WRITINGS OF CARLO BERNARDINI

THE DIVISION OF VISUAL UNITY

The reasons for a division of visual unity are based on a dividing up of the primary visual condition, which is external to the work, and the visual, plastic or structural condition which is internal. Two experimental apparatus are produced which are the mirror image of each other.
If it is true that the relativity of our physical and mental sensations, in the face of things, leaves space for the presentiment of the existence of a diversity between their appearance and their reality - and therefore between their reality and our consciousness - it is equally true that the visible is always perceived beyond the apparent. On this bordeline the relations between things, their rules of structure, lose autonomy definitively. The hypothetical visual and mental second condition to which the intuitive possibilities are addressed is to be looked for in the intrinsic structure of the space of the work, whether this is made of inert matter or of matter in movement.
It is in this second visual existence that one notices the presence of that which is hypothesized as being invisible. The two mirror aspects of the image, by being in a relationship of reciprocal trespassing or of interchangability beyond every point of view, open in a virtual way the entrance of things, as in a sort of metamorphosis of the mental image in the same things.
The operation of metamorphosis of the virtual visible into the real visible is therefore translated into two diverse and autonomous visual conditions: one slowly takes form in the other, it materializes internally, excluding its exterior covering.
Light materializes vision, and that which in reality is as formless as a shadow, beyond the confines of appearances, can become virtual or illusory like a reflected ray of light.
In the process of perception because of the distinction between the image of the thought and that of reality, the relationship of projection between the visible and the invisible is undertaken both as a sort of transmigration of sensory perception in things as well as a sort of demolition of the concept of unity of the work.

Rome 1995

HYPOTHESIS FOR THE DIVISION OF VISUAL UNITY

Shadow and light are visible, although both are formless. Shadow is the dark projection of things. It occupies the other side of matter, increasing the perception of its existence, while remaining evasive and uncontainable.
The other side is beyond the confines of appearances, as a further aspect or dimension, it is the second visual condition of what we are observing.
When we observe an image we are therefore unaware of all its constituent elements as well as their specific identities in so far as the subsequent projection of our imagination prevents us from keeping the first sensation intact. Initially we clearly note a particular sensation when we observe something, which is in fact the primary sensation. Subsequently, however, exactly those elements which are in principle imperceptible (the so - called “obscure zones”) come to our memory and tend to relive in us as something new and strange, since we forget that they were part of the previous sensation. The automatic analysis of the distinction between things as they appear and things in themselves, creates in us the formation of two different worlds, one real and the other illusory. Between these two worlds there is an intermediate condition which can often be very different or ambiguous, and it can move from one world to the other, exactly in the same way as a simple reflection can seem to be a light. In fact through our senses we are subject to the influence of the things which surround us, as well as of a world of entities beyond visible things. The attempt to transcend visible things through other means of sensory perception is at the base of the hypothesis of the separation of an image into diverse and autonomous visual unities. In art the mystery of the visible, or rather the mystery of things in themselves - unobserved, behind the facade of appearances - contrasts with the world of apparent things. These latter, in the conjunction between the construction of the image and thought, give way to the unknowable (perhaps inexistent) things: the so-called “unobservable entities”.
Although they dont have any reality in themselves, they indicate to us a second sensory existence, which the image translates into a visual one. And if in the same image exactly this follows the primary visual condition, the image of the other type comes in turn into existence, like a virtual state.
Although it transforms into an entity in itself, the second visual condition remains infered and made possible only by the primary visual condition of the work.

The division of the visual unity makes itself transparent right on the imprint of the primary visual image. It is the result of a process of cleansing of the initial material, which happens at the level of consciousness, to arrive at a conceptual space which is no longer a representation of that which one imagines, but rather of that from which one imagines.
The image, therefore, is initially transfigured in the clarity of consciousness. Successively, however, the form of the intuition as an ulterior visual condition which the image projects beyond itself, becomes the pure voice of something which exists independently of consciousness.
Before projecting an image onto a surface one projects it inside oneself.
An image can become a kaleidoscope of itself. Its shape, as the spatial disposition of a structure organized in relation to its function, can only express itself. It can give life internally to things which do not exist externally.
But the ideal equilibrium between what is inside and outside will always evade our calculations; what we think we have found after much searching is there, ephemeral and mutable, ready to vanish into nothing.
Just as the secret entity of things and of their constituent parts remains unknown to us, so also in the eternal compromise between reality and illusion there will always be a mysterious nature, which accompaines us like our own shadow.

