BUILT OPEN FIELD: OBSERVATIONS AND PROJECTIONS

by
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A mes parents......
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Abstract

How are dimensions used in order to arrive at a relative relationship
between the figure and the ground? How do dimensions structure the field?
How do they generate movement, change, continuity, discontinuity,
transparency, alternations......?

This thesis attempts to answer these few basic questions. Basic in that
they all relate to an understanding of organization. The premise is that the
strength of a good physical environment lies in its organization, in the basic
relationships between the parts. The organization then becomes a support for
further transformation.

This thesis is also on observation. What is observation? What does it do?
How do architects observe? The premise here is that learning how to observe
or developing observational methods may be the only way to get us out of the
chaotic, singular, non-committal, disassociative state of today's built world.

This thesis is an observational exercise focusing on dimensional stability
as an organizing principle.

Thesis Supervisor: William L. Porter
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1. On Observation
"Even before science had officially recognized that observation intervenes in some way to modify the phenomenon being observed, Gadda knew that 'to know is to insert something into what is real, and hence to distort reality.' From this arises his invariably distorting way of representing things, and the tension he always establishes between himself and the thing represented, so that the more the world becomes distorted before his eyes, the more the author's self becomes involved in this process and is itself... distorted." (App.1:20. Calvino.)

This thesis is an observational thesis. It attempts to first understand what observation (observing) is, then, through a series of observational exercises, attempts to find out what observation does.

The premise is a bold one. It argues that architects have yet to learn how to observe. If the gap between seeing and looking has been bridged (and sometimes even that remains doubtful), the one that exists between looking and observing seems to be more than ever present in how architects look/observe. Part of the argument being that learning how to observe or developing observational methods could be a (the) key to the kind of knowledge that is needed to get us out of the chaotic, singular, non-committal, disassociative state of today's built world.

"The problem, it must be admitted, is one of knowledge.... Designers do not have concepts and techniques that allow them to describe and investigate the
kinds of spatial order that are to be found in highly complex physical objects like towns and cities. (App.1:1.Hillier, Hanson, Peponis, Hudson, Burdett.)

Looking relates to the appearance of things. Observing relates to their essence. As Klee points out, the demarkation between the two is faint. "There is no clash, just a specific something which demands that the essential be grasped." (App.1:6.Klee.)

Looking implies a one way relationship between the viewer and the viewee. One looks at an object. The relationship is one that goes always from viewer to viewee. The result is a "painfully precise investigation of appearance....In this way excellent pictures were obtained of the object's surface filtered by the air; the art of optical site was developed...." (App.1:3 Klee.)

Observing (which leads to knowledge), as suggested by Gadda and Calvino implies two things. A two way relationship between the observer and the observed one (I look and I am being looked at), but also a distortion of both parties. The observer and the observed one are mutually affected.

"For an individual who has a contemplative disposition, the whole secret of happiness is not to consider as evil the invasion of his personality by objects...." (App.1:13.Ponge.)

"Objectism is the getting rid of the lyrical interference of the individual as ego. of the 'subject' and his soul, that peculiar presumption by which western man has interposed himself between
what he is as a creature of nature (with certain instructions to carry out) and those other creations of nature which we may, with no derogation, call objects. For a man is himself an object, whatever he may take to be his advantages, the more likely to recognize himself as such the greater his advantages, particularly at the moment that he achieves an *humilitas* sufficient to make him of use." (App.1:17.Olson.)

"To do this, he has to face each time problems of selection, exclusion, hierarchies of preferences; he soon realizes he is spoiling everything, as always when he involves his own ego and all the problems he has with his own ego.

But how can you look at something and set your own ego aside? Whose eyes are doing the looking? As a rule, you think of the ego as one who is peering out of your own eyes as if leaning on a window sill, looking at the world stretching out before him in all its immensity. So, then a window looks out on the world. The world is out there, and in here, what do we have? The world still—what else could there be?

With a little effort of concentration, Mr. Palomar manages to shift the world from in front of him and set it on the sill, looking out. Now, beyond the window, what do we have? The world is also there, and for the occasion has been split into a looking world and a world looked at. And what about him, also known as the "I," namely Mr. Palomar? Is he not a piece of the world that is looking at another piece of the world?
Or else, given that there is world that side of the window and world this side, perhaps the "I," the ego, is simply the window through which the world looks at the world. To look at itself the world needs the eyes (and the eyeglasses) of Mr. Palomar."(App.1:21.Calvino.)

A transformation of the object observed is something that we have been familiar with for quite a while. Cezanne, the cubists, the constructivists......were constantly taking the world apart in order to reconstruct it and thus bring out new associations.

"We learn to see what flows beneath, we learn the prehistory of the visible. We learn to dig deep and to lay bare. To explain. to analyze."(App.1:4.Klee.)

"We learn to look down on formalism and to avoid taking over finished products. We learn the very special kind of progress that leads towards a critical striving backward, towards the earlier on which the later grows. We learn to get up early to familiarize ourselves with the course of history. We learn cogent truths on the way from causes to facts. We learn to digest. We learn to organize movement through logical relations. We learn logic. We learn organism. As a result the tension between us and the finished product eases. Nothing exaggerated-tension inside, beneath, underneath. Passionate only deep within.
Inwardness."(App.1:4.Klee.)

In the world of writing, Francis Ponge talks about how his observed objects are transformed by semantics. "O infinite resources of the thickness of
things, brought out by the infinite resources of the semantical thickness of words." (Ponge.)

How do (should) architects observe? How do architects record their observations? What is the form of the transformation that the object observed has to take in order for us to extract the kind of knowledge that may help us to "set ourselves in motion." (App.1:5.Klee.)

The observational work done by Fernando Domeyko in Cordoba (see Places v.4.*2) is, I believe, a unique example of the kind of work done with an understanding of the concepts mentioned so far. "The work starts with a careful dismantling or de-constructing of a place that can reveal plural and even contradictory points of view. New issues, forms and, gradually, holistic understandings emerge. By focusing on certain issues the drawings make possible not only these inferences but also transformations that go well beyond them............This drawing has in mind a sense of ruins. of overlapping ruins. A place is defined in time therefore we are in the process of time. Tomorrow will be defined in a new way. We will add a new reading over that reading. but it will remain a place and become even more a place........Knowing the order of the place. you become able to transform it into a new reality." (Domeyko.)

How is the architect being observed by the world? How is the world out there transforming the architect's "inner" world?

Observations do not just add up
anymore. Each new observation does not just sit on top of the pile of prior observations. Each new observation changes, transforms, adds to, negates......past observations. To the additive quality of our "inner" world is added one of constant change which generates new relationships, infinite relationships, unknown relationships. "Because the traveler's past changes according to the route he has followed; not the immediate past, that is, to which each day that goes by adds a day, but the remote past. Arriving at each new city, the traveler finds again a past that he did not know he had." (App.1:15.Calvino.)

"I know (it is a constant buzzing, but I can still make it out). YES. I know well enough that works of art must first please me, distract me, even exalt me if needs be: all this is TRUE. (I also chew my batch of first principles). BUT- and I arrive at my own conclusion on this, at least in certain areas- they must, before all other things, CHANGE me. And thus, first of all, stretch me and contract me: shake-up a bit that part of me that has not yet been changed" (Ponge. The Power of Language. p.144).

This constant transformation of our inner world can now be seen as a "convergence of infinite relationships, past and future, real and possible- and demands that everything should be precisely named, described, and located in space and time." (App.1:22.Calvino.)

This way of operating is what will generate the life of the transformation. It is the place from where the
transformations will register, a reference point.

"........ it is necessary (1) to arrive at a precise inventory of each thing that one has made the object of one's contemplation: (2) to change objects of contemplation rather frequently to assure a degree of equilibrium. But for a contemplative individual, what is most important is the progressive nomination of all the qualities that he discovers...... "(App.1:13.Ponge.)

Naming, describing, making inventories, locating in space and time. All these things have to be done with what is out there in the physical world. Every day, one at a time, step by step, meticulously. Only then will we be free to let the great complexity of the infinite possible relationships between things converge in our inner world and be able to make use of them. Our inner world, in constant state of transformation can only be of use if its original components can be, at any time, referred to, reminded of, re-located in space and time.

The use of our inner world, with its inextricable complexity, convergence of relationships is, I believe, what we call intuition. It is all that transformed knowledge, all of it, some of it, from which it is difficult to isolate particular events or parts. Everything has or will influence everything else.

What has become clear, I hope, is that intuition starts with what is out there in front of us, how we transform it, how what is out there looks at us and how it transforms us.
The kind of intuition that I am talking about is one that requires work, knowledge, systematic observation. An intuition which, because of how it came about, frees us and allows us to move, to keep on moving.

"Another very wrong idea that is also going the rounds at the moment is the equivalence that has been established between inspiration, exploration of the subconscious, and liberation, between chance, automatism, and freedom. Now this sort of inspiration, which consists in blindly obeying every impulse, is in fact slavery. The classical author who wrote his tragedy observing a certain number of known rules is freer than the poet who writes down whatever comes to his head and is slave to other rules of which he knows nothing." (App. 2: 12. Calcino.)
2. From Directional Field to Built Open Field.

Introduction

1. Directional field
2. (Lateral) displacements
3. A directional, self-stable reciprocal form
4. Packed, multi-directional, self-stable, additive field (optional reversals)
5. Dimensionally-stable open field/built open field

Conclusion
Introduction:

This first chapter is an attempt to get at an understanding of the built open field by additively engaging known observable formal behaviours such as directionality, alternation, displacement, and many others.

It was done by taking a closer look at Maurice Smith's "ABC diagrams" which, through a series of additive transformations, take us from an understanding of the directional field to an understanding of the built open field.

These diagrams are, I believe, of importance in that they are not a representation of reality, but are instead the outcome of an additive understanding of particular formal behaviours.

Their quality lies in how they re-construct the "world" step by step, always allowing one to understand where a particular behaviour came from and where it may lead to. "Visual knowledge acquired in the past helps not only in detecting the nature of an object or action appearing in the visual field: it also assigns the present object a place in the system of things constituting our total view of the world." (App.1:19. Arnheim.)

