the intentions of the
artist, one places insurmountable barriers
before the viewer who has neither the
time nor the motivation for the concentra-
ted study necessary to establish a single,
supposedly-correct reading. Plus, this
correct reading can be truly known-for-
certain only when the actual designer has
stated it, a condition rare in new
buildings and virtually non-existent in
older ones. But these are merely prac-
tical limitations: the basic drawback,
as I see it, in an exclusive focus upon
the designer's vision of his building is
that it discounts all other possible ways
of experiencing that building, and in so
doing, refuses to take the perceptions
of the public into account. That is, the
only times that the architect's intentio-
nality can be seen as "involved in the
world" are those times when the person
using a form for his daily activities
thinks about the reasons why the form
might be "that particular way:" if there
were to be only one permissible reason,
one interpretation ("that counter was
placed here only to divide this room"),
then that interpretation would be appli-
cable only at the times when the types of
activity consonant with that interpreta-
tion were taking place; for each activity
during which the form is used in a different
way, the insistence on one interpretation
would foreclose the possibility of consi-
dering that form as intentionally-made to

*This is, in fact, the basis for the idea, shown in the Design sections, that one should not impose upon the viewer a form whose only reason for existence was to "express something" or whose presence the viewer could not ignore.

also meet that activity. Seen in another light, an ordinary person might reasonably explain the configuration of a particular form in a variety of ways, each explanation according with and making sense of the experience of a specific time; the system I'm constructing tries to honor this phenomenon by defining interpretation as it does: this system tries to account for those explanations, systematize them, and base an analytical structure on them.

But by the same token, there will be times when this same ordinary person uses a form only as an expedient instrument, with no thought as to its provenance or place in a scheme of things; indeed, to be forced to interpret a form at such a time would constitute the coercion of an ideology that I condemned earlier.* Thus the system, to match this aspect of public perception, must be constructed so that it can be selectively invoked (a requirement that is addressed later in this section; but note that, by confining its operations to only those perceptions that could arise when viewing with a particular way of seeing, the system need not account for those perceptions that stem from other orientations.). This aspect of optionality, then, completes the characterization, sought at the outset, of the relation between the architect and the public: that is, in the terms used in this system, the architect's proper relation to the public is one in which the public, at its option, connects with

the architect by interpreting his inten-
tionality; an architecture that reflected
this relationship would be one that
signalled to the viewer that a system of
intentionally-deployed forms did exist
within the building, awaiting his
optionally-exercised interpretation.

And in like fashion, this notion of an
architecture that awaits the manipulation
of the viewer addresses the other question
posed at the beginning of this section,
that of the relation between the building
as a useful instrument and the building as
a source of meaning and association. For
just as the viewer must be left free to
interpret the building's forms in any
reasonable way that provides meaning for
him, so must he be free to use those
forms in any reasonable way that meets
his functional needs.

Now, there are two ways in which these
manipulations of use and interpretation
can become so extreme as to sever the
connection between the viewer and archi-
tect. Although both situations result
from the types of manipulations that are
perfectly permissible (and necessary) for
everyday activities, in both cases the
viewer's conceptions would be such as to
fall outside the analytical system because
they would be based, not on the inten-
tionality he could reasonably perceive in
the building, but instead on pre-existent
notions that the viewer would have brought
to the building. In the first instance,
a person might, in his manipulations to

give a rationale for seen forms, contem-
plate and interpret an element that was
not deliberately formed and could not
reasonably be seen as such--in effect,
reading pre-existing meanings and associ-
ations into an element that was purely
fortuitous. Examples of this "boutique
sensibility" abound in, for example,
the amount of sentiment overlaid onto
found industrial spaces and manufactured
items of the last century. One might find
genuine delight in these speculations, but
they so strain any connection to a possible
base in intentionality that they go beyond
the bounds of the system into a condition
one might call fatuousness. Conversely,
a person, might, in his manipulations to
satisfy his own needs, so completely ignore
the intentional aspects of an object that
again any reasonable connection to the
deliberate making of the object would be
severed; and again, even though this is
and must be a common occurence in daily
life, the connections of use and form that
one would make in this situation go
beyond the limits of the system into a
condition one might term exploitation.
Each of us partakes of this exploitative
sensibility every time we merely use an
artistically-formed object (the danger
involved with this condition occurs when
one sees with only the exploitative sensi-
bility: exploitation, in fact, is the
inevitable precondition for the unopposed
destruction of a building of quality.).

Now, assume for a moment that these

*Seen in these terms, the two orientations also suggest the two polar frames of mind with which one would approach tools or objects (all use) and words (all interpretation)--a distinction treated in the section on Parallels.

two conditions represent the end-regions on a continuum of possible orientations-to-form, exploitation connoting a focus on use to the exclusion of interpretation, fatuousness being the complimentary exclusive focus on interpretation.* One can easily see that the kind of interpretation-consonant-with-use I have been discussing all along is modeled by the middle, mixed region of this spectrum. Next, consider, also for a moment, the fact that (for its own operations) the analytical system need deal with only two ways of seeing form: interpretation (the perspective it is constructed specifically to account for) and all other ways. The continuum thus provides a visual analog to this condition, fatuousness and exploitation covering all those perceptions that do not match the definition of interpretation. As such, the constructions exploitation and fatuousness can be seen as elastic boundaries to the analytical system--boundaries because they denote the regions that fall outside the purview of the system, but elastic because there could never be (and, to maintain freedom, should never be) a consensus of agreement about where on the continuum either condition could be said to begin.

But even if elastic, it is nevertheless essential that this analytical system be bounded. Jean Piaget, in his Main Trends in Interdisciplinary Research,[2] discusses various ways in which one might construct systems of analysis and points up the

limitations which must be observed in the construction of each. In the matter of boundedness, he notes that the commonsense assumption is that the analytical system can operate only when the class of data upon which it is based is defined by empirical observation external to the system--as in the case of, say, astronomy where (to the conventional view) the class of phenomena to be explained is defined as all those phenomena recorded by the (unbiased, empirical) telescope. The fallacies behind this view have been revealed by Popper and others,[3] but Piaget goes farther and points out that, even if the limits of its data base cannot be defined in such an all-or-nothing observational manner, an analytical system can still be constructed if it postulates an inclusion criterion: by doing this, the system, in effect, establishes a certain set of characteristics, recognizes only phenomena possessing those characteristics, and then fashions a structure which holds and accounts for each recognized phenomenon. Thus the system can claim a kind of comprehensiveness because it accounts for every phenomenon it recognizes; but by the same token, its applicability as an explanatory tool is likewise limited to the realm of phenomena defined and bounded by the inclusion criterion.

This notion of an analyst-postulated realm of phenomena has a reflection on the work of Michel Foucault. In his

book The Archaeology of Knowledge[4]
Foucault proposes a study of history that
takes as its base the recorded statement--
that is, any statement by any person that
has come down to the present in a recorded
form. To confront this huge volume of
of data en bloc would, of course, be
impossible; but Foucault proposes applying
a whole series of inclusion criteria to
the mass to form planes of discourse--in
effect, groups of statements sharing a
common attribute. Foucault proposes a
rich array of possible inclusion criteria
(examples of which might include "state-
ments about insanity" or "statements by
doctors" or even "statements branded as
irresponsible by the authorities") and
then proposes that for each plane a
structure could be set up that would
relate each statement to the others. By
so doing, not only would the analyst
account for all the (chosen) statements,
but more interestingly, the account itself
would be an analysis and explanation of
the statements encompassed by the plane
of discourse (providing, for example, an
explanation of eighteenth-century France's
view of insanity).

As Piaget's analysis points out, these
explanations, of course, can be applied
only within the realm of phenomena from
which they are drawn, but the important
point to consider here is that, while the
analyst can establish any inclusion cri-
terion that will give him planes of
discourse helpful for his studies, these

criteria need not necessarily be abstruse
or unusual; they might, indeed, be
criteria widely and reasonably held by
the public. When this is the case, the
analyst might be said to be dealing with
a "pre-existing" plane of discourse--this
existence being of a special kind since
any plane of discourse is a construction
whose only existence is in the minds of
those who recognize it.

Foucault himself has carried out an
analysis of such a pre-existing plane of
discourse in his I, Pierre Riviere...,[5]
in which he presents a compilation of
all the statements made by and about a
man, Pierre Riviere, who brutally murdered
his entire family in nineteenth-century
France. The statements are revealing in
themselves, but what is even more
revealing is the phenomenon that occurs
when, in effect, the public recognizes
the existence of a plane of discourse.
For though the fact of the murder was
established by Riviere's actions, the
way in which the crime was perceived by
the public was not. In France at the
time there existed a tradition of "hero-
murderers," men whose crimes were seen as,
in some sense, heroic acts because of the
intolerable circumstances under which each
murderer had found himself and from which
the murder had freed him. Riviere's
crime would have been viewed by the world
as nothing more than a senseless slaying
but for the fact that Riviere kept a
journal in which he presented his version

of the circumstances behind his actions.
By writing these statements (and by their
dissemination to the public), Riviere
caused his crime to be seen as, yes, a
brutal murder but perhaps also a justified
"hero-murder." In Foucault's terms, then,
for the people of the time, their percep-
tions of Riviere's crime (as recorded in
their statements) would exist on two
planes of discourse--that of "murders as
brutal crimes" and that of "murders as
heroic acts." One might say that, by his
writing, Riviere <u>positioned</u> (the perception
of) his crime on a chosen plane of
discourse.

This term positioning comes from a
recent article[6] that shows how advertising
campaigns are constructed to accomplish
deliberately the type of positioning that
Riviere's journal did inadvertently--to
engender in the public's mind the percep-
tion that their product belongs in a
specific, recognized group of other
products. One of the examples given was
an ad campaign for Volvo: here the
advertising firm realized that if the
public perceived the Volvo as an "economy
import," that is, as belonging in the same
group as Volkswagen and Datsun, then in
comparison the Volvo would seem much too
expensive; thus the ad campaign tried to
get the public to see Volvo instead as a
"luxury import" in a class with cars like
Mercedes and BMW, in comparison to which
the Volvo would seem a real bargain.

