l e s   i m m a t é r i a u x

Foreword

The Modern Project?

Do new technologies pose a challenge to certain accepted truths characteristic of modernity? This question, the subject of international debate, has to date received little attention in France.

Insecurity, loss of identity, and crisis are being experienced not only in the economic and social domains, but also in those of human sensibility, knowledge, powers (fertility, life, death) and ways of life (the relation to work, home, food, etc.).

The modern project of the emancipation of humanity, of enfranchisement through the development of various types of knowledge, the mastery of arts and crafts, the extension of freedoms—is this project born of the 'Enlightenment' something that is still operative, that still binds us together, at the close of the twentieth century?
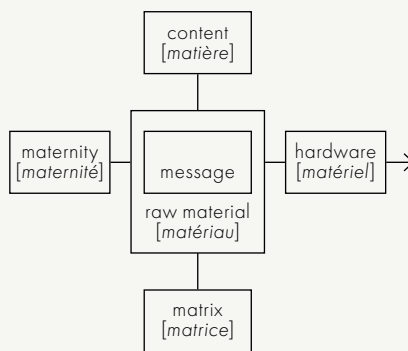
Immaterials: Why?

In all fields of research, the matter that makes up what we call 'objects' is assembled into specific complexes containing interacting micro-elements. 'Matter' is always an energetic state.

Energy is immaterial. The human mind and body are no exception to this analysis. The human would be nothing without the continuous flux of interactions that connects humans with things.Technoscience itself proves to be a kind of intelligent prosthesis used to augment reality so it may know itself.
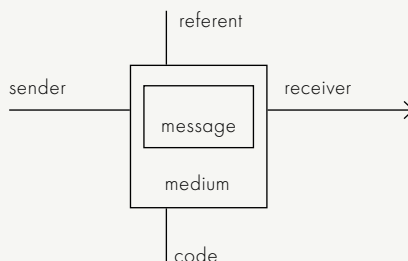
Immaterials: How?

Any reality whatsoever can be regarded as a message. Taking our lead from the etymological root *mât*, we say:

- raw material [*matériau*] is the medium of the message
- the matrix [*matrice*] is the code in which the message is written
- the hardware [*matériel*] is that which ensures that the message is recorded, transmitted, and received
- the content [*matière*] of the message is its referent (as in a 'table of contents')
- maternity [*maternité*] designates the function of the sender of the message:

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                    content
                    [matière]

maternity          message          hardware
[maternité]                         [matériel]  →
                 raw material
                  [matériau]

                    matrix
                   [matrice]
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This schema is a version of the principle of the theory of communication:

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                referent

sender          message          receiver →

                medium

                 code
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'Immaterials' demonstrate and interrogate the disruptions that are affecting this distribution today.

Jean-François Lyotard

Getting Into the Matter

Laid out in harsh grey tones, illuminated by a peculiar light, allowing ideas that were unforeseeable an hour, a day, or a year ago to float, suspended, unsystematic yet rigorously ordered, 'immaterials' exhibit themselves, partway between seeing, feeling, and hearing.

Technoscience, unavoidable, is present, without it being centre stage. Although stripped of its alluring content, its magical charms, one can still sense it behind the scenes.

The floor is open, unoccupied; objects and furniture frozen in mid-air, weightless.

As if through half-closed eyelids, images constructed sign by sign, written out, erase the noise, eliminate trivialities, leaving only the necessary minimum.

Sound opens up another space, another path for reflection inhabited by texts and music.

The polysemy of images and scenes, along with the attendant polyphony, form a collage out of which a third meaning, new and singular, is born.

Highly compact in their presentation, their material concentrated for reflection, the sites follow one from another, punctuating a polymorphous unfolding.

Such light reveals a rare earth, an unknown place or a precious pigment—you decide—which discloses a hidden meaning.

From here, look over there and get a sense of the relationship with a neighbouring field of knowledge, depending on the distance and the obstacles in between.

Listen, here, to the song of blood coursing through the veins—the Doppler effect—and learn from its music. Elsewhere, observe, from afar, traces of the cosmos's very first story, the tale of matter before its precipitation.

When the true becomes uncertain, when existence loses its Manichean nature to become nothing more than a density of probable presences, then 'grasping' it becomes an uncertain task. Extracted from the hegemony of understanding (a futile vanity?) 'immaterials', then, call forth a secret sensibility.

