

THOUGHTS ON THE CENTERING PROCESS

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This is an attempt to bring into clear and coherent terms the ideas that have been discussed in the seminar on the centering process.

The centering process is a process of creation.

The centering process seeks for the creation of the most profound things; things that can be called the mirror of the Self, things that have the beauty that nature has.

The centering process aims at unifying space.

The idea of the unification of space relies on the deep understanding of the concept of a whole. A whole is an entity coherent and distinct in itself, but more than this, a whole is an entity deeply connected to the world around it, so that it becomes an unseparated part of a larger whole.

So, by definition, a whole is composed of two contradictory elements. The same is true for the centering process. The centering process, aiming at the unification of space, tries constantly to bring these two contradictory elements - distinctness and not separateness - into a balanced and harmonious state. Therefore, on doing this, the centering process constructs small distinct wholes as parts of a larger coherent whole, complex wholes out of simpler, not separated wholes.

The centering process is guided by the desire for simplicity.

Simplicity is a very complicated term, since it does not exclude

complexity. But, it dilutes complexity in the simplest possible forms.

This is another contradiction that the centering process tries to overcome constantly: How the most complex relationships between things can be articulated in the most simple, efficient and dense way.

The centering process is encouraging the loss of the Self. On doing so, it guarantees the creation of things which are the mirror of the Self, since they are free of any egocentrism.

The centering process is asking for a constant concentration at each single creative act.

Each act has to be correct in itself. Dense and simple. So, each step has to be made with great care and attention for what is needed, and then it has to be tested against the feeling it creates. These operations ought to happen under <sup>such</sup> a state of mind, so that any worries of what is going to happen afterwards, have no place.

The centering process is an operational process.

It tries to answer the question: "What has to be done next."

Operationally, the centering process is defined as a sequence of four steps, which together form the fundamental cycle, which has to be repeated again and again, in order to produce something. These four fundamental steps refer to the actual creation of a whole.

- Make what is needed to best intensify the first emerging whole
- Yet, this emerging whole can not be completed, unless

other wholes, of the same size as this, are created next to this.

- Also, in order to strengthen the first emerging whole, smaller wholes have to be placed within it.

- Finally, a larger whole has to be developed, within which the first emerging whole is embedded.

Aside from the centering process, there is the collection of the fourteen geometrical properties.

The properties define the different qualitative characteristics that a drawing, or an artifact, or a building has to encompass, in order to be timeless.

Each one of them is introducing a different aspect of the geometry which has to guide the formation of space. So, each one of them is contributing to the creation of something according to its own distinct way; yet, all of them are operating on an equal basis, as concerning the striving for wholeness.

The properties are complementary to one another; therefore, all of them are of equal importance and usefulness; but moreover, none of them can be manifested completely without support from some of the other properties.

The properties can be used as an analytical tool, for the study of a piece of art, or of a building, or of whatever a product, as a way of identifying their qualities and learning from them.

This way of acquaintance with the properties leads to a more powerful use of them, when they can be used as the fundamental operational tool of the centering process, on its seeking for wholeness, simplicity and not-separateness.

This is briefly the basic material, which had been elaborated further during the seminar, with two major questions in mind:

- What is the deep relationship between the properties and the centering process; how do the properties enter the centering process in operational terms, if feasible?
- How can the centering process be formulated clearly and in explicit operational terms, so that it can be deeply understood and replicated by other people?

Trough our attempt to come up with a satisfactory answer for these questions, the centering process was approached from different points of view:

- From the point of view of the structure inherent in the given, which is going to be transformed, aiming at the creation of something profound.
- From the point of view of the fourteen geometrical properties, each one of them contributing on its own specific way to the attainment of the profoundness.
- From the point of view of the transitions, which constitute the process which leads to the profound.

So, the following material will be discussed according to four different themes: the structure, the properties, the transitions, and the process.

The classification of the material under these four themes is made for analytical purposes. Apparently, none of these parts can be confined in itself, since none of them is self-sustained. So, each part will be discussed in relation and with references to the others, with major concern the clarification of the links among these four aspects.

## The structure

Chris said that the things that come out of nothing are profound. Then, what is the nothing? Chris said that the nothing is a highly specific structure; it is the specific structure of emptiness.