Rome 1995

PERMEABLE SPACE

Design combines construction of the image with the thought that gives it origin. A perimetric design brings unity to the inner void and tends to concentrate the greatest force within it. However, this force in turn generates ambivalence, breaking into the margins of the space within the form.
Thus, on the basis of this ambivalence - this transformation of one reality into another - the concept of transmutation of an environmental, traversable space poises the viewpoint between two hypothetical positions, one internal, the other external; between one form of objectivity viewed from outside and another perceived from within.
The optical superimposition of lines traversing a space and lines running along the planes of the same space, viewed from a certain position, can produce two-dimensional visual conditions; as soon as the viewpoint shifts volumetric changes come about, generating mirror-image forms. Thus such changes can generate properties able to permeate a place.
A so-called “permeable” space can therefore be a virtual space tending to exert force on the limit of physical space. Alternatively, it will tend to enclose a real environment within an illusory volume. One seeks to break through the interior of the other. Here the perception of the eye may itself feel called into question, seeking the escape route from the limits of a form. Thus the idea of a permeable space becomes design on the transformation of the coordinates of physical space. If the line delimiting it apparently concentrates both volume and void, it can itself reverse those coordinates, the former giving way to the latter and vice-versa. It is as if volume were annihilated in a flat dimension while void acted as fulcrum to an illusory dimension. Thus we have a sort of space within space. There are two things alone that have in themselves a visible but immaterial property to approach this concept, namely light and shade. Shade can take shape on the surfaces of a physical space, or can fill the entire volume with darkness, but it cannot traverse it.
Thus only light remains.

Rome 2000

BEYOND THE VISUAL THERE MAY BE NOTHING

In the visual language between us and that part of us that emerges in image there is a no man’s land whose secrets we endeavour to find out.
Experimentation seeks to open up an entrance and pass on: it is, as it were, a need for transformation that derives from the innermost being. Ultimately experimentation becomes a real constructive methodology aiming at endowing a work with form and function, and the technical procedure may be an unexpected discovery for the artist himself. The purely visual values inherent in surface, volume and space have now, at the present state of evolution in art, become an unprecedently open field for research.
In fact, such evolution derives from experimentation with the means available at the time, often developing as science combines with the force of ideas.
Today it is scientific evolution that drives society in the direction of a ceaseless dynamism subordinated to the laws of technology, which thus comes to occupy a prevalent space in the life of men. If art still seeks to conduct concrete discourse with

people, it also opens the way to endeavour, rather than confinement in the ivory towers of yesterday's models. Indeed, art can anticipate the innovations of science, finding renewal while taking an autonomous view of their applications, using their systems and means in the course of the creative process. Its language can be seen to be authentic when the creative process looks to the future rather than the past.
Often, the works of art that are most difficult to identify but at the same time the most authentic are those ahead of the times, devoid of allusions to the past. If indeed the innovations of science can change our living conditions, contents expressed in art evoking or citing the past cannot. As the elements of surface, volume and space emerge themselves as the very pivots of experimentation, it appears a perfectly natural step to eliminate all implications of re-evocation from visual research.
It is precisely this encounter between logic and language that places the elements in relations of formal, structural and functional reciprocity.
In such conditions the intrinsic interest of the image does not, therefore, lie in metaphorical or allusive aspects, but solely in its purely visual value, beyond which there may be nothing.

Rome 2000

SCULPTURE PROJECT

"Division of visual unity" is a sculpture consisting of two independent visual units made up of two distinct sculptures: one in stainless steel visible by day, the other in optic fiber visible by night. The "division" project is also achieved through the perceptual mobility obtained with the possibility of entering into the sculpture itself, viewing it from inside and without. Both have a set viewpoint from which they can be observed in two-dimensional form – rhomboidal for the stainless steel sculpture, triangular for that in optic fiber, given the initial visual superimposition of the these two geometrical figures over all the other lines forming the sculptural structures.
As soon as any shift is made from that viewpoint, obtained only by closing one eye like a sort of monocular lens, the resulting duplication of lines transforms the space of both forms at the level of perception. The stainless steel sculpture emerging from a rhomboidal form gives way to multiplication in four triangles as the lines split apart: contained within this is the second sculpture in optic fiber, which begins with an initial triangular figure to double the lines and thus produce three rhomboidal forms.
Different perceptions of the two visual units can be obtained by moving about the sculpture, beginning with the primary (two-dimensional) viewpoint and subsequently advancing a few meters to arrive at the two-dimensional viewpoint of the optic-fiber triangle.
Moreover, by entering the internal space from the opposite side all the other four geometrical figures deriving from the multiplication can be seen together yet distinctly.
By day the very faint visual structure of the unilluminated optic fibers conveys a sense of the form within the steel form, just as the latter conserves its presence by night thanks to the subtle reflections on the steel piping.
The empty space within the sculptural volume makes the work virtually transparent, so that the surrounding cityscape becomes visually involved in the composition.
As dusk gathers the form of light in optic fiber begins to emerge, gradually taking on more visual impact as the sculpture in steel slowly fades into the dark.
This process of form fading to give birth to other forms is of course reversed at sunrise.