Thierry Chaput
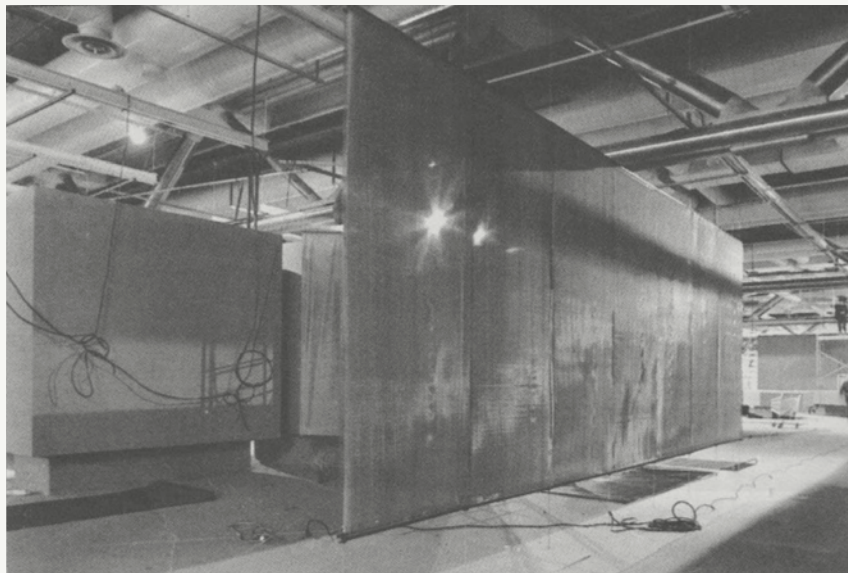
Construction of the Exhibition.
Photo: Jean-Claude Planchet/CCI

'Zone Map' or exhibition route by sound-zones

All of the soundtracks for the exhibition have been produced by the sound studio of the Centre Pompidou's Audiovisual department (Gérard Chiron) in collaboration with IRCAM (Arnaud Petit). The texts were selected by Dolorès Rogozinski.

Entrance

Zone 1
Entrance Chamber: The goddess offers the sign of life to the king. Egyptian bas-relief (thirtieth dynasty, Nectanebo II, the last Egyptian pharaoh, circa 340 BC, Musée de Grenoble).

The symbol of life received here marks what is at stake in the show: today, is there anything that is destined for humans? Do we have to give up the soul, the last breath?

Zone 2
Entrance Corridor: A long empty corridor at the end of which a mirror reflects the space into which it leads: the theatre of the non-body.

Enter the dense texture of the body via its most intimate, unheard immateriality: the sound of the blood.

Zone 3
Theatre of the Non-Body: Five large dioramas interrogate the presence of the body in the theatre. Inspired by Beckett. Imperceptible movements of the scenery and lighting. The dioramas introduce us to the five sequences that form the 'backbone' of the exhibition, the five *mât* words.

The body, medium of presence, condition of all theatre: you and I, actor and spectator, one on stage, the other in the stalls, both of us here and now. An obvious foyer for a resistance to the dematerialisation of our environment by a mediatised society and culture.

Fragment of the temple wall of Karnak North.
Goddess offering the sign of life to King Nectanebo II. Photo: Peter Willi.

Diorama by Jean-Claude Fall
and Gérard Didier. Photo: Gérard Didier

Soundtrack: Original montage:
[Breath is called soul: life and meaning. First cry of a newborn, last breath of a dying man. Breathless person on a resuscitation machine, mouth to mouth. Respiratory rhythm, we take and give back to the world our presence. The first music. When we are breathless, what mother is there to give breath back to us? What kiss, from what mouth?]

Soundtrack: Original montage.
[Torrents of blood pushed by the myocardium toward the brain. The blood's channelling makes it sing. A rhythm of tension and release, the flux and reflux of fresh blood. The mute echo of breath within.]

Soundtrack: Samuel Beckett.
'I gave up before birth, it is not possible otherwise, but birth there had to be, it was he, I was inside, that's how I see it, it was he who wailed, he who saw the light [...] it was he who had a life, I didn't have a life [...].'

Raw Material
[*matériau*]

Zone 4
Vain Nakedness: Twelve asexual mannequins. Below, projection of a sequence from the film *Monsieur Klein* alternating with the image of a deportee.

Second Skin: Examples of provisional skin grafts, autografts, artificial skins. Astronaut suit. Sensory deprivation chamber.

The Angel: Picture of the scarred body. Photographs of hermaphrodites, drag queens, ambiguous bodies. Staging of a confrontation between man and woman, here separated, there confused with one another. On the screen, the declinations of the word 'sex'.