By the specific structure of emptiness is meant the structure of empty space. The space is empty without being exhausted; the more one works on it the more comes out. The thing emerges out of nothing. Nothing and something are not opposite. They produce each other; then there is still room to keep the thing in order before disorder sets in, since the structure of emptiness is a highly orderly structure.

The premise, that something has to emerge out of nothing in order to be profound, is not an operational rule. It is true as a fact, concerning the things which reach profoundness.

Yet, it is really helpful while one is creating something, since it sets a specific state of mind, which is not guided by any desires but by the actual needs of the given situation.

This state of mind is fully illustrated in "Tao Te Ching" as following:

" Thirty spokes

Share one hub

Adapt the nothing therein to the purpose in hand, and you will have the use of the cart. Knead clay in order to make a vessel.

Adapt the nothing therein to the purpose in hand, and you will have the use of the vessel. Cut out windows and doors in order to make a room. Adapt the nothing therein to the purpose in hand, and you will have the use of the room.

Thus what we gain is Something, yet it is by virtue of Nothing that this can be put to use."

The idea of the structure of something can be used as a way to better understand the given, the amorphous given that you have in front of you; a piece of clay, a stone, a piece of wood, a piece of paper, a site. This given is the starting point, the zero, which will be transformed into something by a sequence of acts, both mental and physical.

So, before one gets involved into transformational operations of something, one has to know deeply what this something is; what the deep structure of the thing is. What is that, that the thing reveals to him being at this amorphous state.

This something has to be kept in tact through the entire process of the forthcoming transformations. But more than this, all the forthcoming transformations have to be guided by the desire to bring this something through, on its simplest and most whole form.

To put on another way, none of the forthcoming transformations should violate this something, that is inherent in the deep structure of the given.

Consequently, the immediate question that comes in mind is:

"What is the deep structure of the given? How could it be described? How one can get to grips with this major problem?"

L.L. Whyte in the "Accent of Form" says: "To the physicist structure means arrangement of points in space." This definition of the structure is close to what is meant by the structure of nothing. However, it is not adequate for the deep understanding of the

structure as it is approached here, considering it as the guiding element of a creative process.

Some possible hypotheses will be stated, concerning the way the structure of something can be perceived:

1. The structure as the hierarchy of virtual centers.
2. The structure as the structure of symmetries.
3. The structure as an infinite array of centers.
4. The structure as the manifestation of differences and similarities.
5. The structure as a continuum of both distinct and not-separated elements.

Each one of these hypotheses reveals a different aspect of the structure of the given; it emphasizes a different element inherent in it. Therefore, it would be misleading to say that one of these definitions is more important than the others, or that some are correct, while some others are wrong. All of them are equally important for comprehending the structure of something.



The structure as the hierarchy of virtual centers.

Each given incorporates in its field some areas which ask for more attention than others.

Or, a specific given can not become complete and not damaged, unless its virtual centers come into birth.

These virtual centers confer to the given its identity. The placement of these virtual centers in a given constitute its entity. Therefore, the placement of the virtual centers has to be accurate.

To clarify this more, the following question can be asked:  
What parts of the in-transformation given call for completion or celebration?

These are its virtual centers.

How these virtual centers can be identified?

First of all, in order to do this, the in-transformation given has to be assessed in terms of its virtual centers into its broader context.

The virtual centers of a wall can not be identified, unless we see the wall as a part of a room and as a part that belongs both to the inside and outside.

The virtual centers don't uncover themselves all at the same time. The process of their manifesting themselves is incremental.

So, a map of all the virtual centers of a given can not be constructed in advance, before getting into transformations.

One specific act gives birth to one specific virtual center.

On doing this, the structure of the given is changing constantly, since at each new moment the given has something more than before.

This newly generated center already hints on another virtual center, which starts to unfold.

To determine the virtual centers in advance could be arbitrary, since there is nothing real to support their relationships.

They are latent there, waiting for a specific reason that asks for their manifestation.

In terms of the transformations:

- We can start with whatever virtual center is latent there.
- We have to be very careful that none of the transformations violate any virtual center, although it might not celebrate it.
- Every transformation is guided by the feeling of a virtual center, as Nilli says; it is related to the existing center and asks for that virtual center that can bring the existing one on a more complete and whole state.