It is up to the observer of these diagrams to understand them, transform them and test them against the physical world that surrounds them.
Directional Field:

"All becoming is based on movement."

(App.5:8.Klee)

Movement implies direction. Movement implies time. "Space is a temporal concept. When a point turns into movement and line, it takes time."


Movement implies direction. A direction allows one to go, to keep on going.

A directional field provides optional directional zones of association (d.1, ill.1).

At least four zones (five demarkations) are needed.

-One zone: no option
-Two zones: either/or (most limited option)
-Three zones: Possible central control. Any one controlling behaviour should be avoided.
-Four zones: First truely optional
field, where centrally controlled behaviour is not possible.

The zones potentially provide a packed alternation. Packed because there is no exchange yet between the zones (d.2, ill.2,3,4).

The packed alternation is the most basic kind of alternation. Basic breathing. Better than no alternation. Almost a rhythmic organization. Not enough. Danger of a "regularity that soon becomes monotony."

(App.5:3.Kepes)
The directional field is usually an intensification of an already existing direction. Recognizing and associating with an existing direction is a first "contextual" move at the organizational level.

The landscape, built or natural, is directional. Contours, direction of cultivation, winds, sun, edges... (ill. 5).

Intensifying the existing direction (movement), guarantees some continuity with the larger form (landscape). "The most evident characteristic of movement is its unity. its dynamic continuity". (App. 5:4. Kepes)

Continuity is to be provided for before discontinuity. Discontinuity cannot be the first move. Discontinuity is only understood in relation to a pre-established continuity.

Start with the field in order to work "in open, or what can also be called composition by field, as opposed to inherited line, stanza, over-all form" (App. 2:6. Olson.)

The "energy" (movement implies energy) provided by the existing direction is found in the organized directional field and remains a primary source of energy to the person acting in the field (experiencing the field). (App. 2:6. Olson.)

Direction provides energy to move freely.

"From the moment the poet ventures into field composition—put himself in the open......he has to behave, and be, instant by instant, aware of some several forces...." (App.2:6.Olson.)

Aware of a direction, instant by instant.

"One perception must immediately and directly lead to a further perception. It means exactly what it says, is a matter of, at all points get on with it, keep moving. speed, the nerves, their speed, the perceptions, theirs, the acts, the split second acts, the whole business, keep it moving as fast as you can, citizen." (App.2:6.Olson.)

The directional field is a first move towards a structuring of movement. "that dictates the direction and progression toward ever new spatial relationships." (App.5:4.Kepes.)
2. (Lateral) Displacements.

Where the directional field takes care of the main (primary) direction (GO), the lateral displacement (move against main direction of the field) provides for a place to STOP. Stopping is a new (next) action (d.3).

A GO/STOP (continuity/discontinuity) alternation is generated. Not just a packed alternation anymore. The action of stopping generates an exchange between zones (i.e. zone 2 exchanges with zone 3) (ill.6-10).

With the packed alternation the dimension of each zone exists individually and independently from one another. The lateral displacement generates a dimension which combines the dimensions of two (or more) zones.

From: zone 1+ zone 2+ zone 3+ zone 4. (1+1+1+1) = packed alternation.
To: zone 1+ zone(2+3)+ zone4.  
(1+2+1)= alternation+ exchange.

The continuity (GO) part of the continuity/discontinuity alternation is now seen as a registration zone. The registration (always reinforcing the direction of the field) is not to be seen as a controlling element but rather as a freeing one. "What thus became clear to me was that the way a landscape is set free by its horizon is akin to the way the cohesive potential of a building order can give a building a horizon from
which, strange paradox, it likewise draws its freedom" (Herman Hertzberger).

The discontinuous move is understood in relation to a continuous one. "The classical author who wrote his tragedy observing a certain number of known rules is freer than the poet who writes down whatever comes into his head and is slave to other rules of which he knows nothing." (App.2:12.Calvino).

Lateral displacements may happen on either side of the continuity. If the lateral displacements are in a back to back position (mirrored), a double directional, central, processional form is generated. (ill.11.12).
If the lateral displacements are displaced along the main direction, the main direction still wins while the displacements alternate (walk) along the continuity (yet another kind of alternation) (ill.13.14).
A built/unbuilt alternation (not yet observed) may be part of the lateral displacement (ill.15-18). The new dimension generated by the displacement now has a built and an unbuilt component. The continuity (registration) can be optionally seen as being built or unbuilt.
A built/unbuilt alternation can also happen in the direction of the field. In this case, the alternation is built into the continuity (ill.19-21).
3. A directional self-stable reciprocal form.

A second lateral displacement on the same side of the continuity as the first one generates a directional self-stable directional form. Pie (d.4. ill.22-32).
Directional because the continuity (registration/GO) extends out beyond the displacements (STOPS). Self-stable because it generates some territory beyond itself. A stable territory. Reciprocal (not just an exchange anymore) because for the first time there is an unbuilt STOP generated by
the built ones. Reciprocally, the unbuilt will be built and the built ones will be unbuilt. This is the form of reciprocity.

The territory generated by the pie form is stable in the sense that it is defined by at least three edges and thus can be perceived as a partially closed
form which has particular dimensions in two directions.

As observed with the single displacement, the two displacements (pie) can be found singularly or multiply (ill.33-37) in a back to back situation, mirrored (ill.38-40) or displaced along a main direction (ill.41-46).

From one displacement, to pie, to multiple pie.

The built/unbuilt alternations observed earlier within the lateral displacement as well as within the continuity are also observable in pie.
4. Packed, multi-directional, self-stable, additive field (optional reversals).

Pie is now being deployed in the directional field (ill. 47). Pie and the stable territory that it generates are optionally built (optional reversals) (d.5).

This optional move is a first step towards an "all built" world. A world where the figure is ground and the ground is figure (ill. 48-57).

"For, if the appreciation of object or figure is assumed to require the presence of some sort of ground or field, if the recognition of some sort of however closed field is a prerequisite of all perceptual experience and, if consciousness of field precedes..."
consciousness of figure, then, when figure is unsupported by any recognizable frame of reference, it can only become enfeebled and self-destructive." (App.4:6.Rowe).

"...... the situation to be hoped for should be recognized as one in which both buildings and spaces exist in an equality of sustained debate. A debate in which victory consists in each component emerging undefeated, the imagined condition is a type of solid-void dialectic...." (App.4:9.Rowe.)
"With the cubists.....everything is at once subject and space between, depending on which one's attention is focused." (App.4:10.Hertzberger).

The optional reversal is yet another form of alternation. However, there remains a one to one (OFF/ON) relationship between the figure
(ground) and the ground (figure). It is a form of packing.

In the packed, self-stable field, when something is left unbuilt, its dimensions are still present and work at "locating" the built pieces. Dimensions (not the actual physical definition) are starting to play a primary role at "building" the field.

Everything is built, physically or virtually. The continuity is now two fold. There is a built as well as an unbuilt continuity. Along the same line, there is a built as well as an unbuilt discontinuity. The alternations are multiple.
5. Dimentionally-stable open field/Built open field.

The optional reversal (OFF/ON) which generated a packed self-stable field is now a total reversal (always OFF or ON). All the stabilities (rocks) are now built (d.6).

The original pies are no longer recognizable as separate built elements but the dimensions that they generated survive.

The optionality now lies in the way the dimensions generated by the unbuilt pies are used. The full reversal allows for more optionality in where, how and when the dimensions may be used.

The dimensions are deployed optionally in the field. They build and open the field (sand). The stabilities (rocks, objects), can be seen as ground or
slack (ill.58-61).

"......and we speak of a willingness to reconsider the object which allegedly nobody wants and to evaluate it not so much as figure but as ground."
(App.4:7.Rowe.)

"......it is not hard to acknowledge that the recognition of poche is also a matter of context and that, depending on the perceptual field, a building itself may become a type of poche, for certain purposes a solid assisting the legibility of adjacent spaces. And thus, for instance, such buildings as the Palazzo Borghese may be taken as types of habitable poche which articulate the transition of external voids."
(App.4:8.Rowe.)
Recognizable dimensions found in two directions (the quality of the stability generated by the original pie) are now also observable as part of the continuous field. The continuous field is built by an optional deployment of dimensionally built stops (ill.62).
Conclusion.

In this chapter, the following behaviours were looked at individually as well as part of a series of transformations:

- directionality
- lateral displacement
- exchange
- registration
- mirroring
- optionality
- stability
- reciprocity
- pie
- alternation: packed

The next chapter will look at how these behaviours participate at dimensionally building the field.
3. Places Observed

Introduction
Places 1 to 25
Conclusion
Introduction

The last part of the previous chapter suggests, through a diagramatic transformation, that dimensions (a double directional deployment of) play an important role at building the field in such a way that the figure-ground relationship (which was argued to not be a reasonable option) becomes a much more relative one.

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This chapter looks at dimensions but more particularly at the deployment (through displacements) of stabilities (dotted squares). A stability occurs when one dimension is found in two directions. In order for a stability to exist, it has to be defined by edges. The next series of diagrams shows the different ways in which a stability can be generated.

The "square" quality of the stability is almost never present as such (except in square buildings, square plazas or

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square courtyards). What is found is a zone where one dimension can somehow be found deployed in two directions. Sometimes the stability will be partially filled with a building element, sometimes it will be very closed or sometimes it will be so open that the square as such is hardly recognizable.

Building the field by deploying stabilities (stops) is directly related to the way dimensions are (or were) used to build. In appendix 6, a few paragraphs dealing with dimensions from Jean-Luc Massot’s book “Maisons Rurales et Vie Paysanne en Provence” were translated. The following is an excerpt.

“Most of the rural constructions are dimensioned using the old system, the 'duo-decimal' system. This appears to be essential. In the 'duo-decimal' system, we have a certain element repeated several times. The repetition of this element plays a very important role in the proportions.

The old measures differed from region to region even from village to village. The 'eminee' of Saint-Carmat (700 meters), was different from the one of pelissane, village located only a few kilometers away. The metric system, on the other hand, has uniformed all dimensions and brought along dimensions which did not anymore relate to human dimensions.”

He goes on to give a few examples of surface dimensions.