Of course, the planes of discourse

termed "luxury import" and "economy import"
have no more empirical reality than did
the plane of "murders as heroic acts,"
but neither must they be as capricious
and fleeting as these creations of Madison
Avenue; as categories in the public mind
they may have a certain sort of existence
that is felt as being quite real, and in
the case of categories like murders, they
might have more durability than any
created object one could name. I empha-
size these two points because I want the
reader to see this notion of planes of
discourse not simply as an interesting
but arcane creation of Michel Foucault's
mind, but as a systematization of one of
the ways man actually does use to make
sense of his world. Viewing the concept
of the plane of discourse in this way
raises the possibility that it might
serve as a framework for systematizing
the public's perception of architecture.
This possibility takes on real plausibility
when one makes a certain conceptual shift:
that one view architecture not as a
physical, empirical phenomenon, but as
itself a plane of discourse--a conceptual
creation layered over empirical reality
and reflective of a chosen aspect of it.
Or, to explain by analogy, with the case
of Riviere, the fact of the murder was
the empirical reality, but the public's
perceptions of that fact were organized
by Foucault onto planes of discourse; with
architecture, similarly, the empirical
reality would be the actual building, but

perceptions of that building--both recorded
and projected--could be organized onto
similar planes of discourse. But note
that these planes would not be the
arbitrary creation of the analyst: like
Foucault's plane of murders-as-heroic-
acts, the constructed planes for archi-
tecture would be rational reconstructions
of categories (reasonably supposed to be)
already existing in the public mind.

Given this notion, one can turn back
to the continuum of possible orientations-
to-form and see how each region of the
continuum could be considered such a
reconstructed category--the sensibility
of "building forms as tools for use"
being an example. The perceptions that
one could reasonably suppose would flow
from such sensibilities could thus be
organized onto their respective planes
of discourse, each plane a creation of
the analyst but each still a rationalized
reflection of an existing sensibility.
Thus the plane that I am constructing and
labelling "architecture" would be a reposi-
tory for perceptions engendered by the
existing sensibility that I have been
calling interpretation, that particular
orientation-to-form that sees building
forms as deliberately-made objects for
both use and interpretation.

Once one perceives architecture in this
way, one also sees the task of the archi-
tect in a new light; that is, just as the
efforts of Riviere and the ad company
positioned their "products" so that the

public perceived them in a preferred way,
so it becomes the task of the architect
to position his work as architecture--to
get the public to perceive the empirical
reality of his building as an object for
simultaneous use and interpretation. (Note
here that, just as with Riviere's crime
and the Volvo, this desired perception is
only one of many perceptions that the
public would have of the real object: a
Volvo is necessarily also a mere means of
conveyance. Positioning, in this sense,
is the suggestion of an additional per-
ception--a concept that, importantly,
reflects the fact that, though the archi-
tecture may suggest, still it is the
viewer who chooses his own orientation-to-
form.)

There is a further parallel between
the ad campaign and architecture, and
that involves "customer satisfaction."
With the Volvo, the advertisements sug-
gested that the Volvo be seen as a "luxury
import," implying to a potential buyer
that the car had features and appointments
comparable to those of the Mercedes; but
in addition, the promotion had to involve
more than just hints made in the ad copy:
the car itself had also to perform a role
in the positioning effort--that of making
the proposition plausible by looking like
a luxury import. The Volvo would have
achieved this "look of luxury" with items
like extra trim or carpeting--in short,
through what might be termed manifestations
of superfluousness. But if a buyer,

*This process of "promises made and kept" need not be seen only on the crass level of salesmanship, but may be thought of as the basis for a bounded system of interactions between maker and viewer; seen in this way, such a system would achieve a state of equilibrium when the user accepted the maker's proposed positioning.

**Note that I have not said that a person would necessarily perceive the exact configuration of the whole of the pattern. One deals here with the issue of intentions, and I have set up this system so that intentions need not be read, only connected with.

convinced enough by this double campaign to buy a Volvo, found that his new car had no more luxury than a Volkswagen, he would justifiably feel that he had been deceived, and the possibility of his ever again viewing Volvo as a luxury import would be foreclosed.*

In an analogous effort to position perceprions of form, a building would achieve a "look of architecture" through manifestations of intentionality, signalling to the viewer (by devices like the intentional distortions used in the two designs) that he would be justified in viewing the building as architecture. And as with the Volvo's relation to the Mercedes, so with architecture: the suggestion that a building be viewed as architecture implies that the building has qualities comparable to those of other buildings that the public regards as indisputably Architecture. These implied qualities span a wide range (and will be discussed in more detail below) but there is one basic quality that a building must possess if the public's perception of it as architecture is to be maintained--the promise that the maker has arranged the forms according to a deliberate pattern, and that a person who "buys" the proposition and views the building as architecture will not find that he has been deceived into fatuous speculation. But not only this: by his own interpretations of the deliberate configurations of the forms,** the viewer

will receive the satisfaction of seeing
the building in a new way. If the viewer
receives this satisfaction, then he would
agree that considering this building as
architecture is justified, and he would
figuratively place his perceptions of the
building on his own "plane of architecture,"
alongside and comparable to those remem-
bered perceptions of other deliberately-
patterned, multiply-understood, "architec-
tural" buildings.

One can see how, under this construc-
ted system, the architect and the public
truly are connected--and in a way that
leaves each free to act but which rewards
acts of cooperation. I hope one can also
see this constructed model in the same
light as the planes of discourse--that is,
not merely as an analytical construction,
but also as a rationalization of an
actual, commonly-occurring phenomenon,
one that might be termed complicity.

With this notion of complicity, one
can see how the system closes back upon
itself: for just as complicity is the
precondition for the reward of a greater
understanding, so the perceived inten-
tionality (that engenders that under-
standing) is the necessary precondition
for the phenomenon of complicity. One
can now see the two phenomena of fatu-
ousness and exploitation as descriptions
of the situations when the necessary
preconditions for complicity--and thus
its rewards--are not met; that is, situa-
tions in which the viewer's perceptions

fail to involve manifested intentionality--
in the case of fatuousness, because it
does not exist, in the case of exploita-
tion, because it is ignored. In short,
one might look upon fatuousness as
complicity exercised without justification,
where exploitation would be a case of
complicity withheld where it was justified.

To summarize in the terms with which
I began this section: when a person
views a building as architecture and
he perceives the intentionality manifested
there, then complicity occurs and the
architect and the viewer are connected
because their perceptions can be thought
of as positioned on the same plane of
discourse.

The structure of this analytical
system is now almost complete; the final
point that remains to be covered is this:
I have stated that the connection of
complicity occurs when architect and
viewer have perceptions of the same
character, but I have yet to describe
what the character of those perceptions
might be. That is, so far they have been
described only as perceptions that arise
when one views building forms as both
tools for use and objects for interpre-
tation; the question to be answered is,
what is to be the relation between use
and interpretation?

The answer can be approached at two
levels: on the level of constructing an
analytical system that operates in a clear
and rational manner, what is desired is

a way of deciding which perceptions the
system will recognize and deal with; in
the terms used so far, this level seeks
a Piagetian inclusion criterion that
describes the character of the percep-
tions and not just the nature of their
source, and thus provides a way of
determining which perceptions are to be
permitted onto the plane of architectural
discourse. In a sense, this level seeks
an answer that fits and supports the
constructed operations of the system;
but the other approach is to seek an
answer that matches the observed real-
world operations that the system tries
to model. The desired condition, of
course, is that the two answers will
coincide--that, like the concepts of
complicity and planes of discourse, they
will be not merely analytical construc-
tions but also rationalizations of
actual phenomena that occur in the world.
From this perspective, one could seek
an answer by looking at the perceptions
of the architect, postulating that the
connection of complicity would occur when
the viewer had perceptions of the same
character. In other words, if the nature
of perceptions is a function of one's
orientation-to-form, then the connection
can be said to occur when the viewer
looks at the building with the same
orientation-to-form that the architect
had when designing it. How, then, does
the architect view form?

The answer to this question is crucial

for this system's relation to the world,
for if it is truly to describe the way
one should view architecture to achieve
the rewards of complicity, then it ought
to be applicable to (almost) any archi-
tecture a viewer might look at. But I
think I am on relatively safe ground if
I state that (American, twentieth-century)
architects view form as a means with
which to accomplish the building task
set before them. Two important points
arise from this statement: the first
being that the building task is not to
be seen as merely the programmatic and
mechanical requirements of shelter, but
as a statement of the total situation the
building is to address; as such, the
building task can be seen as a set of
inevitably-conflicting conditions-to-be-
provided, requirements which are stated
by the client or mandated by law and
custom or revealed by empirical tests
and analyses or--and probably most
importantly--set by the architect for
himself. The second point involves the
accomplishment of this task: it is not
enough for the architect merely to take
each requirement individually, provide an
appropriate accommodation for it, and
then assemble the individual accommoda-
tions. To do so would mean that any
interpretation of the resulting building
would be fatuous because each individual
form would be no more that a reflection
of its use aspect: its making would have
involved no considerations other than

those of function; there would have been no intentionality involved in the making of the forms and so no basis for a connection between architect and viewer.

But more vital than these considerations of system-functioning is the requirement that the system be a rationalized reflection of the existent world, and the obvious fact is that architects simply do not work this way: this is not to say that they should or should not, only that to view buildings as if they were designed in this manner would be fundamentally to misperceive the built environment as it now exists. The architect does not (and probably cannot and should not) simply take the stated requirements and translate them directly and mechanically into form. The thing to which the architect gives form is his own conception of those requirements--but not a conception that merely restates the requirements as a listing, nor one that summarizes them in the fashion of a hierarchically-ordered outline. Rather, the architect seeks a conception more like an aphorism, an insight that takes the parts of the building situation and "makes them all fall into place," a design conception that reveals a previously-unseen order into which the individual parts can be fit (in exactly the manner of the subsuming understanding that occasions the "Aha!" reaction).

Given this notion, one can now characterize the relation of use and

interpretation in the architect's orientation-to-form--and by extension, that of the complicitous viewer. For the insight represented by the architect's design conception is itself an interpretation of factors of use:* because he deliberately gives form to this derived total conception and does not mechanically match up individual forms and needs, the architect uses form in an intentional manner, one that reflects his own ordered vision of the building and not just the found order of a building program. In other terms, the architectural way of accommodating the building situation is by deliberately using form to make concrete a resolved conception of it. Thus, to view form in the architectural way--to see a building as architecture-- is to view it as a deliberate reflection of a building situation.

Important implications flow from the dual notion that an architect's design conception is like an aphorism and that a building's forms can be viewed as its reflection. First of all, it is the delightful nature of an aphorism that one can never pin down precisely what it means because it can be interpreted in so many ways. But this is precisely the power of aphorisms and the reason for their durability; for although the interpretations they suggest are different and sometimes even contradictory, somehow when brought together in the mind they reveal a kind of sense, a larger insight

seen before. The process might be
described as a kind of synergy of inter-
pretation: by suggesting a multiplicity
of meanings, the aphorism might be said
to force the mind to juggle the various
notions until something clicks and a new
idea emerges that reconciles them all.
The aphorism thus comes to "mean" more
than just the sum of its individual inter-
pretations.