Each virtual center does not come out arbitrarily; it has a deep relationship to the previous one. Yet it always hints on a new virtual center.

On the overall, there is a very important rule that ties all these virtual centers together. That is, that all of them have to contribute to the whole, in inducing a gradient towards one center.

However, there is no definite rule which determines generally the appropriate moment in the process for the creation of this one center, towards which a gradient is induced. It varies from case to case. It could be the first act, it could be the second act, and so on. But, it is clear that this major center is not completed in one act. It is the product of a sequence of acts.

The identification of the structure as a hierarchy of virtual centers does not mean that some centers are more important than others, in terms of the attention and energy involved in their creation. According to these terms, there is no hierarchy. But, their hierarchy is the result of their relationships in reference to the gradient they induce towards one center.

The definition of the structure as a hierarchy of virtual centers has the following advantages:

- It helps to orient the attention towards the points which need intensification. It gives suggestions for the possible starting points.
- Also, it suggests where to stop: when there are no more virtual centers that peep through.

The main disadvantage of approaching the structure as a hierarchy of virtual centers is that it orients the attention towards something with the idea of a virtual center in mind.

A center, by definition, is a rather distinct entity.

Consequently, the idea of creating something with the maximum feeling of a virtual center would tend to increase the amount of distinctness in the given, if each act would be performed without consideration of the overall.

If each element is introduced as a separate virtual center by itself, without tight links to its context, then the whole will lack coherency and calmness.

If each single act is guided literally by the feeling of a virtual center, then there is no place left for not-separateness.

The structure as the structure of symmetries.

According to this definition, the structure of the given is perceived in terms of its latent symmetries. Some of these symmetries will be celebrated; others will be broken down. The assumption is that everything that is in a state of equilibrium is likely to be symmetrical. Yet, very rarely we see, even in nature, overall symmetrical configurations; but, we very often see configurations which keep their subsymmetries.

This can be formulated on the following manner: Everything tends to be symmetrical, but it always fails.

It can be symmetrical only in completely balanced outside and inside conditions; a rather rare fact.

So, each transformation tends to produce symmetry, but it always fails. It fails because each transformation is not either happening in conditions of isolation or in a completely balanced state; it deals with the forces which surround the in-transformation thing.

However, the intention of each transformation is to be symmetrical. But, if so literally, nothing will be created, since the creation of something is accompanied simultaneously with the break of some sort of symmetry.

But, each act is guided by the strong feeling to maintain symmetry. The hardest is to keep the overall symmetry; and yet, in most cases there is no reason for that. And that is so, because symmetry is not superimposed on whatever a situation; it is the

outcome of an undisturbed balance of forces, an ideal condition, rather rarely met. Yet, the local subsymmetries can be kept, since there are less forces acting on a smaller, limited entity.

This way, assymetry is not arbitrary. It comes out of an endeavour to keep symmetry; nonetheless, an unaccomplished endeavour.

That is why the produced assymetry very seldom is merely the absence of symmetry. As H. Weyl says: "Even in assymetric designs one feels symmetry as the norm from which one deviates under the influence of forces of non-formal character."

Although, in any real situation the thing which will be produced will be asymmetric in its overall form, as a response to the surrounding situation, it is sure that, if the transformations are guided by the feeling to keep the symmetries of the deep structure, something of this will be left on the final product. But more than this, the overall will have the simplicity and calmness that symmetry has; since, symmetry, beyond expressing a geometrical configuration, carries also the connotation of that state of mind which is equally removed from both extremes.

So, the definition of what the structure is, can be more accurate if changed to the following: "the structure is the virtual balance of symmetries and asymmetries."

Operationally, this leads to the following tentative suggestions:

- Each transformation can produce symmetry, as concerning the small.

- Each transformation has to be balanced in terms of the amount

of symmetry and asymmetry it constructs.

- Keep symmetry, unless there is a strong reason for breaking it.
- Asymmetry has to be created as a deviation from symmetry, which fails to manifest itself.

The fourteen properties deal with symmetry.