Le cano carado: a square measure of a surface equivalent to a 4 meter square. The piece of land that contained
1600 cano carado (63 acres) was divided into 8 eminees.

Le panneaux: at Lambesc was worth 200 cano carado.

L'eminado: size of a piece of land that could be seeded with one eminee of grain.

Le carteree: more or less a 2000 square meters.

Le destree: more or less an 8 meter square.

These few paragraphs show that the use of dimensions as surfaces (two directions) was in fact very real. Not only at a small dwelling size (4 meter square, 8 meter square) but also at larger block like sizes (2000 square meters). Massot's observation that the old system is based on the repetition of certain dimensional elements is really the subject of this chapter.

The observations included in this chapter were done systematically. Twenty five different places were looked at, ranging from single farm buildings to a town. For every place was generated a diagram that looks at directionality, registration and displacements (alternations), as well as diagrams of stabilities found within the place. The goal is to try to understand how the deployed stabilities begin to generate directionality, registration and locating displacements (alternations).

It is clear that for each place, not all the stabilities were looked at. Usually one or two seemed to be enough to clarify the understanding.

Out of the twenty five places that were examined, the first fourteen are
accompanied with a short text (description). The other nine, due to the increased complexity and size, were left undescribed. The principles remain the same. The behaviours do not change.

One final word about the square...... "In most ancient writings, and in the rock inscriptions of early man, the square signifies the idea of enclosure, of house, of settlement."
(Bruno Munari. Discovery of the square, p.5)

1. Place: Assafora, Portugal (ill.1.2)

Two squares (stabilities) next to each other. Two rooms (d.1). The stops are the rooms. No displacements (no registration at the building size.

The photograph suggests that the building registers off of a garden wall (land/property demarkation). The wall provides the continuity with the larger landscape (ill.3).
2. Place: *Assafora, Portugal* (ill.4,5)

Three squares build a directional piece (as the two squares did in Place 1). One laterally displaced square generates a registration edge (d.2) as well as a new size (larger than a one square dimension) across what has now become the main direction (d.3).

The dimension of the displaced square includes the thickness of the wall. The location of the displaced square is not controlled by any of the three that generated the main direction. An L- shape (denial of main direction) or a T- shape (central, balanced) building is avoided. The place of entry is at the exchange.
3. Place: Montagne-du-Gorray. Val-d’Isere, Savoie, France. (ill.6.7)

There is now a built/unbuilt alternation included in the lateral displacement (stop). This provides for an access dimension along the main direction. This access dimension provides for an access continuity which generates the built/unbuilt alternation in the direction of the field (d.4).

Two different size stabilities are found. The larger one works at locating the built elements along the main direction (it slides along the continuous piece) (d.5,6), while the smaller one works at locating the built pieces as displaced elements going against the main direction (d.7,8).
4. Place: *La Rosiere. Bourg Saint-Maurice, Savoie, France (ill.8)*

The lateral displacement of the small piece includes a built/unbuilt alternation. In this case, the built piece is displaced by its own dimension. The displaced piece is controlled by the small edge of the larger directional piece. Registration is now found in both directions (d.9).
The larger stability shows that the dimension of the larger building is also found in the open space in front of it, defined by the garden wall and the smaller building. A basic alternation (d.10.11).

The bread oven is displaced from the main building by the dimension of the main building itself. The court (outside) that is generated has the dimension of the main building (inside).

As in the preceding example, the displaced piece is controlled by the small edge of the longer piece. This generates registration in both directions (d.12.13.14).
6. Place: Cumeada-Loule, Portugal.

The built/unbuilt alternations that are part of the displacements generate an access as well as a stop dimension. The form of the access is not unlike the building form of place 2 (d.15).

The large stability (stop) partially sits in the continuous part of the access, while the smaller stabilities (where the well is located) are off of it (d.16).

The larger building's inside edge provides for a strong registration. The edge control situation in the other direction also generates some registration.

Some of the same observations as for Place 6 can be made here. Although the dimensions are different, we find registration edges, access continuities and discontinuities (d.17).

The largest stabilities register along the main building and include the whole access/building exchange which generates the courtyard. Observe how
the short piece of wall outside is part of
the two largest deployed stabilities
(d.18).

The smaller size looked at does not
only generate the building sizes that
make up the building/access exchange
but also, by sliding along the main
direction, generates the sizes of the
stepping that move along the main
direction (d.19).
8. Place: Viguera, Spain. (ill.15,16).

In this case, the main registration, thus the main direction, is generated by the alignment of a small building piece with the arcades at the village entrance. From there, register displacements that locate other buildings much in the same way as in Places 6 and 7 (d.20).

Different situations of edge control generate more registration in both directions.

The stability examined works at locating building and access dimensions along the main direction (d.21).

Observe how the stabilities exchange in the space. As one enters the public place, one associates with more than one stability at a time.
9. Place: Le Bec-Rouge, Tignes, Savoie, France. (ill.17).

Two lateral displacements. One with and one without a built/unbuilt alternation. The one without the alternation moved along the registration and is located partially beyond the end of the longer directional piece (displacement in the direction of the field) (d.22).

Both displacements generate (through edge control) a registration line against the direction of the field.

The largest stability generates the length of the long directional piece, the size and the locations of the displacements and garden walls, as well as the access dimension that was generated by the built/unbuilt alternation of the displacement (d.23).

The smaller stability works very much like the larger one but generates the smallest access dimension (one
10. Place: Talforest, Plumelin, Bretagne, France. (ill.18).

As in Place 9, there are two lateral displacements. In this case, the displacement that slides along the registration in the direction of the field goes beyond the large directional piece and thus also creates a built/unbuilt alternation (this time in the direction of the field). The other piece is displaced...
from the larger building by the
dimension of the building itself (d.25).

The stability looked at not only
locates the displacements in relation to
the larger piece but also locates the
displacements in relation to one another
(d.26).

The registration going against the
main direction of the field, although not
shown, virtually exists.

The laterally displaced element has moved in the direction of the field and its inner edge now aligns with the larger building element's outer edge. This is yet another example of a double directional registration (d.27).

The largest stability, which has and includes the dimension of the largest building element locates the lateral displacement and, if deployed three times in the direction of the field, locates the tool shed (d.28).
12. Place: Kerzeumet. 
*Plondalmezeau, Bretagne, France.* (ill. 24).

Three lateral displacements on both sides of the large directional piece. Two of which include a built/unbuilt alternation. One displacement in the direction of the field.

The edge control situation along with the fact that the lateral displacements are double sided generate registrations in both direction. The "balance" occurring with the almost
displacements have a built/unbuilt alternation and generate a minimal access dimension.

On the one side of the larger building where two displacements occur, an outdoor court is generated (what is left of the closed courtyard).

The other long directional piece is displaced in the direction of the field (a move to open the closed courtyard) but registers with the edges of the other long building and one of the displaced element.

An element displaced in the direction of the field from the second larger building reinforces the main direction (d.33).

This example starts to point out at how a few basic controlled moves can start transforming a particular form. In this case, one can observe what is left of a closed courtyard.

The stability looked at shows how the dimension of the "original" court is being deployed to locate other elements (d.34).
mirrored displacements could make one question what the primary direction is (d.29).

The largest stability partially locates the displacements while providing an overall dimension for the whole complex (d.30).

The medium size stability locates (while including or excluding) the lateral displacements in relation to the larger piece (d.31).

The smaller stability locates the displaced piece in relation to the extremity of the larger one (d.32).

13. Place: Trerohant, Guisseny, Bretagne, France. (ill.25,26).

Two long directional buildings set up the major direction. One of the longer buildings has two displaced elements on one side and one on the other. Those three elements generate a "walking" alternation along the main directional buildings. Each of those three elements...
14. Place: Mas-Saintes-Puelles, Midi Toulousain et Pyreneen, France (ill. 27, 28).

The directional part of the building includes a built/unbuilt alternation. The unbuilt part of the alternation generates a "court" which is further defined by two laterally displaced elements. The two lateral displacements also include an built/unbuilt alternation which generates an access dimension in the body of the building (d.35).

The larger stability generates the length (three side by side) as well as the width (includes lateral displacements) of the building (d.36).

Registration in two directions is observed and is used to define a fairly "closed" interior court.
d.35

d.36
15. Place: *Farmbuilding in Gøysen.*

Norway. (ill.29,30). (d.37-42).
16. Place: Village des Bories, Gordes, Vaucluse, France. (ill.31-34). (d.43-46).
17. Place: Montes, Portugal. (ill.35).
(d.47-51).
18-21. Place: Roman settlement at warendorf on the Ems River near Munster, Germany. (iii.36).

Four successive phases over 150 years of habitation.

Phase one: (d.52-55)
Phase two: (d.56-59)
Phase three: (d.60-63)
Phase four: (d.64-68)
22. Place: Parrabeil, Pyrenees, France.
(ill.36), (d.69-72).
24. Place: Pueblo, New Mexico. (ill. 41).

(d. 76-79).

![Diagram of Pueblo, New Mexico]
25. Place: Combarro, Portugal. (ill.42-45) (d.80.81).
Conclusion:

'Looking for the stability' as a way to understand the inherent spatial structure of a place appears to be useful in that it allows one to look at a great range of built environments.

This particular quality is important in order to start making abstractions, extract rules, principles from what has been observed. These abstractions would then be the base for the development of a generative design tool based on our understanding of the principles.

"Abstraction is the indispensable link and indeed the most essential common trait of perceiving and thinking. To rephrase Kant's pronouncement: vision without abstraction is blind; abstraction without vision is empty." (App.1:20.Arnheim.)

Where this chapter was looking at places individually, the next chapter will attempt to find out whether or not there exists principles at work common to all (most) places.
4. Abstractions

Introduction

1. Concerning the larger stability
2. Concerning the smaller stabilities and their relation to the larger ones
3. Relationship between the stabilities and the built elements
This chapter is an attempt to abstract from ALL the places looked at particular behaviours concerning:

- The deployment of the largest stability (largest size).
- The deployment of the smaller stabilities (smaller sizes).
- The relationship between the deployment of the larger and the smaller stabilities.
- The relationship between the deployment of the stabilities and registration.
- The relationship between the stabilities and the built physical elements that make up a place.