This is precisely the effect I
observed in the analysis of the Browne
house: multiple ways of reading the
forms that could not be reconciled until
a new notion--contained in none of the
individual readings--occurred to me that
"made it all fall into place." Of course,
I am certain that all of my interpreta-
tions did not occur to Richardson; and
I am just as certain that some of his
intentions did not occur to me. But
this is exactly the point: if I had
approached the house with the purpose of
second-guessing Richardson, trying to
list his intentions as seen in the forms,
the synergistic understanding would never
have occurred; plus, I could never have
discovered all that Richardson intended
to do--and even if I could have, just
having that sum of intentions would not
have caused my mind to "click into
place" because my mind is not his. The
understanding and delight of multiple
interpretations came to me only because
I was free to interpret according to my
own vision.

But it is also obvious that my speculations could not have been completely freewheeling or capricious: in order to avoid that condition I labelled fatuousness, I had to limit my interpretations to only those that explained how a perceived formal relation could be seen as a deliberate reflection of some aspect of the building situation. And again, I imposed this restriction not merely to insure the smooth functioning of my analytical system, but in order to reflect (in a systematic way) a consideration that any person viewing buildings must keep in mind. For, if I am concerned that buildings have "meanings and associations for ordinary people," the possibility of this can only occur if the rewards of interpretation make it worth the effort (the "customer satisfaction" I mentioned earlier). Every time a person's interpretation of a building is revealed as fatuous, that person's willingness to try again would naturally diminish, being replaced eventually by a skepticism about the whole enterprise of looking at buildings as architecture.

An example of a situation that would engender such skepticism is this streetscape of shopfronts (shown on the next page), whose configuration one might interpret as reflecting a charming resolution of the requirements of village commerce, but which is actually a newly-designed facade for a modern hotel. A viewer who recognized this condition

and refrained from reading any meaning
into the forms he saw would be enacting
the process of which this constructed
system is a rationalization: that is,
the viewer looks at the shopfronts,
decides something is "fishy" about the
scene, and does not allow himself to slip
into a frame of mind in which, for
example, he might look at a curious quirk
of form as a clever reflection of some
building requirement; in the terms of
the system, he decides that it would be

pointless to look at the shopfronts as
architecture because plainly they are
not a deliberate reflection of their
building situation. By thus withholding
his complicity, he avoids being caught in
the fatuous position of extending himself
to connect with an intentionality that is
not there.

Let me now conclude this section with
an insight that results when one compares
the experience of the viewer of the
streetscape with my experience of viewing
the Browne house. I experienced delight
at having glimpsed insights I had not
seen before, while the viewer experienced
only disappointment and a feeling of
having been deceived. In one case a
person gains new knowledge and an
expansion of visual awareness, in the
other, a person gains nothing but an
increased suspicion that will likely
decrease his openness to visual experience.
All this contrast, but note that the
"empirical reality" of both situations is
the same: "a person stands before a
building and looks at it." Clearly the
mental states that arose from these two
situations were not the result merely of
confronting objective reality; rather,
both were cases in which perceptions were
compared with and played against a
system of conventions. Far from being
objective, both the perceptions and the
conventions are products of a specific
culture and time--so that not only can
these mental occurrences not be seen as

*One can thus see how fatuousness and exploitation exemplify the strict consequences of "straying beyond the borders:" with the fatuous situation of the streetscape, one did not get merely diminished participation of the system and its rewards, the system ceased to be applicable at all.

(empirically) "real," they likewise cannot lay claim to the quasi-real status of "universally-occurring." All of which could make one somewhat uneasy, wondering where this system might touch ground.

But as I see it, this is a misplaced concern: to try to ground a view of architecture on some verifiable rock of universal or empirical reality may not be entirely futile, but to me it seems unnecessary. Better to work from the basic assumption that there can be no verifiable, empirical qualities that constitute architecture, that as stated before, architecture is itself a cultural category, one which is of long standing but which has no existence apart from the cultural conventions that define it at each time and place. One can see how taking this position would naturally lead to my contention that the way to see architecture is in a way that emulates the perceptions of the public--a way that, in effect, reflects those defining conventions. But by avoiding the superficial global view of those conventions and searching for a rigorous logic back of them, I found that the nature of that rigor is one of almost complete freedom of action within elastically-defined but strictly-enforced borders* (a rigor for which the plane of discourse provided a compelling visual analog). So, in reflection of this quality, this system is one in which judgements of correctness are not made, in which "anything goes" as

*which is, of course, not to say that the views of critics are barred: if presented so as not to restrict the viewer's freedom of interpretation, they can, in fact, be helpful in showing one how to "sense more;" see the final section on Possibilities.

long as one does not transgress the borders. These borders are, in fact, the source of the system's rigor, for the precision of the system takes the form not of correctness but of justi-fiability: the only interpretations that are permitted are those that are justifiable (within the borders of the plane of architectural perception or, in the terms of the system, any inter-pretation that explains form as a deliberate reflection of a building situation); but by the same token, any interpretation that is justifiable is permitted. Seeing this condition, I realized how appropriate it is to a system of and for ordinary people; for it means that the system can function (to a great extent) by itself: it does not require the ministrations of autho-rities to adjust and set standards of acceptability and correctness. A person using the system (or more precisely, using the perception of which this system is a model) would find for him-self if his interpretation is justifiable (non-fatuous), just as the viewer of the streetscape did. And in like fashion, he could gain the rewards of using the system without the need for outside help* (as I found at the Browne house). It is, in short, a system eminently suited to the needs of amateurs.

Given this, the rest of the presenta-tion will try to show how the system can also serve the needs of "professionals."

Parallels

There is an existing system that is
similar to the system I've constructed
in that it, too, allows one to operate
as he pleases as long as he does not
transgress the system's boundary-of-the-
permissible, and that is the system of
jurispridence.[7] The law also exemplifies
the way in which a constructed system
can emulate and elaborate a found
cultural system (the system of customs
of which law is a codified outgrowth)
while still remaining faithful to the
basic core of that system (the character
of that faithfulness being conveyed by
what I've called the "Aha!" reaction, in
which the explanation of the law's
complex workings subsumed the public's
customary notion of "fairness.")

The most significant parallel is
that, like architecture, the law has
no empirical or universal standards to
which it can appeal: both are ongoing
creations of the culture in which they
exist. But what the law reveals is that,
for a culturally-created category,
"ongoingness" can impart a validity com-
parable (in the public's mind) to the
validity conferred by empirical verifi-
cation. That is, the public's willing-
ness to accept the law and submit to
its dictates is based upon the law's
continually-demonstrated reliability (it
delivers what it promises: like the
Volvo and the Browne house, it gives
"customer satisfaction"). Or, in other
terms, our respect for the law is

based in our belief that the system has worked rather well in the past; one therefore submits to each successive new decision because (and only when) it meets the same standards, conforms to the same definition as those (respected) laws of the past.

In the last section, I postulated that architecture could be defined as a deliberate reflection of a building situation; one could similarly define a legal decision as a "reasoned response to a justiciable action." For architecture I set up the model that a perception meeting this criterion could be positioned on a hypothetical discursive plane and thus seen as comparable to other examples from other times. In law, continuity with its (created) past is made even more overt through the maintenance of an archive of all decisions. As a compilation of all "reasoned responses to justiciable actions," the archive is an embodiment of the notion of a discursive plane: an array of all the statements that are justifiable by virtue of meeting an inclusion criterion. In this light, one can view the ratio decidendi (the judge's reasoning) of a decision as the judge's version on how his decision ought to be seen as a reasoned response to the justiciable action brought before him--in effect, an attempt to position his ruling "as law" on the plane of legal discourse.

But the most revealing parallel between

the law and this analytical system is
this: just as the architectural system
allowed one freely to interpret any
perception justifiably seen as "architec-
tural," so the decisions in the legal
archive likewise are not given fixed
interpretations. That is, a person
(figuratively) leafing through such an
archive would find no decisions marked
as favored, would find no preference
given to historically-prior decisions,
would see no importance assigned by
virtue of agreement with the preponderance
of rulings.

In the terms of the discursive plane,
the decisions could be seen as arrayed
unhierarchically, each item undifferen-
tiated from the rest. Any differentia-
tion--any interpretations imputing
quality or importance--would be only
in the eyes of the viewer, the differen-
tiation being done by postulating that
certain items be seen as related to
certain other items in a specified way
("A is more profound than B, less
rigorous than C..."). In law, this
process has a name--distinguishing--and
is the process by which a judge cites
other decisions as precedents for his own
ruling; in distinguishing cases, the
judge points out selected cases whose
logic seems to provide an answer to the
problem of the case at hand and then
shows how his decision conforms to and
continues that logic; the judge then
points out other cases whose logic would

give rise to a contradictory answer and
gives reasons why those cases do not or
should not apply. In the terms of the
discursive plane, the judge thus postulates
relations between his decision and selected
others.

The analogous process in architecture
would be, of course, much more fluid; but
nevertheless, by the disposition of his
forms, an architect can put forth the
suggestion that his building be seen as
related to certain structures of the
past. Just how this can be done is a
question, like that of how judges should
arrive at their decisions, best left to
the individual architect. The more
important point to be drawn from this
discussion is that here one has two
systems that view both history (the
relations between items of different
times) and quality (the standards by
which items are given a ranked relation)
as no more than conditional postulations.
In the next part of this section I will
present a third such system--the method
of poetic analysis used by Harold Bloom--
which will, I hope, help convince the
reader of the plausibility of this
unorthodox view.

The possibility of using Harold Bloom's
method of analyzing poetry[8] as a model
for a method of analyzing architecture
occurred to me because of Bloom's repeated
emphasis on the notion of words as objects:
poems are made of words, architecture is

made of objects; could there be a
connection? In what ways is the nature
of words like the nature of objects?

Bloom points out that, while the
recorded form of a word passes through
time intact, the import of that word
is different at each point in time. It
is a false notion that words can be
transparent conveyors of meaning: by
their nature, words partake of some of
the opaque, unreadable quality of
artifacts.