The limits of the body: is it contained by 'sexual identity', by the envelope of the natural skin? And the minimal body: the absurd body of the mannequin, the vacant yet proud body of the deportee.

Extract from Maria Klonaris and Katerina Thomadaki, *Orlando Hermaphrodite II* (1983) (detail). Photo by Maria Klonaris and Katerina Thomadaki.

Zone 5
Sung Body: On two video monitors, on demand, thirty sequences illustrate effects often used in music videos, grouped under the rubrics: treatment of bodies, frames-within-frames, rhythms, sceneries.

No longer the music in and of bodies (zones 1 and 2), but the body and its environs disarticulated, fragmented through the acrobatics of video, all the better to marry with music. From scene to screen, the body of the singer dematerialised.

Zone 6
Exploded Body: Five graphic panels illustrate how the apparent corporeal identity of the human organism is analysed into its cellular elements.

'Infra-Thin': Documents by Yves Klein, Marcel Duchamp; projection by Giovanni Anselmo; video work by Thierry Kuntzel.

Elusive Surface: From France projected flat onto paper to the volume of the microscopic texture of that paper.

At high magnification, surfaces mutate into jagged reliefs, your flesh is resolved into impalpable cells. Art abandons visible appearances for ungraspable apparition. What Duchamp called the 'Infra-Thin'.
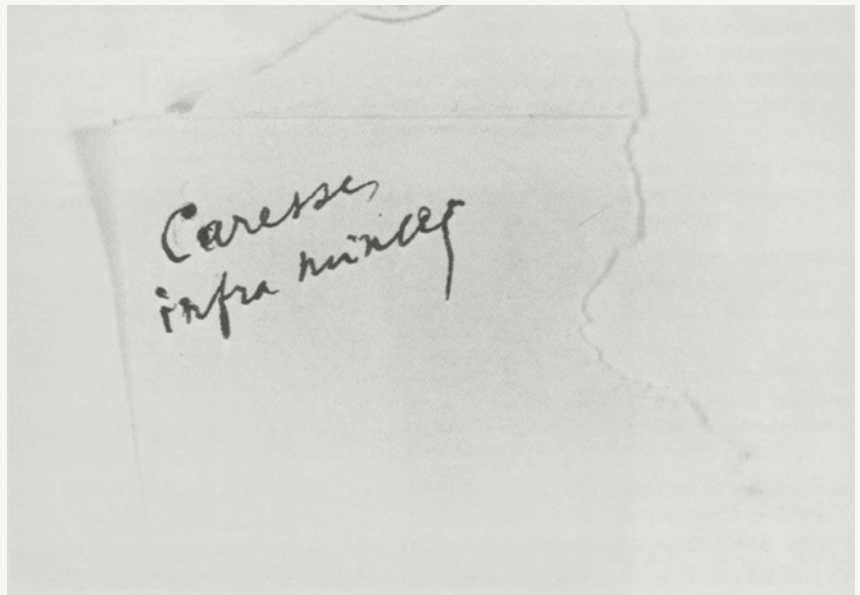
Marcel Duchamp. Photo: documentation du Musée National d'Art Moderne/ Centre Georges Pompidou, Paris.
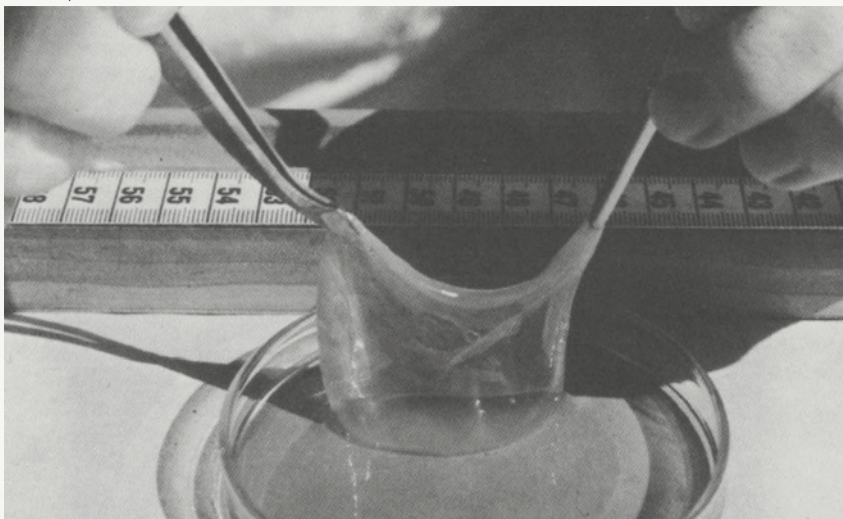
Dermal equivalent
Photo: doctor Neveux (hôpital limitaire Percy).