The chapter is divided into three parts

- Part One looks at the larger stability for all the places looked at. Of particular interest is how the larger size gets deployed and what its relationship to the registration is.
- Part Two looks at the smaller stabilities, how they are deployed and what their relationship with the registration is. Part Two also looks at the relationship between the larger and smaller stabilities.
- Part Three looks at the relationship between the stabilities and the physical elements that make up the place.

The first two parts start with an overview of the principles observed. The diagrams relating to the the
principles described follow directly. One should read the explanation of a principle and then flip through the diagrams to look for evidences. Part Three is a general discussion of principles that relates to all the diagrams included in part One and Two.

For clarity, diagrams come in groups of three. For each stability looked at are drawn:

- A diagram of the place with the deployed stabilities.
- A diagram of the place with the deployed stabilities plus registration.
- A diagram of just the stabilities and the registration.

Every so often, a place generates six diagrams instead of three. This may happen if for example two different larger stabilities (close in size) were found and thought to be important for the overall understanding.
Part One: concerning the larger stability.

1. The dimension of the larger stability is usually a (the) large public dimension.

2. All the built elements that make up the place participate in defining the larger stability. The larger size participates 'fully' in locating the built elements.

3. The large stabilities, when deployed, either overlap or are set against one another. There is never a discontinuity in the deployment of the larger stabilities. The larger size provides for the continuity.

4. The large stability moves laterally in the main direction of the field in order to generate a registration line.

5. The large stability moves laterally against the main direction of the field in order to generate a registration zone.

6. The large stability is never displaced from the registration by more than its own dimension. If it did, a new registration would have to be set up.
Part two: concerning the smaller stabilities and their relationship with the larger ones.

1. The smaller stabilities are often deployed discontinuously. Small stabilities never overlap. Where the larger size provided for the continuity, the smaller size provides for the discontinuity.

2. Small stabilities are sometimes displaced from the registration by more than their own dimensions, but it can be observed that in all the places looked at, some (at least one) of the small stabilities associate directly with the registration.

3. The small stabilities intensify the larger ones (total or partial overlapping, corner intensification,...).
Plan of farm buildings at Cayson
Part Three: relationship between the stabilities and the built physical elements that make a place.

1. Each size stability has the dimension of a building element. Once this relationship is established, the stability is free to do more work without having to relate to an element of the size which originally provided its dimension. This shows that the notion of organization is no longer just concerned with how the pieces relate to one another, but rather how the pieces relate to a more or less complex deployment of stabilities whose dimensions are generated by the elements themselves. The notion of organization becomes a much more relative concept.

2. There is never a one to one relationship between the deployed building elements and the stability diagram. I looked at examples where there is in fact a one to one relationship (see below). The building is the diagram and vice versa. The diagram controls the building and vice versa. Everything controls everything else. It is no longer a field.
5. Projections/Conclusions
5. Projections/Conclusions:

The previous chapter suggests that a deployment of stabilities can be seen as a system. An independent system with components (large stabilities, small stabilities, registration) and rules that generate a series of potential relationships between these components.

A system whose importance lies in its ability to make relative the notion of organization, in that organization is no longer just a set of relationships between parts but also a set of relationships between those same parts and what can now be seen as a stable framework. This relationship between the parts and the stable framework is what generates the field. The relativity of the figure/ground relationship does not allow either one to dominate.

How can a stable framework be put to work? Can it become a generative tool? When a place has been observed as it has been in this thesis and a diagram of its stable framework is abstracted, is it possible to start working from this diagram?

Or, if there are particular qualities about a place that one may be interested in to generate a 'new' design, could one start working directly from the stable framework?

These questions hint at the notion that the stable frameworks abstracted from places could somehow be used (as a whole) independently from what generated them.

Two short exercises brought the
following conclusions.

1. If, in order to generate a new design, a stable framework was chosen according to the particular formal qualities of the place that generated it, when working, it became impossible not to keep referring back to the place itself. In other words, the exercise became one of transformation of the existing place.

2. If, in order to generate a new design, a stable framework was worked on while disregarding the formal qualities of the place that generated it, it became obvious that the diagram was getting in the way and in fact 'controlling' every move.

What this suggests, is that the idea of building up a file of stable frameworks out of which could be extracted, at will, a diagram useful for a particular situation does not seem appropriate. This way of working would suggest that the diagram has a form of overall control. It becomes a concept, a 'big idea'. It is a closed way of working.

The quality of the stable framework lies in its formation, in how it comes about, how it grows, how it generates movement, change, transparency, overlapping and how through its optionality it becomes a base for a collage attitude towards the built world.

"The relation between formation and form can be stated in one sentence: the way to form is higher than its own end and goal......formation determines form and is therefore the greater of the two. Thus form may never be regarded as solution, result, end, but should be regarded as genesis, growth, essence."
Form as phenomenon is a dangerous chimera. Form as movement, as action is a good thing. active form is good. Form as rest, as end, is bad. Passive, finished form is bad. Formation is good. Form is bad: form is the end. death. Formation is movement, act. Formation is life." (App.2:3 Klee)

When a stability gets deployed by displacements, the continuity is provided by the repetition of the dimensions while the optionality in how the stabilities get built provide for constant changing relationships. As one moves, the built definitions move as well. Movement always understood in relation to the stabilities (stops).

Ultimate alternation! "The first step is a regular deviation based on projection. Projection means here that the viewpoint is not strictly static; it is displaced a little and the object moves along....The irregular consists in the accentuation of parts or the omission of certain parts. In any case this introduces freedom into movement and movement into freedom." (App.5:10 Klee)

"One cannot look at a static relationship long without losing interest anymore than one can survive for in a sealed room where the supply of oxygen is soon exhausted. The image as a living experience cannot long exist in a frozen structure. For the image to remain a living organism, relationships within it must be constantly changing. The eye and the mind must be fed with changing visual relationships.....Change implies motion. The plastic image must also be
articulated, therefore, in the time dimension.” (App.5:2 Kepes)

The overlapping of the stabilities (not just a subdivision, grid), brings about a quality of 'transparancy' to the built world which multiplies at any instant (no more singularity) our association with it. "Transparancy means a simultaneous perception of different spatial locations." (App.5:5 Kepes). This quality is obvious when experiencing let us say....a good italian hilltown.

Finally, the formation of the diagram suggests a step by step, incremental, one move at a time, collage like attitude towards the built world. As observed, stabilities may be added, intensified, very built or very open. They can take layers of change. transformations. Our understanding of the formal world makes up our "universe of instruments and when we work, we make do with whatever is at hand at a particular time." (App.3:1 Rowe). Our understanding of dimensional stability is yet another instrument. A basic one.

My understanding of dimensional stability has or will, I hope, become another tool among the set of tools that I already had. One collects tools not always knowing when they will be used and for what purpose. "They are defined only by their potential use.....because the tools are collected or retained on the principle that they may always come in handy." (App.3:1 Rowe). What a set of tools contains "is the contingent result of all the occasions there have been to
renew or enrich the stock or to maintain it with the remains of previous constructions or destructions." (App.3:1 Rowe).

Each new tool added restructures the whole set, or how one thinks about the whole set. It sits there, ready to be used. Now, later, maybe, next, there. It will not do the job by itself. More tools will be needed. It may not even be useful at all in some instances. So it will sit some more and itself be constantly restructured, reshaped by new tools coming in.

"Each life is an encyclopedia, a library, an inventory of objects, a series of styles, and everything can be constantly shuffled and reordered in every way conceivable." (App.2:12 Calvino).

"Wit, you know, is the unexpected copulation of ideas, the discovery of some occult relation between images in appearance remote from each other; and an effusion of wit, therefore, presupposes an accumulation of knowledge; a memory stored with notions, which the imagination may call out to compose new assemblages. Whatever may be the native vigour of the mind, she can never form many combinations from few ideas. as many changes can never be rung upon a few bells." (Samuel Johnson. The Rambler, #194. Saturday, 25 Jan. 1752).
6. Appendix
APPENDIX 1
Obsevation / Description / Knowledge

1. The problem, it must be admitted, is one of knowledge-architectural knowledge. There is a substantial gap in our knowledge of the social implications of strictly formal, hence architectural, decisions. There is no adequate description and explanation of why certain types of spatial patterning seem inevitably to lead to that curious feeling of a disembodied architecture, devoid of human contact and activity, any more than there is an understanding of why common-or-garden urban space of the past so easily provided a setting for the life that nowadays seems so often to be missing. We believe that this lack of knowledge—and probably the loss of responsibility as well—stems from a conceptual difficulty. Designers do not have concepts and techniques that allow them to describe and investigate the kinds of spatial order that are to be found in highly complex physical objects like towns and cities. It is because designers today do not properly understand their spatial logic that they cannot develop a proper understanding of their social consequences.

The problem is one that architecture shares with many other branches of knowledge: that of understanding patterns of spatial relationships.

-- Hillier, Hanson, Peponis, Hudson and Hurdett "Space Syntax"

2. Already at the age of twenty-three, Klee felt laws to be decisive, and that one should not begin with hypotheses but with examples, no matter how small. 'If I can recognise a clear structure, it gives me more than any high-flown theoretical graphs; the typical will come automatically from series of examples.' Seeing the architectural monuments of Rome in 1902, he was convinced that the relations of parts one to another and to the whole correspond to hidden numerical relations present in other works of art and nature; that these numbers and proportions do not signify something cold and rigid, but breathe life; and that their importance as an aid to study and artistic creation is clear.

-- Paul Klee: The Thinking Eye. p22

3. Yesterday's artistic creed and the related study of nature consisted, it seems safe to say, in a painfully precise investigation of appearance. I and you, the artist and his object, sought to establish optical-physical relations across the invisible barrier between the 'I' and the 'you'. In this way excellent pictures were obtained of the object's surface filtered by the air; the art of optical sight was developed, while the art of contemplating unoptical impressions and representations and of making them visible was neglected. Yet the investigation of appearance should not be
underestimated; it ought merely to be amplified. Today this way does not meet our entire need any more than it did the day before yesterday. The artist of today is more than an improved camera; he is more complex, richer, and wider. He is a creature on the earth and a creature within the whole, that is to say, a creature on a star among stars.