This realization is particularly acute
for poetics: because of the imperfect
match between word and meaning, one
cannot authentically use words to inter-
pret a poem: to do so would be to use
a (somewhat opaque) object to explain
another (equally opaque) object. All
that one can truly do is to paraphrase
a poem--in effect, to relate or compare
two objects. But the result of this
limitation is that one can only either
retell the poem exactly by comparing it
with a twin (a tautology that would
yield nothing) or else compare it with
an object not exactly alike--in essence,
to misread it.

But Bloom does not see this as an
undesirable situation; far from it: for
not only is misreading inevitable because
of the nature of words, it is also inten-
tional due to the nature of art. To
explain: as a creation based on conven-
tions, a work of art is seen only in
relation to other works of art: any

import it might have for the viewer
is the result of the viewer comparing
it to other works of art. Knowing this,
the artist naturally despairs of ever
having his work seen as greater than
that to which the viewing public compares
it. To get around this condition, the
artist inevitably misreads these previous
comparable works, interpreting them on
the basis of criteria other than those
(generally assumed to have been) used by
the predecessor-artist--criteria on the
basis of which the new artist's work
would be judged superior to the previous
work; the artist's task, then, is so to
configure his work that the public will
be convinced of its "rightness"--in
effect, accepting his postulated criteria
as the appropriate ones to use for inter-
pretation.

Although intended as a description of
the process of innovation in poetry, this
account can also be seen as a description
of Bloom's views of the nature of art
and of the nature of words (and thus
objects); as such, let me summarize each
in this way:

The nature of words and objects might
be characterized by ATEMPORALITY (neither
the recorded word nor the object changes
form as it passes through time) and
OPACITY (both are at least somewhat
uninterpretable). In like fashion,
the nature of art could be described
by INTENTIONALITY (the artist deliberately
misreads) and INNOVATION (the artist works

to have his work seen as doing something better than that which came before). Now these terms are descriptive enough, but there seems at first glance to be no basis upon which they might be related. But by viewing Bloom's system in the terms of Foucault's planes of discourse, the four terms can be seen as describing the essential characteristics of items on a discursive plane. To diagram this relationship, one could make the following analogies:

ATEMPORALITY : DISPERSION

When arrayed on a plane, the discursive items are not positioned according to "which came before;" they are dispersed freely and unhierarchically across the surface of the plane. In fact, the dimension of time is avoided altogether, and the relations between items are spatial; that is, they are related on the basis of adjacency.

OPAQUENESS : ADJACENCY

With an opaque word or object, the thing itself contains no inherent import: its import is contained fully in the nature of its relationships with other objects. Thus the interpretation of an object is rooted in the relation of adjacency.

INTENTIONALITY : POSITIONING

The focus of the artist's efforts is to get his work seen as related to (and potentially greater than) a body of existing works. Like Pierre Riviere, the Volvo advertisers, and the judge in his

ruling, the artist wants his work to
be seen as occupying a position on a
chosen plane of discourse.

INNOVATION : DISPLACEMENT

Not only does the artist want his
work to be seen on the same plane as the
predecessor, he wants to occupy the precise
position of the predecessor: that is, he
wants his work to have the predecessor's
set of relations-to-other-works. Since
in this model these relations are spatial,
the new work can acquire these relation-
ships only by displacing the predecessor.

Thus the artist's task becomes one of
moving the predecessor out of the way--in
an almost-physical sense, clearing out
artistic space for his own freedom. Bloom
describes six _ratios_ or ways of achieving
this displacement; following the notion
that this system can be mapped as a
series of spatial relationships, I have
diagrammed these six ratios in the
following form:

If one visualizes a plane covered with
dots, each dot symbolizing a work, one of
those dots would be the predecessor-work--
the work considered superior by virtue of
the (spatial) relations it has to all the
other works; its superiority (and its
import) is thus a function of its precise
location on the plane: erasing those
other works, the black dot in the diagram
pin-points that favored location. The
two circles can thus be seen as elabora-
tions-in-space of the import of that locus,
the dashed circle being the predecessor,
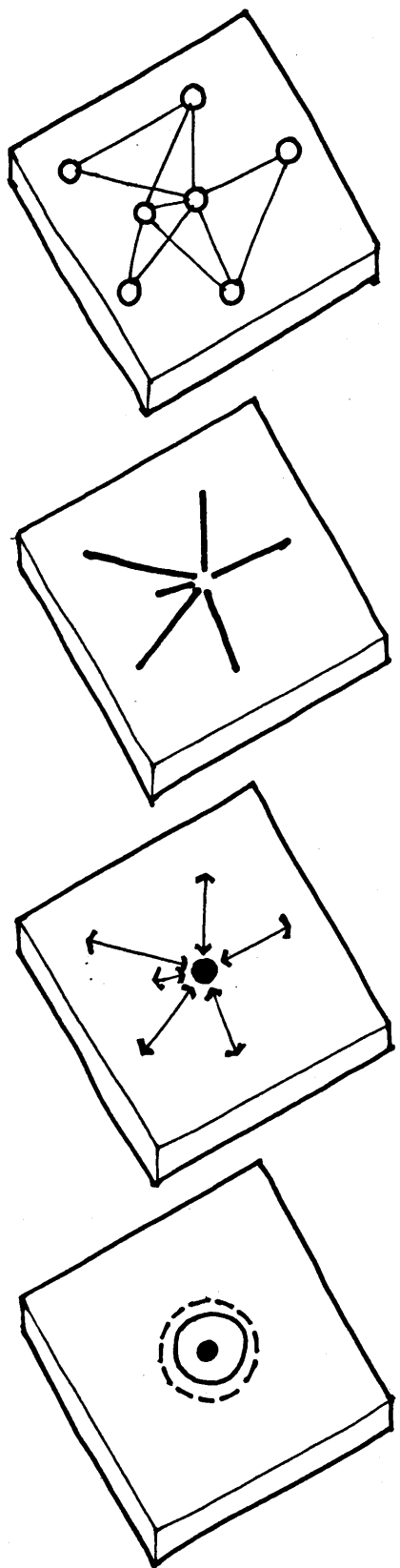
the solid one the successor. As long as
they share that particular locus, they
will have the same net of relationships
and thus the same import: they will be
seen to "mean the same thing," and thus
their adjudged quality in relation to that
meaning would be a function of their
(interpreted) spatial relation to that
locus of meaning.

The six ratios are:
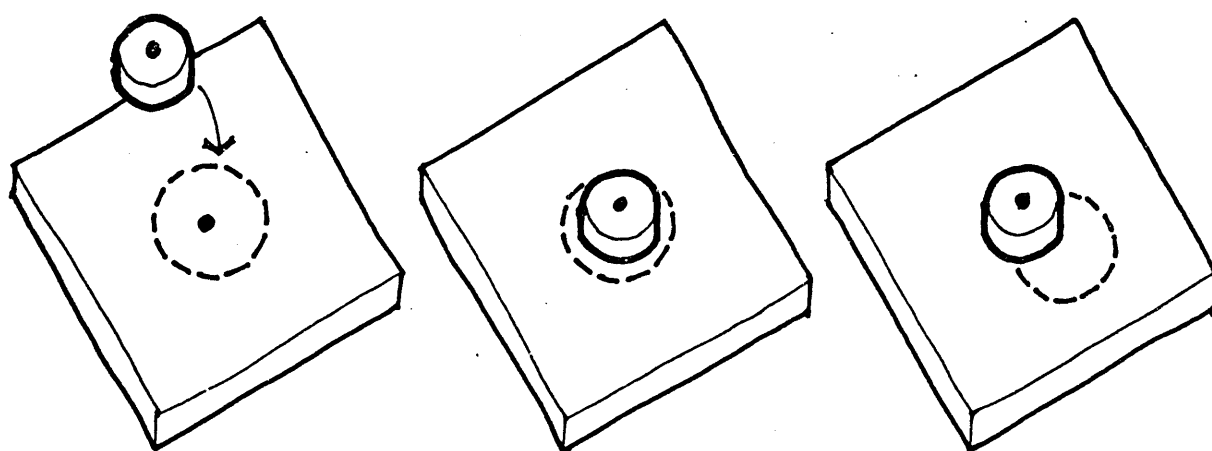
CLINAMEN, which Bloom also terms
SWERVING. Here the new work is positioned
at the locus and immediately the old
work comes to be seen as a misdirected
development of that locus.
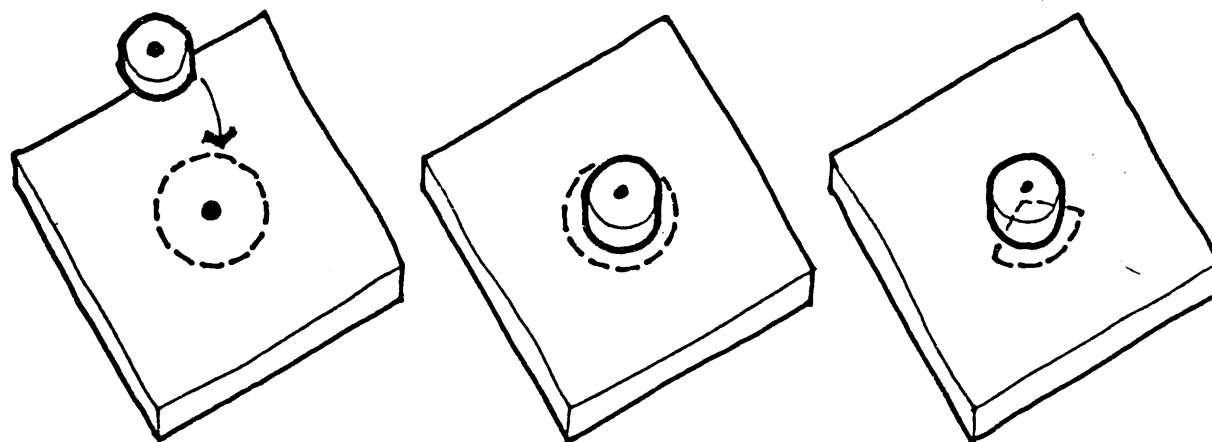
TESSERA, or COMPLETION. In this case