Soundtrack: Antonin Artaud, Dolorès Rogozinski.
'But there is a thing / which is something / only one thing / which is something / and which I feel / because it wants / TO GET OUT: / the presence / of my bodily / suffering.' 'Then divine wrath fell upon the most ancient race of men. And Zeus decided to split them in two. [...] My body is not my body. It is of the wrong sex.'

Soundtrack: Songs from music videos.

Soundtrack: Marcel Proust.
'As my mouth began gradually to approach the cheeks which my eyes had suggested to it that it should kiss, my eyes, changing their position, saw a different pair of cheeks; the throat, studied at closer range and as though through a magnifying glass showed in its coarse grain a robustness which modified the character of the face.'

Zone 7

Indiscernibles: Three mannequins in uniform—surgeon, chef, police officer—multiplied by mirrors, lit up one by one or all at once. On the screen, the rules of these permutations.

One electron is discernible from another only by its place in a given set. Take the set of the first three natural numbers: 1, 2, 3. It can be ordered in six series: 1,3,2; 2,1,3; 2,3,1, etc. The place of each number in relation to the other two determines the value of the series. Analogy: the place of each uniform in relation to the other two, depending on the order in which they are lit up, determines the meaning of the sequence.

Zone 8

Dematerialised Material: Circular audiovisual multimedia display made up of photographic slideshows on eight screens and three video installations. Documents, some original, some drawn from corporate archives, relating to new industrial materials.

The 'hard' raw material of industry is now created specially to respond to the norms of a projected product. It does not precede the project, or the work; its conception and simulation are part and parcel of both. It is not brought in from outside, an object resistant to being worked: it is itself the result of a techno-scientific work of synthesis. — Analogous situation in the arts, for example in music, with synthetic sound.

Zone 9

Luminescent Painting: Works by Moholy-Nagy, Takis, Dan Flavin, François Morellet, Sam Moree, Robert Ryman, Lucio Fontana.

Bodiless Painter: Large panel by Jacques Monory; canvas prepared for painting, photosensitised canvas.

All Kinds of Copies: Cubicle containing a photocopier. Copies of heterogeneous objects made on demand.

The best raw material with which to imitate light is light itself. The best medium in which to reproduce the lighting of an object is photographic recording and projection. Once the phototechnical trap is set, light will make the work for you. Automation of simulacra.
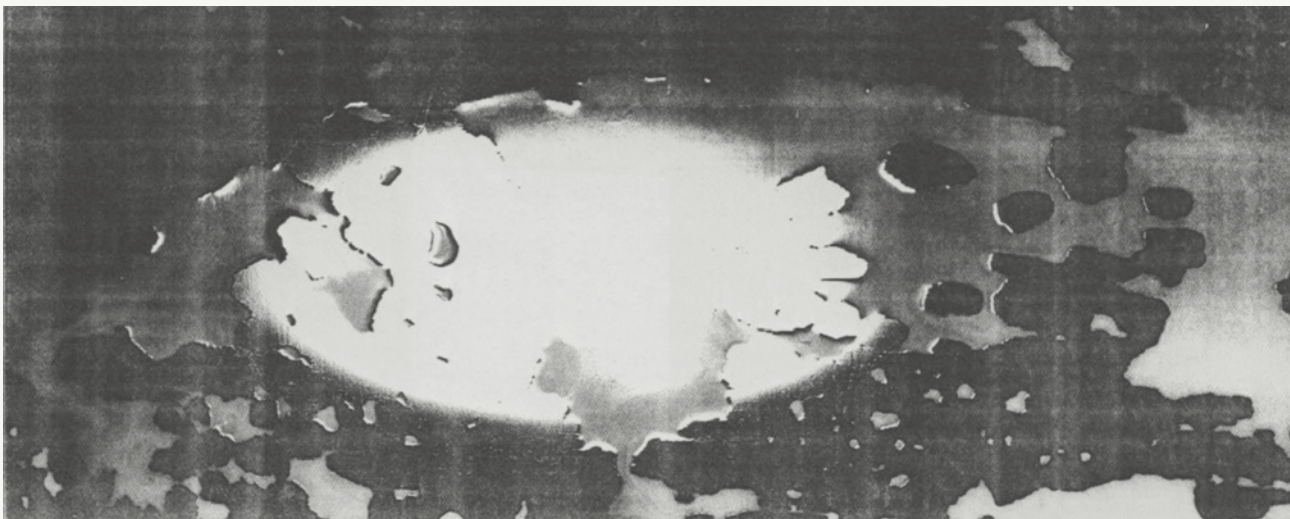