Explicitly, one of them, "local symmetries", states:

"A whole is always symmetrical, unless there are specific reasons for it not to be: the result is that the smallest wholes within a whole, which have less forces acting on them, tend to be symmetrical."

Beyond this, the idea of symmetry is inherent in some other properties.

"Alternating repetition" is based on different kinds of symmetrical arrangements on the overall.

"Centers" call for a kind of symmetry on the small.

And furthermore, if "symmetry" is accepted as a term which carries the connotation of middle measure or balance, then it is clear that some of the properties are towards this direction, as concerning the whole they are referred to:

"Contrast" suggests the creation of symmetrical opposite wholes.

"The void" suggests the creation of undifferentiated, free from dense articulation areas, as a counterbalance to highly differentiated areas.

The structure as an infinite array of centers.

On the definition of the structure as the hierarchy of virtual centers, it was said that there is no map that can be constructed in advance, which can identify all the virtual centers of the given. If that was feasible, then there would be no excitement on what each transformational act is revealing for the following act to be based on.

It is more relaxed to say that the structure is perceived as an infinite array of centers, which is fluid.

This infinite array of centers is not unarticulated. The infinite array of centers creates constellations at some parts of the field. These constellations of centers identify the potential area that needs attention. The constellation of centers is changing after each transition. When something new is placed, then the existing stability of the field is disturbed; the array of centers is moving towards another constellation, in response to what is there, in order to attain a new state of stability.

## The properties.

The major question is: "How do the properties enter the centering process? On what fashion do the properties function as operational tools?"

All the properties, as an entity, define the features of that geometry of space, which guides the process of producing things which are timeless and profound. Each one of the properties is concentrating on its own way of creating space; however, all of them are linked tightly together, on supporting each other, on strengthening each other, on providing something additional that another property is lacking of.

But moreover, what ties the properties and the centering process together is the idea of wholeness. The aim of the centering process is to create wholes at every step, and what a whole has to accomplish, is defined through the properties, as Chris has explained it on the "Unbroken Wholeness".

Let's take the four steps which compose the fundamental cycle of the centering process, which is repeated again and again in order to bring something in the state of wholeness.

Let's concentrate on the third step, which consists of four acts, and which delineates the sequential order that leads to the completion of a whole. ("Definition of the Centering Process", by Chris, April 1980.)

Let's try to clarify what the role of the properties on these four acts is.



First act: "Make this mark that best intensifies this whole  $W_1$ ,  
to make it a stronger center."

This first act is based on the property "centers", which says  
that the whole  $W_1$  has to be a strong entity by itself, where  
attention has to be focused on.

Second act: "In the course of embellishing the whole  $W_1$ , you  
must also pay attention to, and help to strengthen  
some parallel whole  $W_2$ , which lies next to it, and  
is of comparable size."

This second act is based on the property "positive-negative",  
which says that not only the whole  $W_1$  itself, but also the  
space next to it has to be a clear positive entity, as good as  
the whole  $W_1$  itself.

Third act: "In the course of strengthening  $W_1$ , you must also  
place within it those smaller wholes, at one level  
smaller than  $W_1$ , which will do the most to help to  
make  $W_1$ , whole itself. Let us call these smaller  
wholes  $W_3$ ."

This third act is based on the property "levels of scale", which  
says that the whole  $W_1$  has to be articulated in such a way, so  
that it encloses in itself different orders of entities, smaller  
wholes  $W_3$ .

Fourth act: "And at the same time, you must also become mindful  
of some larger whole  $W_4$ , which is much larger than  
 $W_1$ , of which  $W_1$  and  $W_2$  are a part, and which the  
creation of  $W_1$  helps to strengthen."

This fourth act is based on the property "not-separateness", which says that a distinct whole  $W_1$  is part of a larger whole  $W_4$ , of which it becomes an unseparable part.

But, to say that the operations of these four acts emanate only from these four properties, - centers, positive-negative, levels of scale, not-separateness -, is an oversimplification, which is not true.

It can be said that the absence of these four properties in the operations of the fundamental cycle will cause damage to what is being created; they are necessary, but not sufficient.

The first step, when the first whole  $W_1$  is created, is guided by the desire to create something that has the feeling of a center. This can not be attained, unless some other properties will be used for the fulfilment of the first whole; like boundaries, since a center has usually more material towards its edge than in the middle, local symmetries, since a center has at least one axis of symmetry, and good shape, since a center by itself is a coherent, fully articulated entity.