the older work comes to be seen as an
<u>incomplete</u> elaboration of the locus of
meaning.
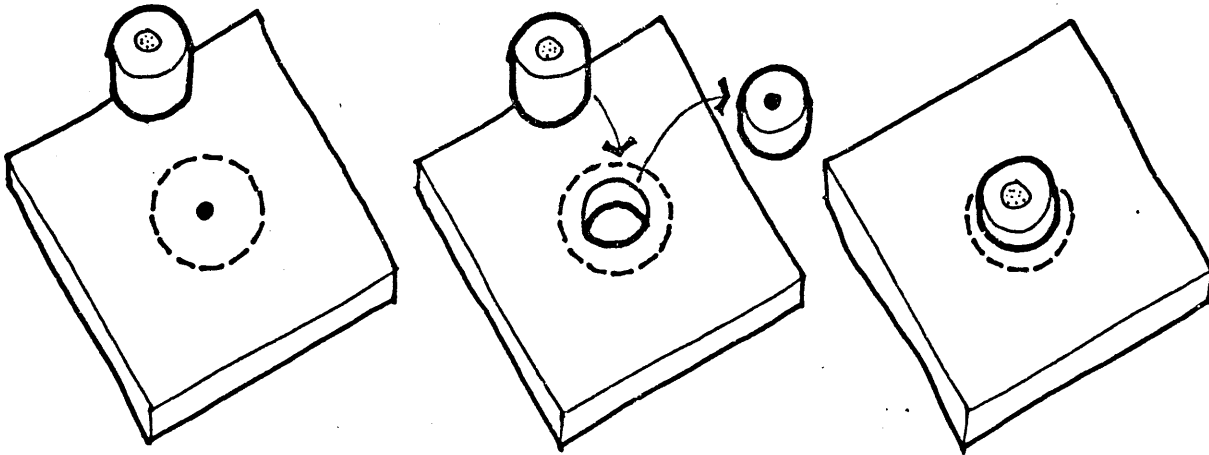
KENOSIS, or EMPTYING-AND-REFILLING.
Here the artist puts forward a more radical
proposition in which he says, "What the
predecessor <u>really</u> meant was <u>this</u>." That
is, he reinterprets the locus of meaning
itself--in spatial .terms, removing the
locus of which the predecessor's work was
an elaboration and replacing it with the
new locus that his new work elaborates.
The predecessor-work thus comes to seem
<u>irrelevant</u>.
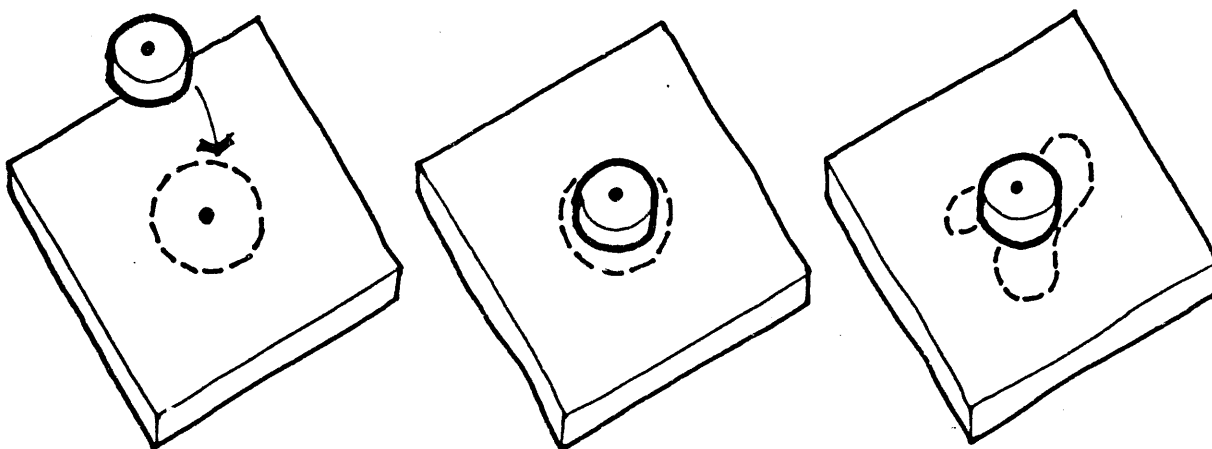
DAEMONIZATION, which might be termed
FOCUSING. In this case the new work

appears on the scene and the older work
comes to seem wandering, out-of-focus--
the new work now seen as incisive,
on-target.
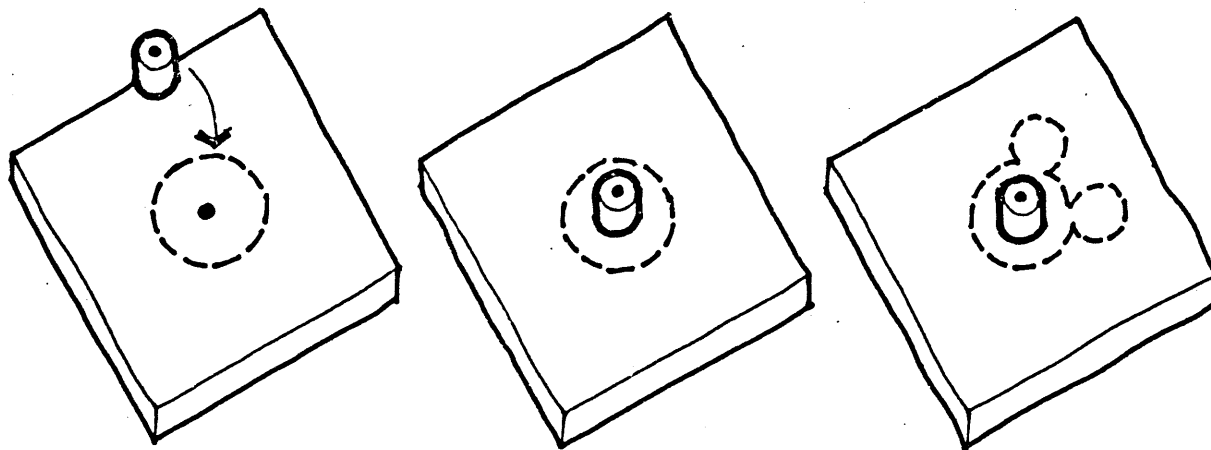
ASKESIS, or SELF-LIMITATION. Here the
artist deliberately limits his development
of the locus of meaning but "sells" this
diminished elaboration as sufficient and
complete--with the result that the older
work comes to be seen as having needless,
superfluous elements.
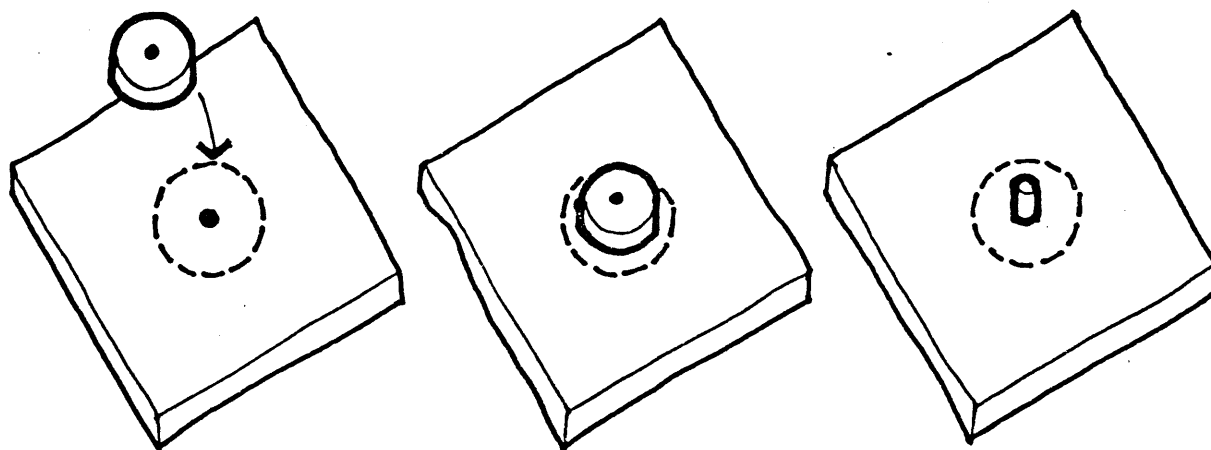
APOPHRADES, which I have termed BECOMING
THE ESSENCE. This is the most radical
proposition of all, for here the new work
is seen to embody the locus of meaning so
perfectly as to become that locus: the

*Bloom's model thus can deal with the phenomenon of revivals without the pejorative "throwback" characterization which the linear model must invoke to account for such occurrences within the terms of its system.

resulting effect is that the older work, as a development of that locus, now comes to be seen as no more than an elaboration upon its successor.

Bloom's vision thus overturns the idea of temporal succession--an idea that, because of its quality of linearity (of having two ends) so often leads to the dangers of extending the line either forward (the projected future as the inevitable result of the present) or back (the present as the inevitable result of a constructed past). By allowing one to map temporal relationships into space, Bloom's system avoids the problem of determinacy but still provides a rigorous model for change--a type of change that is unpredictable but which is more than just random occurrences. And also, by showing succession as spatial, Bloom's model addresses the known condition of artistic reevaluation: for in the model of linear succession, the only work to which a new work is directly related is the one immediately behind it on the line: relations between the new work and ones more distantly-previous have to be modelled by some leap-frogging process. Bloom's model, however, avoids this, the new work being placed directly atop the work to which it is compared.*

But the consideration that makes this model most applicable to my personal vision of architecture is the notion of the equivalence of works from different points in time. For this vision, it seems to me,

accords most precisely with the normal
perception and use of buildings in the
environment--much better than the analyti-
cal view that sees a building primarily
in terms of what came before and after
it. In a very real sense, Bloom's vision
frees the work from its position on a
time-line, allowing it to interact with
the works of all times and places; and
in so doing, he frees the viewer from
the single vision of linear succession--
allowing him the freedom to reinterpret
the relations of history and the stan-
dards of quality--but all and only within
the elastically-defined but strictly-
enforced bounds of the discursive plane
of architecture.

For me, this Bloom/Foucault system
is almost uncontrollably suggestive, but
let me present some of these implications
in a structured framework. In the next
section, labelled Opportunities, I will
try to show how the compositional ideal
that flows out of this system opens up
opportunities foreclosed by the more
conventional ideal based on the tenets
of the modern movement.

Opportunities

Let me return to my interpretation of
Bloom's system: recall how each work was
centered on a point that denoted the
focus of a net of relationships; as such,
any sum-of-qualities or "essence" that
a work might be said to have would con-
sist of the interpretation of those
relationships. Thus, under this model,
a work has no "essence" intrinsic to
itself; and further (since these rela-
tionships are to works of other times)
a work has no meaning apart from its
history.