Steel under a microscope. Photo: IRSID.
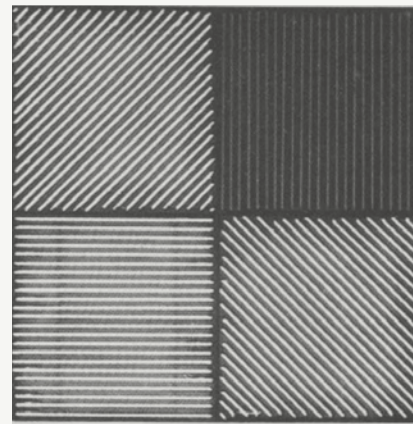
François Morellet, *Parallèles de néon 0°, 45°, 90°, 135° avec quatre rythmes interférents*, 1963, Paris, collection of Galerie Liliane and Michel Durand-Dessert. Photo: All rights reserved.

Martine Delage, Brigitte Eymann, photocopy of drops of water and milk.

Soundtrack: Gaston Bachelard. 'There is no such thing as two individuals indiscernible from each other'. Heisenberg's objection: 'Your principle of individuation [...] loses all of its validity at the scale of microphysical phenomena [...]. Individuality is a prerogative of complexity, and an isolated particle is too simple to be endowed with individuality.'

Soundtrack: Original montage. [Looking at them, one does not see them, and they are called invisible. / Listening to them, one does not hear them, and they are called inaudible. / Touching them, one does not feel them, and they are called impalpable. / [...] Here is the principle: / matter harbours possibilities, / the immaterial realises them. Lao Tzu.]

Soundtrack: Maurice Blanchot, Henri Michaux, Octavio Paz. 'The reason I'm painting this way', says Andy Warhol, 'is that I want to be a machine.' 'The image shines where there is no original, but only an eternal scintillation.' 'Signs devour signs'.

Matrix [*matrice*]

Zone 10

All Kinds of Skins:
A variety of types of clothing illustrates the predominance of the functional.

Food Ration:
Necessary nutritional components, presented in a refrigerator; dietetic programs on a microcomputer.

Clothing and food are subjected to the simple matrix of the functional: be lean, ready for action, the first to the goal. The body is dressed and fed with a view to optimising its performance. To avoid illness and accident, to live better by staying young, these are victories. Eliminate the superfluous, the sumptuous, bad fat: 'Let's slim down!'

Zone 11

All Kinds of Noises:
Complete reproduction of the score of a piece by Jean-Charles François for pianist-vocalist and dancer-vocalist.

What is the difference between the vibration produced by striking the case of a piano and the one you get by pressing down one of its keys? The latter is a sound selected by a matrix, the tempered scale; it can be notated on a classical score. So is the former just a noise? Like all the contemporary arts, music today is questioning its limits. Research into percussion, synthetic sounds, extra-European musics, and acoustics are making the idea of the sonic matrix more complex—which has an impact on musical notation.
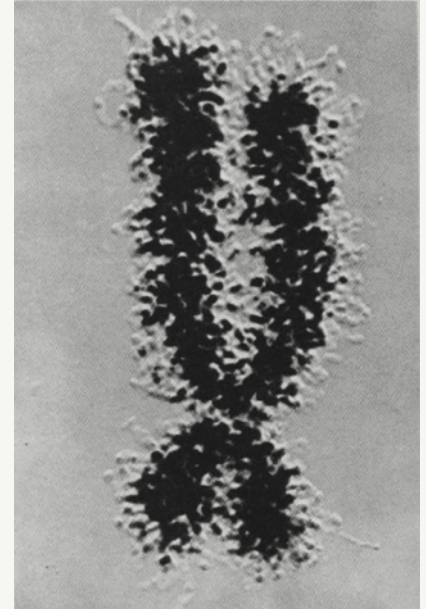
Zone 12

Living Language:
Video projection of experiments on cow and rabbit embryos at INRA-CNRZ (J.-P. Ozil and J. Modlinski). On screen, the genetic code.

Chess Game:
Chessboard on a human scale. The visitor is lit by a spotlight each time they step onto a square virtually occupied by a piece in the game of chess that a computer is playing behind the scenes. On screen, a definition of the elements of the matrix.