-- Paul Klee; The Thinking Eye. p63.

4. We construct and keep on constructing, yet intuition is still a good thing. You can do a good deal without it, but not everything. Where intuition is combined with exact research it speeds up the progress of research. Exactitude winged by intuition is at times best. But because exact research is exact research, it gets ahead even without intuition, though perhaps not very quickly. In principle it can do without intuition. It can be logical; it can construct. It can build bridges boldly from one thing to another. It can maintain order in the midst of turmoil.

In art, too, there is room enough for exact research, and the gates have been open now for quite some time. What was accomplished in music before the end of the eighteenth century has hardly been begun in the pictorial field. Mathematics and physics provide a lever in the form of rules to be observed or contradicted. They compel us — a salutary necessity — to concern ourselves first with the function and not with the finished form. Algebraic, geometrical, and mechanical problems are steps in our education towards the essential, towards the functional as opposed to the impressional. We learn to see what flows beneath, we learn the prehistory of the visible. We learn to dig deep and to lay bare. To explain, to analyse.

We learn to look down on formalism and to avoid taking over finished products. We learn the very special kind of progress that leads towards a critical striving backward, toward the earlier on which the later grows. We learn to get up early to familiarise ourselves with the course of history. We learn cogent truths on the way from causes to facts. We learn to digest. We learn to organise movement through logical relations. We learn logic. We learn organism. As a result the tension between us and the finished product eases. Nothing exaggerated — tension inside, behind, underneath. Passionate only deep within. Inwardness.

-- Paul Klee; The Thinking Eye. p69.

5. In our business the motives for analysis are naturally different. We do not undertake analyses of works because we want to copy them or because we suspect them. We investigate the methods by which another has created his work, in order to set ourselves in motion. This approach should save us from regarding a work of art as something rigid, something fixed and unchanging. Exercises of
this kind will guard us against creeping up to a finished product hoping to pick off what is most striking, and to make off with it.


6. Forms react on us both through their essence and their appearance, those kindred organs of the spirit. The line of demarcation between essence and appearance is faint. There is no clash, just a specific something which demands that the essential be grasped.


7. The language of vision, optical communication, is one of the strongest potential means both to reunite man and his knowledge and to re-form man into an integrated being. The visual language is capable of disseminating knowledge more effectively than almost any other vehicle of communication.


8. But the language of vision has a more subtle and, to a certain extent, an even more important contemporary task. To perceive a visual image implies the beholder's participation in a process of organization. The experience of an image is thus a creative act of integration. Its essential characteristic is that by plastic power an experience is formed into an organic whole. Here is a basic discipline of forming, that is, thinking in terms of structure, a discipline of utmost importance in the chaos of our formless world. Plastic arts, the optimum forms of the language of vision, are, therefore, an invaluable educational medium.


9. To perceive an image is to participate in a forming process; it is a creative act.

From the simplest form of orientation to the most embracing plastic unity of a work of art, there is a common significant basis: the following up of the sensory qualities of the visual field and the organizing of them. In dependent of what one "sees," every experiencing of a visual image is a forming; a dynamic process of integration, a "plastic" experience. The word "plastic" therefore is here used to designate the formative quality, the shaping of sensory impressions into unified, organic wholes.


10. Confronted with a complex optical field, one will reduce it to basic inter-relationships. Just as in nature there is a tendency to find the most economic surface unity in every formation, so in the visual organization there is a tendency to find the most economic spatial unity in the ordering of optical differences.
11. Forces of organization driving toward spatial order, toward stability, tend to shape optical units into closed compact wholes. Confronted with a complex optical situation, the beholder searches for the form with the most stable unity, or with the least disturbed relationship to the environment.

12. Due to the laws of visual organization, no visual unit can exist in itself on the picture-plane. Each unit leads beyond itself and implies a larger whole. Thus units not only live on the picture-plane; they also grow. They merge into wholes with a common function. Three musical tones have each its particular wave length, its individual tonal quality; but when the three are sounded together their individual characteristics retreat and something entirely new appears -- the chord. Similarly, the optical units organized into spatial configurations become more than the sum total of their component parts.

13. For an individual who has a contemplative disposition, the whole secret of happiness is not to consider as an evil the invasion of his personality by objects. In order for that experience to avoid becoming a mystical one, it is necessary (1) to arrive at a precise inventory of each thing that one has made the object of one's contemplation; (2) to change objects of contemplation rather frequently to assure a degree of equilibrium. But for a contemplative individual, what is most important is the progressive nomination of all the qualities that he discovers; those qualities that TRANSPORT him should not transport him further than their measured and exact meanings.

14. In vain, great-hearted Kublai, shall I attempt to describe Zaira, city of high bastions. I could tell you how many steps make up the streets rising like stairways, and the degree of the arcades' curves, and what kind of zinc scales cover the roofs; but I already know this would be the same as telling you nothing. The city does not consist of this, but of relationships between the measurements of its space and the events of its past: the height of a lamppost and the distance from the ground of a hanged usurper's swaying feet; the line strung from the lamppost to the railing opposite and the festoons that decorate the course of the queen's nuptial procession; the height of that railing and the leap of the adulterer who climbed over it at dawn; the tilt of a guttering and a cat's progress along it as he slips into the
same window; the firing range of a gunboat which has suddenly appeared beyond the cape and the bomb that destroys the guttering; the rips in the fish net and the three old men seated on the dock mending nets and telling each other for the hundredth time the story of the gunboat of the usurper, who some say was the queen's illegitimate son, abandoned in his swaddling clothes there on the dock.

As this wave of memories flows in, the city soaks it up like a sponge and expands. A description of Zaira as it is today should contain all Zaira's past.

The city, however, does not tell its past, but contains it like the lines of a hand, written in the corners of the streets, the gratings of the windows, the banisters of the steps, the antennae of the lightning rods, the poles of the flags, every segment marked in turn with scratches, indentations, scrolls.


15. Marco Polo imagined answering (or Kublai Khan imagined his answer) that the more one was lost in unfamiliar quarter of distant cities, the more one understood the other cities he had crossed to arrive there; and he retraced the stages of his journeys, and he came to know the port from which he had set sail, and the familiar places of his youth, and the surroundings of home, and a little square of Venice where he gamble as a child.

At this point Kublai Khan interrupted him or imagined interrupting him, or Marco Polo imagined himself interrupted, with a question such as: "You advance always with your head turned back?" or "Is what you see always behind you?" or rather, "Does your journey take place only in the past?"

All this so that Marco Polo could explain or imagine explaining or be imagined explaining or succeed finally in explaining to himself that what he sought was always something lying ahead, and even if it was a matter of the past it was a past that changed gradually as he advanced on his journey, because the traveler's past changes according to the route he has followed: not the immediate past, that is, to which each day that goes by adds a day, but the more remote past. Arriving at each new city, the traveler finds again a past of his that he did not know he had: the foreignness of what you no longer are or no longer possess lies in wait for you in foreign, unpossessed places.


16. ...Newly arrived and quite ignorant of the languages of the Levant, Marco Polo could express himself only by drawing objects from his baggage -- drums, salt, fish, necklaces of wart hogs' teeth -- and pointing to them with gestures, leaps, cries of wonder or of horror, imitating the bay of the jackal, the boot of the owl.

The connections between one element of the story and another were not always obvious to the emperor; the objects could have
various meanings: a quiver filled with arrows could indicate the approach of war, or an abundance of game, or else an armorer's shop; an hourglass could mean time passing, or time past, or sand, or a place where hourglasses are made.

But what enhanced for Kublai every event or piece of news reported by his inarticulate informer was the space that remained around it, a void not filled with words. The descriptions of cities Marco Polo visited had this virtue: you could wander through them in thought, become lost, stop and enjoy the cool air, or run off.

As time went by, words began to replace objects and gestures in Marco's tales: first exclamations, isolated nouns, dry verbs, then phrases, ramified and leafy discourses, metaphors and tropes. The foreigner had learned to speak the emperor's language or the emperor to understand the language of the foreigner.

But you would have said communication between them was less happy than in the past: to be sure, words were more useful than objects and gestures in listing the most important things of every province and city -- monuments, markets, costumes, fauna and flora -- and yet when Polo began to talk about how life must be in those places, day after day, evening after evening, words failed him, and little by little, he went back to relying on gestures, grimaces, glances.

So, for each city, after the fundamental information given in precise words, he followed with a mute commentary, holding up his hands, palms out, or backs, or sideways, in straight or oblique movements, spasmodic or slow. A new kind of dialogue was established: the Great Khan's white hands, heavy with rings, answered with stately movements the sinewy, agile hands of the merchant. As an understanding grew between them, their hands began to assume fixed attitudes, each of which corresponded to a shift of mood, in their alternation and repetition. And as the vocabulary of things was renewed with new samples of merchandise, the repertory of mute comment tended to become closed, stable. The pleasure of falling back on it also diminished in both; in their conversations, most of the time, they remained silent and immobile.


17. What seems to me a more valid formulation for present use is "objectivism," a word to be taken to stand for the kind of relation of man to experience which a poet might state as the necessity of a line or a work to be as wood is, to be as clean as wood is as it issues from the hand of nature, to be shaped as wood can be when a man has had his hand to it. Objectivism is the getting rid of the lyrical interference of the individual as ego, of the "subject" and his soul, that peculiar presumption by which western man has interposed himself between what he is as a creature of nature
(with certain instructions to carry out) and those other creations of nature which we may, with no derogation, call objects. For a man is himself an object, whatever he may take to be his advantages, the more likely to recognize himself as such the greater his advantages, particularly at that moment that he achieves an humilitas sufficient to make him of use.


18. Perception consists in fitting the stimulus material with templates of relatively simple shape, which I call visual concepts or visual categories. The simplicity of these visual concepts is relative, in that a complex stimulus pattern viewed by refined vision may produce a rather intricate shape, which is the simplest attainable under the circumstances. What matters is that an object at which someone is looking can be said to be truly perceived only to the extent to which it is fitted to some organized shape. In addition, there generally is an amount of visual noise, accompanying and modifying the perceived shape with more or less vague detail and nuances, but this contributes little to visual comprehension.