Stated in this bald manner, this
assertion flies in the face of (an
equally bald version of) the conventional
modern-architecture ideal, which would
state that any "essence" a building might
have would flow from its unique and
individual manner of reflecting the
specific reality of the present moment.
This specific reality would be defined
in terms of individual functional require-
ments, and (in extreme form) the design
ideal would be: first, to find the
specific form which most perfectly accom-
modated each particular function; by
then arranging these individual function-
fit forms according to their positions
in a sequence of activities, a building
would result that then could be said to
be reflective of its functional order.

(This is admittedly an extreme form of
the functionalist ideal, going beyond
even Christopher Alexander's close-fit
functionalism of the mid-sixties--a

*And in the very same sense, to seek to interpret a building reflective of only a structural order (a Miesian universal space, for example) would be equally fatuous. The December]975 issue of Architectural Review made much the same point about buildings reflective only of the "order of the market."

**precisely "those simple signals that tell one how to function in a building" that I've sought to go beyond.

position which even he has now backed away from. And although the whole issue is something of a dead horse, I am not beating it to further defeat defeated functionalism, but instead to point out what I see as the necessary characteristics of an acceptable alternative.)

My objections to this ideal again come on two grounds--its implications for the way people actually live, and its implications for the operation of the system meant to model the way people live. On the level of daily life, this type of close-fit design necessarily works against any functional arrangements other than those foreseen and provided for; in fact, the closer it approaches its ideal of "perfect fit," the more it inhibits alternatives.

And in the terms of the system's reconstruction of public perception, another objection is that, by attempting to be an embodiment of only its functional order, this design ideal makes any contemplation after a wider, subsuming understanding fatuous: the designer intended no aphoristic vision of the building situation, and so to look for one would be futile and self-defeating.* In other words, since the building is meant to reflect nothing more than the unique, empirical reality of its programmed functions, the only non-fatuous import one could derive from the building would be a knowledge of its (unique, empirical) physical layout.**

But I think that the most revealing
flaw is that the ideal simply does not
model the way architects work: it posits
a situation in which the architect ought
to be "surprised" at the final (derived)
configuration of his building. Here
Bloom's is a more convincing reconstruc-
tion of the architect's actual efforts.
For with Bloom's model the architect
knows, before he puts pencil to paper,
what position he wants his building to
occupy; in other terms, he knows the
nature of the desired relations to other
buildings. He thus has a prevision of
the import of his building--he knows
beforehand what he wants it to "mean"--
and he works to bring that import to form.
This import is the precise parallel of
the aphoristic design concept I spoke of
earlier--the insight that doesn't merely
explain the layout of the rooms, but
which makes the conflicting aspects of
the total building situation fall into
place. Thus under this Bloom/Foucault
model, and under my own, the architect
works to have his building seen as a
deliberate embodiment of his own reso-
lution of the building situation.

This notion of working from a design
preconception implies a manner of compo-
sition that also runs counter to the
modern-architecture ideal. Under the
functional ideal, the designer's base
is a collection of specific parts, each
form the result of an objective design
process; under this alternative system

the designer begins with a general whole
whose form is the result of an intensely
subjective choice process: from among
forms that already exist (and thus have
import) the designer chooses the form
that best embodies his design conception
(and whose import will suggest that it
be compared/related to a chosen prede-
cessor). His design task (his "elabo-
ration of the locus of meaning") then
is to divide up that general whole to
provide articulated, optionally-invoked
spaces for the specific activities. But
note: because the basic form of the whole
would be one familiar to the viewer, it
would not be necessary to see the form
in an "unviolated" state in order to
recognize its shape; thus the manifesting
of specific parts would not foreclose the
possibility of perceiving the whole's shape;
but rather, these operations upon the
whole would be seen as deviations from it--
as distortions of the overall shape
toward the individual shapes, moves from
the general toward the specific.

Interestingly, this process closely
parallels Louis Kahn's design method in
which a general Form, reflective of the
essence of the building, is distorted,
through the process of Design, in
response to particular, specific demands.
But a further parallel might be said to
exist with Beaux-Arts design methods,
which not only stressed the unspecific
articulation I've been promoting, but
also employed previously-known forms

specifically for the purposes I've
labelled positioning.

Both of these compositional methods
can be seen as outgrowths of what Emil
Kaufmann has termed the Renaissance-
Baroque system of design.[9] Under this
system too, general, known forms were
articulated in response to specific needs,
but Kaufmann points out that the ideal
was to avoid overemphasis on either the
whole or the parts by precisely balancing
the antagonistic tendencies toward unity
and division. This balance was achieved
by composing the forms so that the rela-
tions between parts would always appear
clear and uniquevocal: wings would look
clearly subordinate to the main mass;
collections of potentially-repeatable
items would be gathered so as to give an
impression of "this much and no more"
completeness; in windowed walls, either
solid or void would dominate without
question. These methods were carried
forward and set down in compositional
textbooks until well into the twentieth
century.[10] But Kaufmann points out that
the inherent flaws of the system were
seen as early as the late eighteenth
century: with the passing of Baroque
absolutism, eventually the complexity of
the patterns of activity to be housed
reached a point where no form could ade-
quately embody them; the tendency toward
division began to dominate the composi-
tions of the greatest architects, and the
possibility of maintaining wholeness

seemed to be lost.

But one can now see that the break-up
of the system Kaufmann describes was not
made inevitable by the increased complex-
ity of the programs but by the insis-
tence on unequivocal formal relations:
by demanding that the relations between
parts be viewed in one specific way, the
compositional ideal foreclosed the
possibility that, as in the Browne house,
there could be more than one unified
"embodiment" in the same building.* The
realization that such an embodiment is
not an empirical fact but is a creation
of the viewer's mind ties together several
aspects. First, on the level of the
viewer, it avoids the freedom-restricting
insistence on a single "correct" set of
formal relations and in so doing it
allows the individual viewer to involve
hikself with the building. It is thus
also a truer reflection of the way public
perception itself changes over time
(objects that look "slim" to most people
in one decade might look "spindly" in the
next).

For the designer this multiple-sugges-
tiveness both allows for and encourages
the deliberate misreading and positioning
that were shown as a model for innovation.
It is also the source of the lyricism of
a building that continues to yield new
interpretations. But for me, the greatest
possibility opened up by multiple sugges-
tiveness is that it can gently prod the
ordinary viewer into contemplation: it

is too often the case that a person will
look at a building, decide that it is
unquestionably thus-and-so, and never
really look at it again. Multiple
suggestiveness could serve to undermine
this closed-mindedness by presenting to
the viewer things that cannot be explained
in a single glance, things that ask to
be studied more fully. But, crucially,
not things that demand to be studied. And,
equally crucially, things that will both
justify and reward such study.

Dangers

There must be literally dozens of ways
that one could point out the potential
dangers this system holds for theory and
practice, and even to respond (in this
pre-emptive manner) to just those I'm aware
of would be more than either I or the
reader could handle. So in this section
I try to respond to only four of these
topics, these particular ones chosen from
among many possibilities for their
ability to highlight and clarify certain
aspects I consider important.

L'ARCHITECTURE DANS LE BOUDOIR

The first involves the notion, discussed
at the end of the last section, that the
"architecture" aspects of a building are
seen only when one employs a special
kind of perception. Manfredo Tafuri[11]
has used the term l'Architecture dans le
boudoir to denote the phenomenon in which
forms are deliberately disposed so as to
make the viewer notice qualities that
would not be seen by an everyday percep-
tion. He sees no possibility for explicit,
"iconic" meaning in architecture today
because of the nature of modern life; and
so, he maintains, modern architects
have attempted to recover meaning by
redefining it in terms of qualities that
can be conveyed by form. Tafuri describes
two ways in which this project has been
approached.

The first group (characterized by the
work of Aldo Rossi in Italy, but to a
lesser degree also by that of Kahn and
Stirling) affirms the possibility of

recovering the kinesthetic, experiential
import of forms themselves by a move of
wrenching a particular form out of its
normal (functional, economic) context:
by minimizing the connection between a
form and its use, the form is highlighted
as an exceptional event (like the classic
chairs on the platform at MoMA)--as, in
fact, precisely surreal. Thus, once the
viewer has been jarred into an awareness
of the-form-itself, he begins to notice
the (intrinsic) qualities he never saw
before--qualities which this tendency
would claim as the "meaning" of the
form. In this view, the apperception of
formal meaning depends on a separation
from, or more precisely a denial of the
context of the ordinary world.

The second tendency (illustrated perhaps
best by the work of Ulrich Frantzen, the
Smithsons or the Metabolist Group) can
also be seen as an attempt to reciver
meaning; but in this case meaning is seen
as attached, not to specific forms, but
to specific functions or actions. The
basis for this notion is the observation
that, while important human needs are
relatively enduring, these needs are met
by a succession of forms, each of which,
in turn, fills the same cultural "slot,"
thus assuming the import, the meaning
held by its predecessor. Consequently,
this approach seeks to recapture meaning
by introducing (as replacements for
supposedly-obsolete forms) new forms that
so clearly reflect or emphasize their

*It is interesting
to note how much this
replacing process
resembles that in which
perceptions were seen
as shifted on a discur-
sive plane. The crucial
difference, of course,
is that a plane posited
for this system would
be one of use alone.

function that they take over the asso-
ciations linked to the older forms.*

This approach is likewise dans le
boudoir in that, in this case, an activity
is highlighted as exceptional by the
unfamiliar form with which one performs
the act (recall the first time you sat
in a Barcelona chair): again, a heigh-
tened awareness depends on the creation
of a surreal situation. And where the
first case presented a situation in which
the existence of the normal form-use tie
is denied, here the artist opposes the
link between an everyday activity and its
normal accommodating form.

Tafuri sees both of these attempts at
meaning as doomed to failure. His first
criticism is that one cannot evaluate the
products of either system: taking as his
object-to-be-evaluated the disposition of
the forms of a building, Tafuri points
out that, with the first approach, the
arrangement of forms is (to a greater or
lesser extent) arbitrary, ordered accor-
ding to rules set up by the architect and
therefore criticizable only in terms of
adherence to those same rules--which of
course results only in a futile tautology.
In the second group, the disposition of
forms is proof against criticism because
(in theory) it is determined by the func-
tional requirements it satisfies. Seeing
that criticism of either system circles
back on itself, Tafuri maintains that one
must get outside these systems of form
and see what validity their respective

rules for arranging forms have when
measured against the "structures that
determine the existence of architecture."
Tafuri maintains that these structures
are the economy and the systems of indus-
trial production, and that the rules of
both groups exist only in relation to
this order of production: the first, by
adopting production's forms and rejecting
their normal uses; the second, by adopting
the use-patterns of the industrialized
world but rejecting the forms with which
the activities are normally carried out.
Thus, says Tafuri, neither pole has an
independent existence apart from produc-
tion, and both therefore exist at the
sufferance of the production system.