Rome 2001

MENTAL DESIGN AND VIRTUAL VOLUME

A two-dimensional visual image reduces the spatial totality of the three dimensions. Thus, a picture surface bears not only forms but also colours to underpin the spatial relations.
The surface then becomes the field upon which the illusory sensation of transition from the second to the third dimension is achieved.
In the space of an environment, on the other hand, the problem lies in conveying this sensation with light, which may be immaterial but nevertheless belongs to physical reality, and thus not truly comparable with the illusory element typical of painting.
In physics it is light that constitutes the principle of colour, and it is through its agency that the surface can become space, just as space can be transformed into surface.

Eliminating real lighting to transform the coordinates of a dark environment with design in light, surfaces and space can be integrated to become the architecture of a "mental space".Removed from the environment, light can thus be transferred solely to the "mental design" of this ulterior place.
Straight fibre-optic lines configuring in relation to the planes of an environment can create a dynamic field of taut forms with the appearance of slender surfaces.
A structured three-dimensional form whose volume can from one specific viewpoint be ascribed to a single, flat geometrical figure as the lines are optically superimposed will, from the opposite angle within the installation, go through a series of distinct geometrical figures.
It is precisely by dividing and destructuring the space in the environment that the internal relationship between these architectural and volumetric two- and three-dimensional units can split into the two visual units, autonomous and opposed. Darkness destroys visual space, and with it the existence of all chance effects due to real or artificial light in the environment in question. The precise mental design can therefore only be composed with strokes of light. It is not the installed form that adapts to the place, but the place that is transformed to accompany the image. The structuring of volume which, as we have seen, results from the occupation of physical space with a fine line of light, may at one and the same time appear as virtual space within environmental space or real space within illusory space.
While the technologies for illusory reproduction of the visible world in so-called virtual realities seem to be taking us into a future where real life finds substitutes even at the sensorial level, dissociated from the corporeal world, in the experimental visual arts the dividing line between external representation and mental conception can become so thin as eventually to disappear. Thought begins with visual sensations crystallising in the idea of synthesis.
Idea and artwork are thus in the material itself, or in its intrinsic transformation.

Rome 2002

THE EXPERIMENTAL LINE OF LIGHT

Light has the property of moulding our perception of things.
With its power to permeate our receptive capacities, modifying them, it can bring down the walls that close a space in and create a new space in its place.
A visual language based on an "immaterial" phenomenon like light leads our perception of space itself to the borderline between real and illusory, founding its key elements on pure experimentation and research within this logic.
The only path open to us in the free zone we encounter between ourselves and those aspects of ourselves that emerge in the visual language, and which we endeavour to interpret, is experimentation – the one way to enter a place for which we have no key.
Here advance is achieved when scientific research combines with an impelling need to transform ideas.
A visual language can locate through a medium lacking material quality the element essential for advance along the crest dividing our perception of the real state of things from the hypothetical or illusory state. It is precisely within this "free zone" that we can lose the perceptual coordinates of space, to rediscover them by breaching the limits of physical space and venturing into a second, hypothetical space. In the inner tension between the two – real space and thought space – one tends to penetrate and permeate the other; intercommunication between the two brings about the environmental transformation of perception.
Light can expand or generate space, whether or not there are walls or surfaces to delimit it.

Milan 2004

THE FOURTH DIRECTION OF SPACE

The "Fourth Direction of Space" project was conceived in the first place with the aim of creating within a space a configuration of imaginary time in contrast to that of real time, generating a dialogue about light between technological means of expression like optic fibres and experimental videos on light.
The idea behind this is to create an interactive dynamic field of light, consisting of a fixed audiovisual installation in optic fibre enwrapping space like an illusory volume, within which abstract experimental videos on light are activated by sensors as the spectator moves about, projected between the walls and floor.
A dynamic field of light will be created based also on the perceptual mobility of light induced in the observer, and on the change in the coordinates of the perspectives in the architectural space.
"The Fourth Direction of Space" is in fact generated through the perceptual mobility deriving from the possibility of entering,

initially, into the optic fibre installation itself, observing it both from outside and from the internal space through its own visual rhythm, and subsequently becoming involved in the dynamics of the videos, already established and independent of our will. Thus the concept of real time according to which we move within the installation interchanges with a sort of imaginary time, introduced by the movement and rhythm of the light as the videos come into play interactively when we move about in the environment.
The simultaneous sensory superimposition of the transformed perceptual coordinates of real space and perception of an imaginary time can bring about yet another hypothetical sense of change in the direction of space.
And so the fourth direction is hypothesised on the basis of the co-presence and duality in space of the two time entities.