The second step, when the second whole  $W_2$ , of the same size as  $W_1$ , is created next to  $W_1$ , is guided by the desire to bring the space which is laid next to  $W_1$  to a state of completion compatible with that of the existing whole; that means, to attribute to this contiguously lying space the same feeling of completion and positiveness as that given to  $W_1$ . So, whatever seems to be negative, because of lack of attention and care, has to become positive.

The property, which draws the attention to this aspect of spatial configuration is positive-negative. Yet, although necessary, it is not sufficient.

In order to do this successfully, the edge condition of the first whole  $W_1$  has to be dealt with, in conjunction with what is going to come next to it; hence the properties boundaries and deep interlock. Also, this new whole  $W_2$  has to be dealt with as a new center which is supporting the existing whole  $W_1$ .

The third step, that asks for the strengthening of  $W_1$  through the articulation of smaller wholes  $W_3$  within  $W_1$ , emanates from the need for levels of scale.

Yet, for this operation to be conducted successfully, some other properties are necessary. The embellishing of a center asks for more material at its own edge than in the middle; hence boundaries and void. Also, the embellishment has to aim at strengthening the centeredness of the first whole  $W_1$ ; so, it has to start inducing a gradient towards one center.

The fourth step, when the larger whole  $W_4$  is introduced is guided by the feeling of not-separateness. This can only be attained when we pay attention on the way this new emerging whole is going to be related to the existing whole.

The properties which deal with this specific issue are: centers, alternating repetition, echoes, deep interlock, the void, levels of scale.

This analysis, on a theoretical level, clarifies the fact that the properties are tightly connected to each other; it also

hints on a kind of sequential order that they might come into play. This connection among the properties becomes more and more apparent on the course of doing something, unlike their sequential order.

During the centering process no conscious decision is made, concerning which property has to be used next. The way they are used has no explicit order. Each act calls for a specific property; each property calls for another property, and this varies according to different cases. Therefore, their sequential order varies from case to case.

Also, there is no hierarchical order in the classification of the properties; there is no property which is more important than another.

As, it has been said, the properties are tightly connected, since none of them can fulfil its aim without the support and the aid of the other properties.

Alternating repetition can not even operate without symmetry.

Alternating repetition can be completely spoiled if the repeated elements do not accomplish the need for positive-negative.

Alternating repetition can generate dead elements if it is not supported by roughness.

Alternating repetition asks for good shape from its repeated elements.

Alternating repetition is treating each one of its repeated elements as a center.

Alternating repetition is treating its contiguously repeated elements in such a way, so that there is an ambiguity concerning the precise territory of each one of them.

Alternating repetition gives room for contrast to be manifested, since its repeated elements could be of opposite types.

Alternating repetition attains a high degree of not-separateness, since each one of its elements becomes an undistinguishable part of the larger whole it creates.

Good shape can not be accomplished, unless it is treated through different levels of scale.

Good shape by itself is nothing if it does not pay attention on the formation of positive-negative.

Good shape fails to manifest itself, unless it comprises local symmetries.

Good shape asks for a fully articulated boundary, differentiating it from its surroundings, while it is connecting it.

Good shape is constituted of different orders of centers.

Good shape lacks wholeness, unless it is deeply interlocked with its surrounding.

Good shape is the basis of the elements in alternating repetition.

And this is just a handful of the relationships between the properties.

Although the properties are related to each other ~~XXX~~ <sup>because of</sup> different reasons, there are some rules, the same for all the properties, which characterize them as an entity.

- There is no hierarchical order according to which the properties are classified.

- There is no one definite sequential order, according to which

the properties appear during the process.