-- Rudolph Arnheim: Visual Thinking. p27.

19. The most useful and common interaction between perception and memory takes place in the recognition of things seen. Visual knowledge acquired in the past helps not only in detecting the nature of an object or action appearing in the visual field; it also assigns the present object a place in the system of things constituting our total view of the world. Thus almost every act of perception involves subsuming a given particular phenomenon under some visual concept—an operation most typical of thinking.

As I pointed out earlier, this subsumption can take place only if perception involves also first and foremost the formation of a concept of the object to be classified. The object of classification is not simply "the sensory stuff from which percepts are made," as Bruner calls it in the paper to which I referred earlier. The mind cannot give shape to the shapeless. This has been evident, for example, in the development of the so-called projective techniques in psychology.

-- Rudolph Arnheim: Visual Thinking. p27.

20. The purely cognitive difficulties opposing this approach have been discussed. I have pointed out that perception and thinking cannot get along without each other. Abstraction is the indispensable link and indeed the most essential common trait of perceiving and thinking. To rephrase Kant's pronouncement: vision without abstraction is blind; abstraction without vision is empty.
21. To do this, he has to face each time problems of selection, exclusion, hierarchies of preference; he soon realizes he is spoiling everything, as always when he involves his own ego and all the problems he has with his own ego.

But how can you look at something and set your own ego aside? Whose eyes are doing the looking? As a rule, you think of the ego as one who is peering out of your own eyes as if leaning on a window sill, looking at the world stretching out before him in all its immensity. So, then: a window looks out on the world. The world is out there; and in here, what do we have? The world still — what else could there be? With a little effort of concentration, Mr. Palomar manages to shift the world from in front of him and set it on the sill, looking out. Now beyond the window, what do we have? The world is also there, and for the occasion has been split into a looking world and a world looked at. And what about him also known as "I," namely Mr. Palomar? Is he not a piece of the window and world this side, perhaps the "I," the ego, is simply the window through which the world looks at the world. To look at itself the world needs the eyes (and the eyeglasses) of Mr. Palomar.

22. Starting from there, Roscioni explains how for Gadda this knowledge of things — seen as the convergence of infinite relationships, past and future, real or possible — demands that everything should be precisely named, described, and located in space and time.

23. Even before science had officially recognized that observation intervenes in some way to modify the phenomenon being observed, Gadda knew that "conoscere e inserire alcunche nel reale; e, quindi, deformare il reale" (to know is to insert something into what is real, and hence to distort reality).
APPENDIX 2

Process

1. We need mechanical function. This means working on the basis of a law, not in order to demonstrate the law, but in order to create a freer form, based on the rules.

   -- Paul Klee: The Thinking Eye. p151.

2. In art the essential is to create movement according to rules, to create deviations while bearing the rules in mind. If you adhere too strictly, you get into barren territory. There is no need to demand absolute conformity. It is only recently that we have been free to deviate from the rule. What do we gain by it?

   We gain possibilities of Spatio-Plastic representation and movement that we limited under earlier methods. With constructive dexterity such effects might be obtained from one position. But that is only one way and not the direct way of showing different things at once. This possibility was seriously discussed only after it had been used by artists who knew how to unify and combine organic processes.

   -- Paul Klee: The Thinking Eye. p152.

3. The relation between formation and form, which we discern even in the smallest things, retains its fundamental character in later stages, because it is determined by a principle. I think the nature of this relation can be stated in one sentence: the way to form, dictated no doubt by some inward or outward necessity, is higher than its own end and goal. The way is essential and determines the conclusive or concluded character of the work. Formation determines form and is therefore the greater of the two. Thus form may never be regarded as solution, result, end, but should be regarded as genesis, growth, essence. Form as phenomenon is a dangerous chimera. Form as movement, as action is a good thing, active form is good. Form as rest, as end, is bad. Passive, finished form is bad. Formation is good. Form is bad; form is the end, death. Formation is movement, act. Formation is life.


4. Marco enters a city; he sees someone in a square living a life or an instant that could be his; he could now be in that man's place, if he had stopped in time, long ago; or if, long ago at a crossroads, instead of taking one road he had taken the opposite one, and after long wandering he had come to be in the place of that man in that square. By now, from that real or hypothetical past of his, he is excluded; he cannot stop; he must go on to another city, where another of his pasts awaits him, or something perhaps that had been a possible future of his and is now someone else's present. Futures not achieved are only branches of the past: dead branches.
5. Those who arrive at Thekla can see little of the city, beyond the plank fences, the sackcloth screens, the scaffoldings, the metal armatures, the wooden cat walks hanging from ropes or supported by sawhorses, the ladder, the trestles. If you ask, "Why is Thekla's construction taking such a long time?" the inhabitants continue hoisting sacks, lowering leaded strings, moving long brushes up and down, as they answer, "So that its destruction cannot begin." And if asked whether they fear that, once the scaffoldings are removed, the city may begin to crumble and fall to pieces, they add hastily, in a whisper, "Not only the city."

If, dissatisfied with the answers, someone puts his eye to a crack in a fence, he sees cranes pulling up other cranes, scaffoldings that embrace other scaffoldings, beams that prop up other beams. "What meaning does your construction have?"

he asks. "What is the aim of a city under construction unless it is a city? Where is the plan you are following, the blueprint?"

"We will show it to you as soon as the working day is over; we cannot interrupt our work now," they answer.

Work stops at sunset. Darkness falls over the building site. The sky is filled with stars. "There is the blueprint," they say.

6. I want to do two things: first, try to show what projective or OPEN verse is, what it involves, in its act of composition, how, in distinction from the non-projective, it is accomplished; and II, suggest a few ideas about what stance toward reality brings such verse into being, what that stance does, both to the poet and to his reader. (The stance involves, for example, a change beyond, and larger than, the technical

and may, the way things look, lead to new poetics and to new concepts from which some sort of drama, say, or of epic, perhaps, may emerge.)

First, some simplicities that a man learns, if he works in OPEN, or what can also be called COMPOSITION BY FIELD, as opposed to inherited line, stanza, over-all form, what is the "old" base of the non-projective.

(1) The kinetics of the thing. A poem is energy transferred form where the poet get it (he will have some several causations), by way of the poem itself to, all the way over to, the reader. Okay, then the poem itself must, at all points, be a high energy-construct and, at all points, an energy-discharge. So: how is the poet to accomplish same energy, how is he, what is the process by which a poet gets in, all points energy at least the equivalent of the energy which propelled him in the first place, yet an energy which is peculiar to verse alone and which will be, obviously, also different from the energy which the reader, because he is a third term, will
take away?

This is the problem which any poet who departs from closed form is specially confronted by. And it involves a whole series of new recognitions. From the moment he ventures into FIELD COMPOSITION - put himself in the open - he can go by no track other than the one the poem under hand declares, for itself. Thus he has to behave, and be, instant by instant aware of some several forces just now beginning to be examined. (It is much more, for example, this push, than simply such a one as Pound put, so wisely, to get us started: "the musical phrase," go by it, boys, rather than by, the metronome.)

(2) is the principle, the law which presides conspicuously over such composition, and, when obeyed, is the reason why a projective poem can come into being. It is this: FORM IS NEVER MORE THAN AN EXTENSION OF CONTENT. (Or so it got phrased by one, R. Creeley, and it makes absolute sense to me, with this possible extension of content under hand.) There it is, brothers, sitting there, for USE.

Now (3) the process of the thing, how the principle can be made as to shape the energies that the form is accomplished. And I think it can be boiled down to one statement (first pounded into my head by Edward Dahlberg): ONE PERCEPTION MUST IMMEDIATELY AND DIRECTLY LEAD TO A FURTHER PERCEPTION. It means exactly what it says, is a matter of, at all points (even, I should say, of our management of daily reality as of the daily work) get on with it, keep moving, keep in, speed, the nerves, their speed, the perceptions, theirs, the acts, the split second acts, the whole business, keep it moving as fast as you can, citizen. And if you also set up as a poet, USE USE USE the process at all points, in any given poem always, always one perception must must must MOVE, INSTANTER, ON ANOTHER!

So there we are, fast, there's the dogma. And its excuse, this usableness, in practice. Which gets us, inside the machinery, now, 1950, of how projective verse is made.


7. One need only look at the role that resemblances among elements play in a work of art. They are frequent and are used by artists for what Picasso once called assonances. "Painting is poetry and is always written in verse with plastic rhymes, never in prose," he said to Francoise Gilot. "Plastic rhymes are forms that rhyme with one another or supply assonances either with other forms or with the space that surrounds them..." A viewer discovering such assonances in a painting will thereby trace connections that may be essential to its structure.

-- Rudolph Arnheim: Visual Thinking. p56.

8. For in an age, allegedly, of optional latitude and pluralist intention, it should be possible as least to plot some kind of
strategy of accommodation and coexistence.

-- Rowe and Koetter: Collage City. pps 65-66.

9. Now, for present purposes, the obvious construct to mount along side Versailles is the Villa Adriana at Tivoli. For, if the one is certainly an exhibition of total architecture and total design, the other attempts to dissipate all reference to any controlling idea; and, if there is absolute power under two impersonations, then one might even feel constrained to digress and to ask which is the more useful model— for us.

There is unambiguous, unabashed Versailles. The moral is declared to the world and the advertisement, like so many things French, can scarcely be refused. This is total control and the glaring illumination of it. It is the triumph of generality, the prevalence of the overwhelming idea and the refusal to the exception. And then, compared with this single-minded performance of Louis XIV, we have the curiosity of Hadrian—of Hadrian who is, apparently, so disorganized and casual, who proposes the reverse of any 'totality', who seems to need only an accumulation of disparate ideal fragments and whose criticism of Imperial Rome (configurationally much like his own house) is rather an endorsement than any protest.

-- Rowe and Koetter: Collage City. p90.

10. Which is not to deny the usefulness of well-concerted information nor the heuristic utility which fantasies of highly organized reality may often supply; but which is to notice that, by now, the literal extension of total design into total management and total print out, has, as much among its proponents as its critics, begun, for some time, to appear as a rather dubious and fruitless enterprise. And it is perhaps as a result that there have emerge a series of counter-productions, a barrage of imperfectly defined reactions, not only to the monolithic offensiveness of would-be systemics but also to its related lack of responsiveness to fine grain association, immediate circumstance, vitality.