Written by Carlo Bernardini and Manu Sobral, São Paulo, Brazil 2004

ANALYSIS AND PERSPECTIVES IN THE EVOLUTION OF LANGUAGE

Visual art is subject to ceaseless changes and emotions both in appearance and in essence, in ideas and materials as in formal structures.
It has the property to transform our perception into thoughts and concepts through the transformation itself of visual form and material.
The work does not represent resolution or finalisation of language, but rather an experimental field for as yet unknown perspectives of the language itself, and thus of thought.
The initial randomness or imprecision of an experimental procedure can open up to us a new, functional system of language, and at the same time and ulterior visual reality in the place of the reality that had been hitherto foreseeable.
What we call a “second reality” or visual condition can be determined by the illumination of a particular place as “mental design” and consequent darkening of the other places, the places of the real.
The concept of reality is attacked and overthrown through the sheer force of the “second reality” project.
Attempts to copy or revive the imitation of reality lead only to fossilisation of the present in the language of the past.
When the authenticity of a material or an operating system is in close association with its time and gives expression to its force in that time, then it becomes difficult to revitalise the sense of it outside that time: hence the need to participate in the innovative process.
By contrast, the initiation impressed by new materials on the visual language generates the consequent evolutions in ideas and thought.
Innovative artists bring about these initiatory processes, while the others concentrate their efforts on maintaining the same processes, merely extending their duration in time.
Experimentation with the aim of renewing the language recreates the material or constructs a new identity for it through the paradoxical nature of forms.
Space and time have often combined around concepts of simultaneity and thus of “spatialization of time”, thereby bringing about intersection between motionless static forms and dynamic forms with predetermined rhythms, within which the phases of perception are formed through successive stages of development accordingly with our free movements.
If the concept of spatialization of time thus becomes the paradigm for experimental research, then real and unreal, logic and imagination will come to constitute an unpredictable oneness. The uniform, progressive and apparently irreversible orders of reality can be overthrown, halted or reversed in parallel, simultaneous resolutions of movement, albeit with illusory distance between them.
Thus the perception of the simultaneity of different images disconnected in space actually creates this ambiguous state between space and time, between the physicality of things and mental processes, thereby provoking a rift in the inner relations between a multiplicity of visual units.
In the field of visual experimentation, and so in research in and evolution of contemporary art, on the basis of all the possibilities thus generated, the way can be opened up towards an organic system of respiration in the related space, like the rhythms of autonomous life.
Surfaces endowed with sensitivity, the interaction of light and the mediation of forms between the two and three dimensions can shift the range of language to the “non-material” elements, imperceptible, impalpable presences which thus trigger the mental processes performed within interactive systems.

Milan 2005

THE LIGHT THAT GENERATES SPACE

A drawing paper is simply paper as long as it is white, but once you draw on it, it becomes “a drawing”.
A design in light is a mental drawing that uses a dark space, as a kind of dark paper on which it forms in negative.
An optical fibre drawing in space can be in harmony with the place itself, but the light can also create an interrelation by overcoming the physical walls and transforming the environment in a deceptive way.
An installation, in fact, has the power to take the space and push it to the limit of an illusionary dimension, the one dictated by the original idea.
A mental drawing, executed with the light of the optical fibre, can go beyond the walls, not allowing the viewer to understand its origin.
The lines of light passing through the walls connect different rooms, joining them in the space of a single work, which lacking a complete point of view, in its wholeness can only be reconstructed as a puzzle in the viewer’s mind.
The installation takes over the space and incorporates it.
The spatial form develops a challenging relationship with the space, as it penetrates it, stimulates it and reduces to its power, until transforming it into itself. It is a role play where the space is transformed from the container into the artwork: the drawing of light goes through it penetrating it, and once inside, it goes beyond the walls without the solution of continuity.
The optical fibre line passes from room to room piercing the walls and the floors, combining the external environment with the internal one in a sole drawing: “Permeable space”, the place where *Light generates space.*

Milan 2009