- There is no one property by itself which can accomplish the aim of one act, which seeks for wholeness.
- Each property calls for the support of another property or properties. This does not mean that there is one to one relationships between them, which is always the same. On the contrary, it varies according to the specific needs for simplicity and wholeness of each specific act.
- According to the four steps of the centering process, described above, there are some properties without which, the aim of the act can not be attained; these are: centers, positive-negative, levels of scale, not-separateness.
- There is an inherent contradiction in each one of the properties; each one of them, by itself, is striving for both, not-separateness and distinctness. e.g. contrast: it tries to create opposite wholes, dark wholes in contrast with light wholes, busy wholes in contrast with empty wholes. This way it is inducing distinctness. Yet, on doing so, the overall whole reaches a state of balance; it becomes more not-separated in itself and from its context. However, when scrutinizing the properties, without considering this contradiction, it seems that some of them are more into the direction of inducing distinctness, like centers, boundaries, the void, good shape, contrast; some are more into the direction of inducing not-separateness, like echoes, alternating repetition, deep interlock, positive-negative.

So far, the properties have been discussed in terms of the organizing effect they have on the small; on each one act, on the sequence between acts.

But, what is the role, played by the properties, concerning the overall organization of something?

Among the 14 properties it seems that there are two properties which have the power of organizing the whole: centers and alternating repetition.

The property of centers is organizing the whole on the basis of an overall centeredness, which emerges from a gradient leading to one or more centers.

The property of alternating repetition is organizing the whole on the basis of an infinite overall repetition of two different kinds of entities, which are repeated alternatively.

It is clear that the one does not exclude the other, neither in the small or in the large, since conceivably, there is the possibility for the whole to be organized according to both of them, when centeredness and alternating repetition overlap.

Given this distinction, there are some questions, still with an unsatisfactory answer:

- How do you go about using one of these three organizing rules on a specific case?
- Is there anything that determines which one of these three possibilities could be more fruitful for a specific case, and what is this?
- What makes you, while doing something, to use the one than the other?

Your intuition, probably. The judgement you are doing is rather intuitive than anything else.

The case of the design of the ceiling in the seminar room is a rather clear case, which confirms this assumption.

There were solutions based on each one of these three organizing rules.

Hajo's ceiling manifested the alternating repetition.

The ceiling I designed was based on centeredness.

Chris' s ceiling was based both on alternating repetition and centeredness.

Yet, each one of them was a likely solution, and there were no criteria to judge which one of these organizing rules could be more appropriate for the ceiling of the seminar room.

To pursue the same question a little bit further, one can ask whether ~~XXXXXXIX~~ the structure of the given is able of giving any suggestions, which could lead to one of these three possibilities specifically.

The structure of the given as the hierarchy of virtual centers enhances the direction towards centeredness. So, it is rather doubtful.

The structure of the given, perceived as the structure of the symmetries could lead to either one of them, indepentendly of the specificity of the case; not really helpful.

Maybe, it is more promising to say, that the context<sup>†</sup> which surrounds the given, plays an important role on guiding your intuition towards centeredness or alternating repetition or a combination of both of them, as the organizing principle of the whole.



## The transitions

What has been said so far, was tackled more from an analytical point of view, trying to clarify the role of ~~XXXXXXXXXXXXXXXX~~ "the structure" and the role of "the properties" in the process. Yet, in strict operational terms, it is not clear what the structure of the given tells us to do and at what stage of the process, or how <sup>do</sup> the properties enter the process specifically.

But, beyond this, the question is if the centering process can be defined in explicit operational terms, and what does it mean? Do we want a step by step delineation of the process, assuming that the same operational steps can be valid for each creative process. By this I mean, could it be sufficient and really helpful to construct a process which tells you, on concrete terms, how to start, what to do next, what ~~XXXXX~~ exactly follows each possible act, how and when exactly to stop.

Could such a process <sup>possibly</sup> guarantee the profoundness of the outcome, even if it is made with this intention specifically? Or, such an operational instrument could be restrictive, concerning the creativity of the actor?

It is clear that a process which determines the creative acts in advance, and which offers one definite operational way in order to arrive at something profound, is not what ~~XX~~ is necessary and wanted.

The most crucial aspects of the process, which need attention, and have to be scrutinized, are the following:

What each performed transition is consisted of?

What each transition has to avoid in order to be acceptable?

What each transition has to fullfil in order to contribute the most in the generation of something?

What could be the possible criteria according to which the success of each transition can be judged?

So, instead of dealing with the whole process, we can concentrate first on one transition, and then we can see how does one transition follow the previous one; on what manner are the transitions connected.