    But this problem of captivity exists
only if one assumes that "architecture"
must be indisputably there: if, as I've
tried to maintain, architecture itself
is seen as not an empirical reality, nor
even as a perception of an empirical
reality, but as a subjective interpre-
tation of perceived intentionality--then
that architecture is a creation of the
complicity between viewer and (interpre-
ted) maker, a creation that is apart from
the system of production. As for Tafuri's
other objection--the absence of standards
that exist outside the system--I've
tried to show how structures like the law
have standards that possess a complex
relationship to the world outside the
system, but that even without the grounding
in public acceptability, these structures

can function in a perfectly rigorous
manner if only they confine their opera-
tions to those areas within a boundary
criterion.

For the realm of art, however, such
self-imposed restrictions seem, at first
glance, inappropriate. Art, one would
imagine, would seek a different sort of
base of validity; this next part will
discuss three tendencies in modern art,
each of which can be seen as a search
for some kind of certitude. In this
respect, all three might be seen as
reflecting a certain lack of faith in the
standards man adopts to judge his own
works; this standard has always heretofore
been some (changing) conception of a
"human order," but doubt about the ade-
quacy of this standard arises when one
realizes that the same man-created human
order has also been the principle used by
man to guide his own creative efforts.
All too aware of this situation, the
modern sensibility seems to despair over
the revealed <u>conditional</u> quality of all
human creations, and one manifestation
of this despair is this series of attempts
to find a standard outside man--to find
an order that is not man-made and conse-
quently fallible.

AUTHENTICITY

The first tendency focuses on what
Bloom referred to as the opacity of
objects, the notion that an object
created as a statement will be inauthentic
to the conception of its maker. The

*or, in the terms used
in the model of the
discursive plane,
attention thus forecloses
the type of associative
positioning posited
as the basis for
interpretation.

realization of this in art has led to
the ongoing project of producing objects
free of this characteristic--producing
objects that will be seen as unlike
everyday objects-in-the-world. Rosalind
Krauss has termed the desired mode of
seeing these works as one of attention:[12]
when one looks as an object with atten-
tion, one abandons his normal incli-
nation to formulate a general impression
of the total object by which he can
classify it with other known objects.
Instead, he focuses individually on
each characteristic of the surface of
the object so that each surface charac-
teristic remains specific, and each is
experienced only as itself--not as merely
a component to be subsumed into some
preconceived whole.

The object itself, then, must be of
such a nature as to defeat the normal-
perception tendency to generalize and
meld individual characteristics into a
prior and therefore inauthentic synthesis.*
Michael Fried has noted two basic ways in
which this has been attempted,[13] both of
which involve a manipulation of the rela-
tions between these individual charac-
teristics. With Literalist art (under
which Fried includes Minimal sculptures
and paintings), the artist attempts
to create a work in which the individual
parts will manifest no relation to each
other, but will relate only and directly
to the whole. That is, by being pre-
vented from logically forming any two

or more parts into a sub-group, one is
forced to see the whole only as an
assemblage of parts, each of which is
perceived as only itself and therefore
authentic to itself.

If Literalist art thus tries to defeat
the normal making of relations by denying
their possibility, then Modernist art
makes the same attempt by proposing an
alternative set of relations--those of
art itself. For this art, the only
object truly unlike everyday objects is
an art-object--a work whose parts are
related in a deliberate, conventional
manner. The Modernist artist thus aims
to prevent the viewer from forming an
unintended (and therefore inauthentic)
set of relations by making his (the
artist's) own relations appear inevitable;[14]
that is, that the disposition of parts
will look so patently "right" that the
viewer's attention will pass over the
relations and focus instead only on the
whole object, the object again seen as
an assemblage of parts, but in this
case parts related in the only logically
possible (and therefore authentic) manner.

One can see that both tendencies deal
with the issue of the relation of parts
by attempting to close the matter to
question--Literalist art by a non-existent
relation between parts, Modernist by a
relation seen as inevitable. What the
correct perception of this art demands,
then, is that the viewer suspend his
everyday propensity to seek a reason that

would account for why the parts of an
object are arranged in a particular way.
Thus the intention is not only to prevent
the viewer from imagining alternative
relations, but also to prevent speculation
as to why the one permissible configu-
ration was give that particular form.
Given this, the Literalist/Modernist
model, if used in the creation of buil-
dings, would not only prevent the recon-
ceptualizations necessary for alternative
uses, it would also prevent any compli-
city or involvement by the viewer.

This is a problem raised by applying
a model where it perhaps cannot fit; but
even on the level of art itself, objec-
tions can be raised. With either a
Literalist or Modernist work, the viewer's
feeling of being foreign to the artwork
is a logical outcome of the artist's
program of preventing the inauthenticity
of the viewer's imagining that the work
is like something seen before. In Clement
Greenberg's view, the artwork distances
the viewer, producing a situation which
he terms presence.[15] But conversely (as
Fried points out), presence exists only
when a viewer is on hand;[16] without the
viewer's reaction, that quality of
presence by which the work seeks to
defeat the inauthenticity of interpre-
tation ceases to exist. In the absence
of a viewer, the work loses a part of
its fundamental nature: if presence is
a necessary part of the artwork, then
by itself the work is incomplete and

*The work itself thus "tells" the viewer when his mode of perception is inapplicable--in much the same way that the fake storefronts "told" the viewer that looking at them as architecture would be fatuous.

so, inauthentic.

AUTONOMY

To escape this situation--which Fried calls theatricality--the work must, in some objective sense, be autonomous from its audience; that is, the work must defeat speculation by being such that the only things that could possibly be known about it are those things that would be apprehended by a purely objective perceiving mechanism--by eyesight alone. Fried maintains that this condition can exist only when the artwork is "wholly manifest" in an instant[17]--when successive viewings of the work would supply no additional data for use in (subjective) speculation after a "content." Thus, the inauthenticity of a theatrical, speculative situation is defeated only when the viewer realizes that the objective, eyesight data he gets upon first seeing the work is all the data one could possible get. If he tries to make speculations that involve characteristics of form beyond those immediately presented to vision, these speculations will be shown to be false because the work will supply no "corroborating data."* One can see how this quality is achieved in the paintings of Morris Louis and Kenneth Noland, but Krauss has pointed to David Smith's sculpture as an example of the more difficult project of making three-dimensional forms "wholly manifest."[18]-- which of course immediately suggests that this method might be applicable to a

possible architecture. For like archi-
tecture, a sculpture is necessarily
experienced sequentially: that is, an
impression is formed upon first seeing
the work against which successive im-
pressions from other points are compared.
By the way he configures his work, Smith
insures that views beyond the first will
either "look like some object other than
the one I first saw" or else "look like
exactly and only the object I first saw."
That is, all that can be known about a
work is seen immediately, since additional
views will only provide contradictory
information or the same information.
Smith's work is thus authentic to the
opaque nature of objects because the work
really does "say" or imply no import
beyond what one can see. But Krauss notes
that by so doing, Smith's work also
achieves seamlessness in that one's views
of the work, being "always different" or
"always the same," are undifferentiated
from each other and thus indivisible.

Again one can see how in this way a
perfectly permissible condition in art
becomes a stumbling-block when applied
to architecture, for this indivisibility
would (if achieved) prevent one from
imagining the sub-groups of parts neces-
sary to accommodate activities. But also
once again--as in the case of the phenome-
non of presence--considerations from within
the realm of art itself point up objec-
tions to the project of manifesting forms
that "say nothing." This goal of

producing only silence can be seen as a self-restriction* by the artist, as a faithfulness to Wittgenstein's doctrine of refusing to say those things which cannot be stated clearly. Silence, then, can be seen as a denoting by the artist of those areas of life to which verbalizing is inadequate and inauthentic. And so by implication, the area of life covered by the artist is just such an area "of which one must remain silent." Seen in these terms, the task of preventing speculation beyond the surface qualities of his work can be thought of as an effort by the artist to retain his role as "truthful commentator" on his chosen area of experience by insuring that his works will not be read incorrectly and judged untruthful. Susan Sontag has characterized this refusal to speak as the marking of artistic space: by clearing away the "noise" of unjustified speculation and unclear thought, what is left is pure, true silence. But here again, she points out, the artist's autonomy is defeated by the very fact that his created silence can be perceived only because the rest of the world _is_ so noisy.[19] The artistic space is seen as different and therefore distinct not for its own intrinsic qualities, but only because it opposes what surrounds it: like the architecture dans le bouroir, the silent space depends upon the world because it exists only in relation to it.

THE NATURE OF THE MEDIUM

There is a third tendency in modern
art which could be seen as an attempt to
circumvent these problems of existing
in opposition to objective reality: by
clearing away all conventions, this
tendency tries to base an art on the
incontrovertible imperatives that make up
the unique nature of each medium. The
major outcome of this idea has been the
attempt to found an esthetics of painting
upon only the quality of flatness. Neil
Levine has pointed out that, almost alone
among all the arts, hardly any discussion
occurred about a unique nature of archi-
tecture; he himself has suggested the
intriguing idea that one might consider
the essential characteristic of archi-
tecture to be the bounding surface;[20]
that is, unlike the surface of a painting,
which essentially has no other side,
and unlike the surface of a sculpture,
which is touched by the same space on
all sides, the surface of an architec-
tural object is always touched by one
space on one side ("a room") but by a
space that is essentially different on
any other side ("a different room," the
outdoors). But whatever one settles
on as the nature of a medium, each
proposition can be seen as an attempt to
redefine the nature of the medium--
inevitably to propose an alternative
vision of that particular art. To do
so necessarily implies a belief that the
existent vision of the art is in some

way misdirected, bankrupt, or false.

Now, the system I'm trying to
construct is also an alternative vision,
and it too springs from a belief in the
bankruptcy of the modernist vision. But
I have already revealed my fondness for
aphorisms, and I think there are multiple
layers of meaning in Benedetto Croce's
motto "Architecture is what everybody
knows it is."[21] If architecture has
a unique nature as an art is must be
that exists for people in the world. To
found an architecture on terms other
than this is necessarily to be false,
inauthentic. Rather than attempt to
redefine architecture, I have tried to
accept "what everybody knows" about
architecture and systematize it. Some
of the possible fruits of this approach
are discussed in the final section.