-- Rowe and Koetter: Collage City. p96.

11. In order to escape the arbitrary nature of existence, Perec, like his protagonist, is forced to impose rigorous rules and regulations on himself, even if these rules are in turn arbitrary. But the miracle is that this system of poetics, which might seem artificial and mechanical, produces inexhaustible freedom and wealth of invention. This is because it coincides with something that had been Perec's Passion ever since his first novel (Les choses, 1965): a passion for catalogues, for the enumeration of objects, each defined both in itself and by its belonging to any epoch, a
style, a society; a passion extending to menus, concert programs, diet charts, bibliographies real or imaginary.

-- Italo Calvino: Six Memos For The Next Millennium. p122.

12. Another very wrong idea that is also going the rounds at the moment is the equivalence that has been established between inspiration, exploration of the subconscious, and liberation, between chance, automatism, and freedom. Now this sort of inspiration, which consists in blindly obeying every impulse, is in fact slavery. The classical author who wrote his tragedy observing a certain number of known rules is freer than the poet who writes down whatever comes into his head and is slave to other rules of which he knows nothing.

-- Italo Calvino: Six Memos For The Next Millennium. p123.

13. Who are we, who is each one of us, if not a combinatoria of experiences, information, books we have read, things imagined? Each life is an encyclopedia, a library, an inventory of objects, a series of styles, and everything can be constantly shuffled and reordered in every way conceivable.

But perhaps the answer that stands closest to my heart is something else: think what it would be to have a work conceived from outside the self, a work that would let us escape the limited perspective of the individual ego, not only to enter into selves like our own but to give speech to that which has no language, to the bird perching on the edge of the gutter, to the tree in spring and the tree in fall, to stone, to cement, to plastic...

-- Italo Calvino: Six Memos For The Next Millennium. p124.
1. 'There still exists among ourselves,' says Claude Levi-Strauss, 'an activity which on the technical plan gives us quite a good understanding of what a science we prefer to call "prior" rather than "primitive" could have been on the plan of speculation. This is what is commonly called "bricolage" in French; and he then proceeds to an extended analysis of the objectives of 'bricolage' and of science, of the respective roles of the 'bricoleur' and the engineer.

In its old sense the verb 'bricoler' applied to ball games and billiards, to hunting, shooting and riding. It was however always used with reference to some extraneous movement: a ball rebounding, a dog straying or a horse swerving from its direct course to avoid an obstacle. And in our time the 'bricoleur' is still someone who works with his hands and uses devious means compared to those of the craftsman.

The 'bricoleur' is adept at performing a large number of diverse tasks: but, unlike the engineer, he does not subordinate each of them to the availability of raw materials and tools conceived and procured for the purpose of the project. His universe of instruments is closed and the rules of his game are always to make do with 'whatever is at hand', that is to say with a set of tools and materials which is always finite and is also heterogeneous because what it contains bears no relation to the current project, or indeed to any particular project, but is the contingent result of all the occasions there have been to renew or enrich the stock or to maintain it with the remains of previous constructions or destructions. The set of the 'bricoleur's' means cannot therefore be defined in terms of a project (which would presuppose besides, that, as in the case of the engineer, there are, at least in theory, as many sets of tools and materials, or 'instrumental sets', as there are different kinds of projects. It is to be defined only by its potential use...because the elements are collected or retained on the principle that they may always come in handy'. Such elements are specialized up to a point, sufficiently for the 'bricoleur' not to need the equipment and knowledge of all trades and professions, but not enough for each of them to have only one definite and determinate use. They represent a set of actual and possible relations; they are operators', but they can be used for any operations of the same type.

-- Rowe and Koetter: Collage City. pps 102-103.

2. We have not only a confrontation of the 'bricoleur's 'savage mind' with the 'domesticated' mind of the engineer, but also a useful indication that these two modes of thought are not representatives of a progressive serial (the engineer illustrating
a perfection of the 'bricoleur', etc.) but that, in fact, they are necessarily coexistent and complementary conditions of the mind. In other words. We might be about to arrive at some approximation of Levi-Strauss's 'pensee logique au niveau du sensible'.

--- Rowe and Koetter: Collage City. p104.

3. Indeed, if we are willing to recognize the methods of science and 'bricolage' as concomitant propensities, if we are willing to recognize that they are - both of them - modes of address to problems, if we are willing (and it may be hard) to concede equality between the 'civilized' mind (with its presumptions of logical seriality) and the 'savage' mind (with its analogical leaps), then, in re-establishing 'bricolage' alongside science, it might even be possible to suppose that the way for a truly useful future dialectic could be prepared.

--- Rowe and Koetter: Collage City. p105.

4. You remember that bull's head I exhibited recently? Out of the handlebars and the bicycle seat I made a bull's head which everybody recognized as a bull's head. Thus a metamorphosis was completed; and now I would like to see another metamorphosis take place in the opposite direction. Suppose my bull's head is thrown on the scrap heap. Perhaps some day a fellow will come along and say: 'Why there's something that would come in very handy for the handlebars of my bicycle...' and so a double metamorphosis would have been achieved.

--- Rowe and Koetter: Collage City. p138.

5. Remembrance of former function and value (bicycle and minotaurs); shifting context; an attitude which encourages the composite; an exploitation and re-cycling of meaning (has there ever been enough to go around?); desuetude of function with corresponding agglomeration of reference; memory; anticipation; the connectedness of memory and wit; the integrity of wit; this is a laundry list of reactions to Picasso's proposition; and, since it is a proposition evidently addressed to people, it is in terms such as these, in terms of pleasures remembered and desired, of a dialectic between past and future, of an impacting of iconographic content, of a temporal as well as a spatial collision, that resuming an earlier argument, one might proceed to specify an ideal city of the mind.

--- Rowe and Koetter: Collage City. p138.

6. With Picasso's image one asks: what is false and what is true, what is antique and what is 'of today'; and it is because of an inability to make half way adequate reply to this pleasing difficulty that one, finally, is
obliged to identify the problem of composite presence in terms of collage.

-- Rowe and Koetter: Collage City. pps 138-139

7. Collage and the architect's conscience, collage as technique and collage as state of mind.

-- Rowe and Koetter: Collage City. p139.

8. Objects and episodes are obtrusively imported and, while they retain the overtones of their source and origin, they gain also a wholly new impact form their changed context.

-- Rowe and Koetter: Collage City. p139.

9. It is suggested that a collage approach, an approach in which objects are conscripted or seduced form out of their context, is - at the present day - the only way of dealing with the ultimate problems of, either or both, utopia and tradition; and the provenance of the architectural objects introduced into the social collage need not be of great consequence. It relates to taste and conviction. The objects can be aristocratic or they can be 'folkish', academic or popular. Whether they originate in Pergamum or Dahomey, in Dętroit or Dubrovnik, whether their implications are of the twentieth or the fifteenth century, is no great matter.

-- Rowe and Koetter: Collage City. pps 114-115.

10. Wit, you know, is the unexpected copulation of ideas, the discovery of some occult relation between images in appearance remote form each other; and an effusion of wit, therefore, presupposes an accumulation of knowledge; a memory stored with notions, which the imagination may cull out to compose new assemblages. Whatever may be the native vigour of the mind, she can never form many combinations from few ideas, as many changes can never be rung upon a few bells. Accident may indeed sometimes produce a lucky parallel or a striking contrast; but these gifts of chance are not frequent, and he that has nothing of his own, and yet condemns himself to needless expenses must live upon loans or theft.

-- Rowe and Koetter: Collage City. p140.

11. This brings us to the cubists again, and in particular to the early collages of Picasso and Braque; to the way everyday objects and materials are taken out of their accepted context and placed in a new one, altering their significance, which in turn sets off sequences of new associations.

12. Carlo Emilio Gadda tried all his life to represent the world as a knot, a tangled skein of yarn; to represent it without in the least diminishing the inextricable complexity or, to put it better, the simultaneous presence of the most disparate elements that converge to determine every event.

-- Italo Calvino: Memos For The Next Millennium. p106.

13. It comes to this, this whole aspect of the newer problems. (We now enter, actually, the large area of the whole poem, into the FIELD, if you like, where all the syllables and all the lines must be managed in their relations to each other.) It is a matter, finally, of OBJECTS, what they are, what they are inside a poem, how they got there, and, once there, how they are to be used. This is something I want to get to in another way in Part II, but, for the moment, let me indicate this, that every element in an open poem (the syllable, the line, as well as the image, the sound, the sense) must be taken up as participants in the kinetic of the poem just as solidly as we are accustomed to take what we call the objects of reality; and that these elements are to be seen as creating the tensions of a poem just as totally as do those other objects create what we know as the world.

The objects which occur at every given moment of composition (of recognition, we can call it) are, can be, must be treated exactly as they do occur therein and not by any ideas or preconceptions from outside the poem, must be handled as a series of objects in field in such a way that a series of tensions (which they also are) are made to hold, and to hold exactly inside the content and the context of the poem which has forced itself, through the poet and them, into being.

Because breath allows all the speech-force of language back in (speech is the "solid" of verse, is the secret of a poem's energy), because, now, a poem has, by speech, solidity, everything in it can now be treated as solids, objects, things; and, though insisting upon the absolute difference of the reality of verse from that other dispersed and distributed thing, yet each of these elements of a poem can be allowed to have the play of their separate energies and can be allowed, once the poem is well composed, to keep, as those other objects do, their proper confusions.

APPENDIX 4
Figure-Ground / Figure-Figure

1. 'The energetic task which art must accomplish is to transmute the emptiness into space, that is into something which our minds can grasp as an organized unity.'


2. 'Fulfilment depends on the arrangement of space by means of lines, plans, volumes. Not self-contained, individual bodies, but relations and proportions.'


3. 'Emptiness, chaos, the unnatural become space, that means order, definition, form, when we introduce determinate signs of a specific type and in a specific relationship to each other. The structure and the scale of this mass of indicative signs imparts a certain tension to space. By changing these signs we alter the tension of space, which is formed from one and the same void.'