All the trasitions that constitute the process are the same.

They are the same on the folloing terms: because of the feeling involved in each one of them, because of the degree of attention that each one of the transitions demands, because of their importance as a unique part of the whole process, because of their simplicity and wholeness seeking aspect, because of their relationship to the previous and forthcoming transition.

Yet, they are different, since each one of them is introducing a completely different element, since each one of them is revealing something new from the existing latent structure, and since each transition is inducing either similarity or difference, either distinctness or not-separateness.

Each~~XXXXXXXXXX~~ transition is generating a tranformation of the given towards a more complete state of wholeness.

Therefore, all the transformations have to be guided by the following rules, which relate them to the structure of the in-  
transformation given.

1. Each transformation should be guided by the strong feeling of avoiding anything that could possibly violate the deep structure of the given.

2. In order for any transformation to be valid, it has to respect whatever consists the deep structure of the given.

This is not a timid respect that preserves merely the existing situation on a blunt manner.

It is a respect that celebrates on a simple and dense way the existing elements of the deep structure of the given.

3. Furthermore, for any transformation to be really successful, something from the deep structure of the given has to be revealed.

This way, what you are doing is latent there; what you are getting is somehow already there.

Yet, each transformation is creating something new. But, this new element it is bringing forth, is formed under the impact of the previously stated rules; so, the new thing that comes out of the transformation becomes a consistent part of the whole, since it is part of the latent deep structure of the given. This will guarantee its profoundness.

Each transition is connected deeply with the structure of the virtual centers; their link is based on the fundamental demand for no violation of any virtual center, through any transition.

This rule states what has to be avoided.

Beyond this mandatory prerequisite, it is not yet clear, if each transition ought to give birth to a virtual center.

The reasons for this reluctance are -as it has been mentioned before- the following:

- An attitude towards celebrating the virtual centers will tend to induce, in most of the cases, a gradient towards one or more centers, as concerning the overall organization of something. And this, as we have seen, is not the unique case; such an approach might limit the emerging of structures based on alternating repetition.
- It is extremely hard to define where the virtual centers of a given structure are.
- And yet, if each single act approaches something through the feeling of a virtual center, that could tend to increase the amount of distinctness in the generated product.

A transition, is either introducing a new whole  
or, it is hinting at a new whole  
or, it is completing a whole  
or, it is doing all these things at the same  
time, or maybe, just two of them.

It is clear that their sequential order is: hinting, introducing, completing. But also, it is clear that an act, which is introducing something, might hint at something else at the same time; or, an act, which is completing something, might introduce something

else and might hint at something different. So, each transition might have to take care of more than one thing at a time.

However, as transitions follow each other, there is a specific task that each one of them has to accomplish in relation to the state brought up by the previous transition.

If one transitional act ends at the time of hinting at a whole, the next act has at least to introduce this whole, on a definite manner.

If one transitional act ends at the time of introducing a whole, the following act has to take off from this point, and at least, it has the task to bring this already introduced whole at a state of completion.

If one transitional act ends at the time of completing a whole, the following act has to study carefully this level of completion, trying to identify the possible new wholes which are already hinted, and work on them.

So, the thing grows through a series of connected transitions.

There is an unbroken continuity in the process that forms the thing. Each transition is connected with its previous one; its starting point refers explicitly to the end product of the previous one. This way, there is no arbitrariness in terms of the sequence the transitions are introduced.

Each transition is part of the process that seeks for simplicity and not-separateness. Through these transitions the thing grows from simple and distinct forms to more complex and not-separated forms.

Each transition is inducing distinctness in the small in order

to attain an overall balanced not-separateness; however, each transition is guided by the feeling for not-separateness. Each transition is introducing also simplicity in order to attain lack of complexity in the overall.

Therefore, transitions which respect what has been stated above, are good transitions; they help the whole process.

Transitions, which violate what has been said above, are bad transitions; they damage the process.

## The process

The problems in mathematics seek for one correct solution, but there are different ways through which the solution can be attained.

The problems we are dealing with, differ from the mathematical problems, since there is no just one correct or best solution; yet, they are similar to them, since there is more than one way to arrive at the good solutions.