Possibilities

In this final section I want to discuss
two possibilities raised by the material
presented thus far. These possibilities
are speculative, of course, but more
than mere flights of fancy: much of
the reasoning for this analytical
method is based on the two quite
different analytical systems constructed
by Susan Sontag and Claude Levi-Strauss,
and these possibilities are similarly
based on implications the authors noted
for their own systems.

The idea that one might be able to
reconstruct the found logic of a social
phenomenon comes from Levi-Strauss'
analysis of Indian myths of Latin
America,[22] in which (in a way quite
different from that which I've employed)
he posits a structure that encompasses
all the myths into a rigorous system.
The logic of this structure is not the
same as that the natives use to explain
the myths to themselves, but is rather
a reconstruction of that logic along
other, quite different lines.

But what Levi-Strauss found in the
construction of this system was that, by,
in effect, getting outside the system
and looking back at it (through the "lens"
of his own systematic model), one could
glimpse there a "Great Truth," an inter-
preted import to the system itself.*
And, like the "import" of an architect's
design conception, this Great Truth would
take the form of a many-layered, sub-
suming aphorism--one that would explain

*In Foucault's terms
one would view the whole
system as a dot on some
plane of human ex-
perience; this import
would thus consist of
the interpreted
relations that myth
(as a system) has with
the rest of life.

*Or: the interpreted import of the individual myths according to the logic of the partici- oants: the myths' relation on one of the participants' discursive planes.

the system in the "Aha!" way referred to before. For example, Edmund Leach[23] has pointed out that one studying the whole of Greek myth along the lines of Levi- Strauss' American studies might interpret their import as "Sons must kill their fathers, and daughters must desert their homes"--a rather curious statement and one that, at first glance, also flies in the face of the social lessons taught by the individual myths.* But by con- sidering the statement in an aphoristic way, one can see that the society of docile children called for by the individual myths would be one doomed eventually to stagnation: only when children do turn against their parents will a culture remain vigorous. The subsuming Truth, then, suggests that, for the everyday conduct of affairs, children should be pliant and well- behaved, but for the long-term health of society they must be rebellious.

The tantalizing implication this holds for my study is that a thorough- going reconstruction of the found system of architecture might likewise reveal a similar aphoristic insight. This is, of course, highly speculative, but it does suggest that any study that seeks to derive an essential nature of architec- ture from its material reality may be misdirected, focusing on a picture as incomplete as the individual Greek myths; better, perhaps, and more fruitful to focus on what architecture means to the

*This esthetics, like my reconstruction, would be a modelling of one of the many possible existent ways of seeing.

public.

The second point, in fact, concerns itself directly with this question of what meaning architecture holds for people. The preceding section raised the possibility that received theories of art be considered bankrupt on their own terms; Susan Sontag's criticism[24] addresses the more fundamental issue of their meaninglessness and lack of relevance to the lives of people. She appeals for an art that will make us more attuned to the world--to make us "sense more"--and for a criticism that will help us do so. She sees a vicious cycle in which the public loses the ability to respond to art and the artist ceases to produce works that could engender a response. This is due, she says, to a fundamentally miscast vision of what art does and how it does it. To address this misapprehension, she sketches the outlines of an esthetics* and moves on to describe the necessary function of criticism under such a system.

Her central point is that the insight one gains through the experiencing of art is fundamentally different from that kind of insight one might learn or be taught: through art one experiences a "way of making sense of things." This is a crucial phrase: one experiences, one does not "learn" or "come to know;" and as such, one's words could never fully describe such an experience which, like an aphorism, would have multiple levels

*This assumes, as I think one must, that one cannot imagine a wholly new form--that one necessarily begins work from the base of a prior form.

**in two senses: to impute aphoristic meaning to every part of the configuration would be fatuous; conversely, to assume that each part is the result of only functional (mechanically-derived, unwilled) considerations and to explain the work only in those terms would not only be exploitative, but would fail to provide any guide to apprehending the places where volition was manifested.

of significance. By the same token, then, criticism could never convey the quality of this experience to a viewer: criticism cannot explain art to the public--what it must do is guide the viewer toward having his own personal experience of art.

For Sontag, criticism, as presently conceived, fails to recognize this task because it misunderstands the nature of artistic form. Criticism takes as its object the actual physical configuration of the work and tries to disclose the import of that configuration--the reason why all the forms are arranged as they are. But (for Sontag) the artistic purpose of an art work is not to convey import (not to "teach") but to convey the artist's volition. Thus (in my terms) the artist's task is to bring a physical configuration of forms into accord with his deliberate, resolved vision. In essence, the artist intervenes in that configuration* only at those points that do not accord with that vision; that is, the final configuration discloses the points at which the artist deliberately chose to intervene--where he prevented "the fortuitous" from appearing by interposing "the intentional."

The function of criticism, then, is not to interpret the whole of the physical configuration itself,** but to separate those aspects that are intentional from those that are merely fortuitous: to point out those places where the configuration differs from "what would have

happened if no will had intervened."
By so doing, criticism reveals the
pattern of intentionality manifested
within the forms. The viewer then
interprets that pattern and in so doing
experiences the aphoristic insight: or,
in Foucault's terms, he relates and com-
pares that pattern with other remembered
patterns, the configuration of these
connections being a function of the
viewer's experiences, but the nature of
each connection constituting one of the
insight's many layers of meaning.

Thus, though one could never fully
describe the personal import of such an
experience, one can say that its character
is one of association, a linking of
immediate experience with memory. By
this linking, memory gives immediate
experience a profounder import, and in
return immediate experience both renews
(and adds to) memory and connects it to
the present. Memory is thus seen as not
merely a repository of tid-bits to be
turned to at odd moments, but as an
ever-present source of deep meaning.

In like fashion, innovation can be seen
in a new light: an innovative work would
not be simply a work whose specific shape
had not been seen before, but would be
a work whose deliberate aspects (whatever
shape they took) revealed a new way to
convey a pattern of volition. By perceiving
an innovative work in these terms, a
viewer would apprehend a new way in which
the associative experience could be

"triggered." But more: because the
multiple connections made by the insight
need not be limited to memories only
from that particular artistic medium,
each new experience opens the viewer to
the possibility of associating that
pattern of volition with remembered
patterns from other areas of life. Once
one fully realizes this, one sees that
it is possible to perform any act according
to a deliberate pattern that deviates from
the fortuitous, and it is possible to
link any deliberate, patterned act with
any other deliberate, patterned act.

The realization of this distinction
between willed acts and fortuitous acts
is central: one can, in fact, see an
historical analog here. In traditional
or archaic societies, (nearly) all the
forms and actions of the culture are
controlled or specified by an all-embra-
cing canon: every action is either in
conformance to a rule (and therefore
meaningful) or in violation of one (and
therefore also meaningful). But with the
break-up of traditional society and the
emergence of individual freedom comes the
possibility not only of willed or inten-
tional form and action, but also of
fortuitous (and therefore meaningless)
form and action. Thus one might say that
a bargain is struck: with freedom comes
the ability and power to act according
to one's own will, but with fortuitousness
comes the atomization and confusion of
meaningless forms and inexplicable actions.

For the realm of art, freedom makes
innovation possible, but fortuitousness
raises the need for a criticism that
will attune us to the difference between
volition and accident.

By pointing out places in life where
there is deliberate import, such a
criticism would dispel the stultifying
suspicion that all forms and acts are
meaningless. Opened in this way to new
possibilities, a viewer who gave his
complicity to an intentional act would
experience associations that would forge
links to other actions, from different
times and from other areas of life. By
showing us these links, art would provide
a vision of a re-integrated life, a
vision that suggests a new aphorism:
Art explains life, life imitates art.

Notes

1. Mariana Griswold VanRensselaer, Henry Hobson Richardson and his Works (1969), pp. 105-6.

2. Jean Piaget, Main Trends in Interdisciplinary Research (1973).

3. Many thinkers in the field of the philosophy of science have explored the relation between data-collection and data-interpretation, among the ones who have influenced this model are:
Imre Lakatos, "Falsification and the Methodology of Scientific Research Programmes" in I. Lakatos and A. Musgrave, eds., Criticism and the Growth of Knowledge (1970).
Karl Popper, "On the Sources of Ignorance and knowledge" in Conjectures and Refutations : the Growth of Scientific Knowledge (1968).
Joseph Agassi, Towards a Historiography of Science (1963).

4. Michel Foucault, The Archaeology of Knowledge (1972).

5. Michel Foucault, I, Pierre Riviere... (1975).

6. Ted Morgan, "New! Improved! Advertising!" New York Times Magazine, 25 January 1976.

7. This extremely cursory version of the law's structure is distilled from the following standard texts:
Benjamin Cardozo, The Nature of the Judicial Process (1921).
Edward H, Levi, An Introduction to Legal Reasoning (1949).
And one rebuttal:
Richard Dworkin, "The Model of Rules," University of Chicago Law Review (1967), pp. 17-45.
The idea of using the law as a model--one of the ideas that tickled my mind into beginning this study--comes from:
Peter Collins, Architectural Judgement (1971).

8. Harold Bloom, The Anxiety of Influence (1973).
My introduction to Bloom's ideas came through:
Vincent Scully, The Shingle Style Today; or, the Historian's Revenge (1974).

9. Emil Kaufmann, Architecture in the Age of Reason (1955).

10. Some of these books include:
N. C. Curtis, Architectural Composition (1908).
H. Robertson, Principles of Architectural Composition (1924).

Ernest Pickering, Architectural Design (1933).
    A. Trystan Edwards, Style and Composition in Architecture (1952).

11. Manfredo Tafuri, "L'Architecture dans le boudoir: The Language of Criticism and the Criticism of Language," Oppositions 3.

12. Rosalind Krauss, Terminal Iron Works: The Sculpture of David Smith (1971), p. 99.

13. Michael Fried, "Art and Objecthood," Artforum 5 (summer, 1967).

14. Michael Fried, Three American Painters (exhibition catalog, 1965), p. 44.

15. Fried, "Art...," p. 13.

16. Ibid., p. 15.

17. Ibid., p. 17.

18. Krauss, p. 181.

19. Susan Sontag, "The Aesthetics of Silence" in Styles of Radical Will (1969).

20. Neil Levine, conversation, 2 March 1976.

21. Quoted by Sibyl Moholy-Nagy at a symposium in Charlottesville, Va., December 1968.

22. This account of Levi-Strauss' work is based primarily on my reading of his The Raw and the Cooked (1970).

23. Edmund Leach, Claude Levi-Strauss (1974).

24. My interpretation of Sontag is based on two of her essays, "Against Interpretation" and "On Style," both in her Against Interpretation (1966).