4. Chinese and Japanese calligraphy also has a sound respect for the white interval. Characters are written in imaginary squares, the blank areas of which are given as much consideration as the graphic units, the strokes. Written or printed communication is living or dead depending upon the organization of its blank spaces.

   -- Gyorgy Kepes: The Language of Vision. p32.

5. Natural order in the cosmos, i.e. the natural balance of nature. The partial field from light to dark moves up and down between the poles of white and black. In nature it is assuredly white that can lay claim to the most primordial activity. White given in nature is light itself. In the beginning resistance is dead and the whole is without movement or life. We must bring black and summon it to battle against the formless strength of light. Thus we use offensive and defensive energies together or in turn. A living balance between the two poles - this is the task we cannot avoid. The penetration of nature based on black and white [1]. The concept of balanced opposites.


6. Certainly, in considering the modern city from the point of view of perceptual performance, by Gestalt criteria it can only be condemned. For, if the appreciation or perception of object or figure is assumed to require the presence of some sort of ground or field, if the
recognition of some sort of however closed field is a prerequisite of all perceptual experience and, if consciousness of field precedes consciousness of figure, then, when figure is unsupported by any recognizable frame of reference, it can only become enfeebled and self-destructive.

-- Rowe and Koetter: Collage City. p64.

7. ...; and we speak of a willingness to reconsider the object which allegedly nobody wants and to evaluate it not so much as figure but as ground.

-- Rowe and Koetter: Collage City. p68.

8. It is not hard to acknowledge that the recognition of poche is also a matter of context and that, depending on perceptual field, a building itself may become a type of poche, for certain purposes a solid assisting the legibility of adjacent spaces. And thus, for instance, such buildings as the Palazzo Borghese may be taken as types of habitable poche which articulate the transition of external voids.

-- Rowe and Koetter: Collage City. p79.

9. To summarize: it is here proposed that, rather than hoping and waiting for the withering away of the object (while, simultaneously manufacturing versions of it in profusion unparalleled), it might be judicious, in most cases, to allow and encourage the object to become digested in a prevalent texture or matrix. It is further suggested that neither object nor space fixation are, in themselves, any longer representative of valuable attitudes. The one may, indeed, characterize the 'new' city and the other the old; but, if these are situations which must be transcended rather than emulated, the situation to be hoped for should be recognized as one in which both buildings and spaces exist in an equality of sustained debate. A debate in which victory consists in each component emerging undefeated, the imagined condition is a type of solid-void dialectic which might allow for the joint existence of the overtly planned and the genuinely unplanned, of the set-piece and the accident, of the public and the private, of the state and the individual. It is a condition of alerted equilibrium which is envisaged; and it is in order to illuminate the potential of such a contest that we have introduced a rudimentary variety of possible strategies. Cross-breeding, assimilation.

-- Rowe and Koetter: Collage City. p83.

10. With the cubists every doubt on this score is soon dispelled owing to the basic equality granted all component elements, so that things of major or minor importance become interchangeable - everything is at once subject
and space between depending on which one's attention is focused.

With Max Ernst the space in between acquires articulate shape - it even becomes a figure in its own right.

Such things belong to the game in both music and the fine arts, but in the realm of architecture I have, so far, never come across anything built along these lines. It was Van Eyck and, as far as I know he alone, who kept pointing to relativity as the true constituent pivot of 20th-century thought. So continually shifting attention away from where it is usually focused as a matter of course and on to what is contingent is to be expected in his case, though not less surprising for all that.

-- Herman Hertzberger, "Aldo Van Eyck" p22.
APPENDIX 5
Time / Movement / Alternation / Transparency

1. When something appears or disappears, moves from one place to another, changes its shape or size or color or brightness, the observing person or animal may find his own condition altered; an enemy approaching, an opportunity escaping, a demand to be met, a signal to be obeyed. The most primitive organ of sight, the light-sensitive spot or nerve fiber in a clam or a barnacle, will limit information to changes to brightness and thereby permit the animal to withdraw into its shell as soon as a shadow interrupts the sunlight. To contemplate immobile parts of the surroundings is more nearly a luxury, useful at most to spot the locations of possible future changes or to view the context in which events take place.

Change is absent in immobile things but also in things repeating the same action over and over or persevering in it steadfastly. Psychologists discussing satiation and adaptation point out that animals, even quite primitive ones, will stop reacting when a given stimulus reaches them again and again. The constant factors of a visual setting, e.g., the particular color of ever present sunlight will vanish from consciousness, just as a constant noise or smell will. When a person is forced to stare at a given figure he will use any opportunity to change it by varying it; he may reorganize the grouping of its parts or make a reversible figure switch from one view to the other. A color looked at steadily tends to bleach, and if the eye is made to fixate a pattern without the small scanning movements that are never absent otherwise, that pattern will disappear from sight after a short while. These reactions to monotony go all the way from conscious defense to the purely physiological wearing off of impulses generated in the brain by a static situation. They are an elementary form of intelligent contempt for indiscriminate attention. Noticed and attended to is only what matters. One refuses to be bored.


2. One cannot look at a static relationship long without losing interest any more than one can survive for long in a sealed room where the supply of oxygen is soon exhausted. The image as a living experience cannot long exist in a frozen structure. For the image to remain a living organism, relationships within it must be constantly changing. The eye and the mind must be fed with changing visual relationships. Only this changing variety can provide the stimulation necessary for holding attention upon the picture surface. Change implies motion. The plastic image must also be articulated, therefore, in the time dimension. The ultimate aim of plastic organization is a structure of movement that dictates the
direction and the progression toward ever new spatial relationships until the experience achieves its fullest spatial saturation.

-- Gyorgy Kepes: The Language of Vision. p52.

3. Rhythmic organization, although an essential condition for keeping the attention and thus prolonging the life span of the image, is not in itself fully sufficient to secure the maximum endurance of attention necessary for integration of a plastic form. One is well acquainted with the irritating sensation produced by the regular repetition of a sound of a drum. One knows almost instinctively that a simple rhythmic pattern possesses a regularity that soon becomes monotony.


4. The power of rhythm in keeping attention prolonged is conditioned by the necessity to feed attention by progressively changing optical material. Change implies movement. The final task of plastic organization is, then, the creation of an optical structure of movement that will dictate the direction and progression of plastic relationships until the experience reaches full integration. The most evident characteristic of movement is its unity, its dynamic continuity.


5. Transparency means a simultaneous perception of different spatial locations.

-- Gyorgy Kepes: The Language of Vision. p77.

6. The use of this geometrical relationship was re-introduced by the Renaissance painters as the main device for representing spatial relationships. Their artistic goal was the optical scientific mastery of nature. Conditioned by the aspirations and outlook of the Renaissance, they sought to achieve this step by step by focusing always on one aspect, on one cut-out sector, of the unbounded wealth of surrounding nature. Like the anatomist — another pioneer of the same spirit, who made his conquest of knowledge by eliminating the living, moving aspects of the body — the artist — anatomist of the visual image — eliminated the flux of the innumerable visual relationships that the visible world has for the spectator. He froze the living, fluctuating wealth of the visual field into a static geometrical system, eliminating the time-element always present in the experience of the spectator.

-- Gyorgy Kepes: The Language of Vision. p86.

7. In accordance with the ancient Chinese canons, Chinese and Japanese painters assign to linear perspective a
diametrically opposite role from that given it by western painters. In their system parallel lines converge as they approach the spectator. They open up the space instead of closing it. The picture space is not a scientific optical diagram of the apparent positions of objects but a medium of experience, an active two-dimensional panorama for the spectator, who lives the image. The same approach was used in many early European paintings.

-- Gyorgy Kepes: The Language of Vision. p86.

8. All becoming is based on movement. In Lessing's Laocoon, on which we wasted a certain amount of intellectual effort in our younger days, a good deal of fuss is made about the difference between temporal and spatial art. But on closer scrutiny the fuss turns out to be mere learned foolishness. For space itself is a temporal concept. When a point turns into movement and line - that takes time. Or when a line is displaced to form a plane. And the same is true of the movement of planes into spaces. Does a picture come into being all at once? No, it is built up piece by piece, the same as a house.

-- Paul Klee: The Thinking Eye. p78.

9. In the work of art, paths are laid out for the beholder's eye, which gropes like a grazing beast (in music, as everyone knows, there are channels leading to the ear - in drama we have both varieties). The pictorial work springs from movement, it is itself fixated movement, and it is grasped in movement (eye muscles).

-- Paul Klee: The Thinking Eye. p78.

10. We must work our way back to unity. This can be done in the pictorial field by bringing disparate things together harmoniously. Here the links are important. And the scale depends also on the distance from the beholder.

The first step is a regular deviation based on projection. Projection means here that the viewpoint is not strictly static; it is displaced a little and the object moves along. We can also remain stationary and displace the object.

The irregular consists in the accentuation of parts or the omission of certain parts. In any case this introduces freedom into movement and movement into freedom.

In the Provence region, the site chosen for construction is very rarely a site that does not already possess some built physical definition. The site usually has been occupied during periods of expansion, during the time of the Gallo-Romains.

The perimeter of the piece of the building that is to be built is roughly defined by drawing lines on the ground. The basic measurements are taken. One puts up sticks at each extremity of the new facade in order to appreciate its length. The lines drawn on the ground show the peripheral walls and all the bearing walls in order to show the location of the rooms in relation to one another. One uses knotted rope to obtain right angles. The proportions are elementary, in general the square, the rectangle, the double square. The alignment is simply provided by the sticks. Thus, nothing is really aligned, nor are the right angles perfectly square. If an assemblage of massive rocks get in the way, the alignment is easily broken. There is not at the beginning a well defined plan, but a constant adaptation to the ground.

Most of the rural constructions are dimensioned using the old system. The Duo decimal system. This appears to be essential. In the Duo decimal system, we have a certain element repeated several times. The repetition of this element plays a very important role in the proportions.

The old measures differed from region to region and even from village to village. The "eminée" of Saint-Carmat (700 meters), was different from the one of Pelissane, village located only a few Kilometers away. The metric system, on the other hand, has uniformed all dimensions and brought along dimensions which did not anymore relate to human dimensions.

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