But the most fundamental similarity between these two processes is that both of them ~~may~~ ought to obey some basic rules in order to be able to reach a successful end, regardless of the particular steps they choose to follow.

These rules in mathematics are very explicitly stated, and by the time you deviate from them you have already failed.

As concerning the creative processes, -the so-called "centering process"- is guided by some specific principles. The purpose of these principles is not to delineate a process which can be replicated exactly; their purpose is to set the limits, within which the centering process is operating successfully.

- There is no one best solution, as concerning problems, that the centering process is tackling. There is more than one outcome which can heal the situation, posed as a problem by the centering process. Yet, it is not clear if the number of the possible ~~XXXXXXXXXX~~ wholes that heal is limited or unlimited. It seems more promising to say that the number of the possible wholes that heal is limited; then, what are the criteria,

according to which these wholes can be judged?

- There is no one best way, through which the profound outcome can be attained. But, all these different ways are guided by the same principles.

- The first principle is that, all these different ways are constituted by transitions which respect the deep structure of the given. So, the whole process is an unbroken continuation of transitions, respectful of the deep structure.

This principle raises one important question: what if, among all these transitions, respectful of the deep structure of the given, there is one transition that violates the deep structure of the given; is its effect devastating ; that means, is there any way that this violation can be repaired, so that the whole thing can be brought back into a state where the effect of the already conducted violation is dissolved?

To say that no violations of the deep structure of the given ought to happen, ~~XXXXXX~~ <sup>is caused</sup> too much of a burden, making the conductor of the process uptight. Then, what are the possible ways that a violation can be repaired?

The experiments we did in the class showed that one violation of the deep structure is enough to damage the thing; the implication of this observation was that the damaged thing has to be thrown away; you have to start again. When drawing or painting on a piece of paper that is easy; but, when one deals with a real situation, let's say during the construction process of a building something damaging happens, the problem becomes much more serious, since it is not so easy to get rid of something that already stands up.



So, the important question becomes: how, by the time a violation is realized, could the violation be repaired, without this implying that the process has to go back to the stage before the violation has happened, but with a continuation of the process, putting effort on the repair of the violation?

It seems to me that most of the violations of the deep structure of the given can be repairable. Yet, it seems doubtful, whether a violation, which damages a virtual center of the given, can be repaired effectively.

- Another principle is that of paying attention at the generation and performance of each single act. Different formulas of where attention has to be paid to, have been articulated:

Pay attention for the search of the simplest whole that heals, or pay attention on the deep structure of the given, or pay attention on the virtual centers of the given, or pay attention in giving birth to something that has the feeling of a "being", and so on.

Yet, all of these formulas say more or less the same thing:

Pay attention on what you have in front of you. Study and scrutinize it deeply before getting into any action. Then, after you have added something, or altered something, see if the new stage that the thing is brought into, is more whole and more complete than the previous stage you have started of.

- The process aims at simplicity and not-separateness.

Yet, each step of the process is introducing some changes, which are inducing distinctness or not-separateness, simplicity or complexity, similarities or differences.

The whole thing grows from simple and distinct forms towards more complex and not-separated forms. However, after each transition there is a balance between distinctness and not-separateness, between simplicity and complexity of relationships. The appropriate use of the properties through the transitions help to bring the whole thing at such a balanced state.

- The process is dealing repeatitively with the creation of a whole as an entity, and with the embedding of this whole into a larger whole.

When dealing with the whole itself, it tries to make it a coherent and complete entity, and also deals with the smaller wholes that this entity comprises.

When trying to embed this whole into a larger whole, the process is dealing both, with the immediate surrounding of the whole, as well as with the larger context, of which this whole becomes an unseparable part.

On doing the first, it seems that the process attains distinctness; on doing the second it reaches not-separateness.

- The process starts with the introduction of either a small size whole, or a medium size whole, or a large size whole. But, regardless of the size of the whole it is introducing, there is always something smaller to be added in, and there is always something larger to be connected with.

To add in a whole something smaller it could demand an extensive act, or to relate a whole with a larger whole it could call for a tiny act. Yet, whatever the act is, extensive or tiny, it is extremely important.

- The process ends when there are no more virtual centers of the given to be revealed, or when there is no possible transition that can bring the whole thing into a more elevated state of wholeness.