Hidden Variables:
Microcomputer with statistics software and a graphic display. The visitor responds via the keyboard to a survey of visitor profiles conducted throughout the period of the exhibition (questions on seven variables).

Registration:
The visitor composes combinations of numbers at random on the keyboard. Certain of these combinations correspond to real entities in the solar system, whose 'identity card' is displayed in the slide projection. On screen, a list of the 'partitions of 4'.

What exists only exists if it is possible according to the rules of the matrix in operation: the rules of the game of chess, of DNA, of the probability that you will visit the exhibition, of individuation in the cosmos. What's more, certain possibilities of the matrix will in fact never come about. Necessity and chance, mathematical structure and incomprehensible contingency, determine what will be.

Score of Jean-Charles François, *Remarques Pertinentes sur les Crustacés Décapodes*, for pianist-vocalist and dancer-vocalist, July 1982, Delmar, California. Photo: Jean-Claude Planchet/CCI.

Human chromosome. Photo: CNRI.

Soundtrack: Émile Zola, Gilbert Lascault.
'There were loose jackets, little bodices, morning gowns and peignoirs in linen, nainsook, and lace, long white roomy garments, [...] white petticoats of every length [...]' 'The Roman emperor Publius Septimus Greta (189–212) organised feasts where the names of all the dishes began with the same letter.'

Soundtrack: Original montage.

Soundtrack: Dolorès Rogozinski, Stéphane Mallarmé.
'There, you exist. On that place on the chessboard./Encased, numbered, marked./From before your birth, ordered, registered. [...]/This internal regulation, this invariant and hidden distribution, will have programmed you according to the order of necessity [...]/And yet one must still expect accident, on exceptional cases, on the chance that distracts the system.' '*It was*/progeny of the stars/*the number*/[...] *it would be/worse/not/more nor less/*indifferently but just as much/*chance/nothing* [...]/*will have taken place/but the place* [...]/*A constellation* [...].'

Zone 13

Little Invisibles: Three spaces decorated with the same motif. Lit up alternately, the first with natural mono-chromatic light, the second with natural and ultraviolet light. In the third, lit with natural light, an infrared camera films the invisible décor and transmits the image to a monitor.
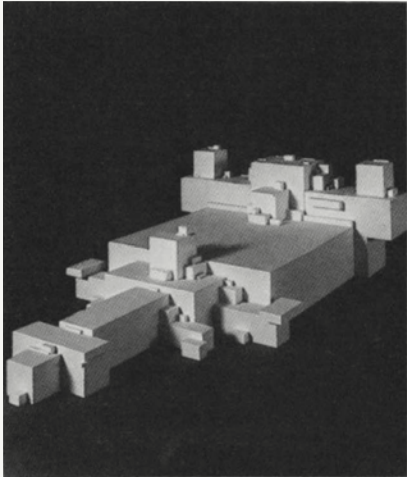
Flat Architecture: Works by Kazimir Malevich, Zaha Hadid, Rem Koolhaas, Piet Zwart.

The new visual prostheses are modifying the matrix of visibility that governs human ocular vision; new materials free the architect from the constraints of 'building'. The code of the architectural message becomes increasingly confused with that of freehand drawing; the eye has access to visual information that comes from beyond its field of visibility.
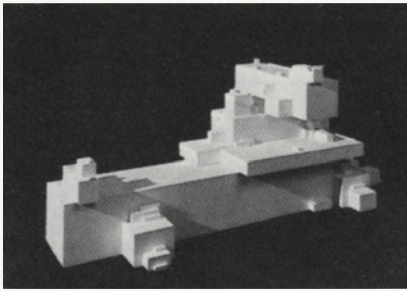
Kazimir Malevich (1878–1935), *Alpha*, 1923, collection of the Musée National d'Art Moderne/Centre Georges Pompidou, Paris. Photo: Musée National d'Art Moderne/Centre Georges Pompidou, Paris.

Kazimir Malevich (1878–1935), *Beta*, before 1926, collection of the Musée National d'Art Moderne/Centre Georges Pompidou, Paris. Photo: Musée National d'Art Moderne/Centre Georges Pompidou, Paris.

Hardware [*matériel*]

Zone 14

Invisible Man: Holographic works by Alexander and Stephen Benton.

Compartment: Japanese sleeping unit equipped with a radio, television, telephone, and air conditioning.

Hurried Eater: Table: four place settings upon which are projected slides of traditional and fast-food menus.
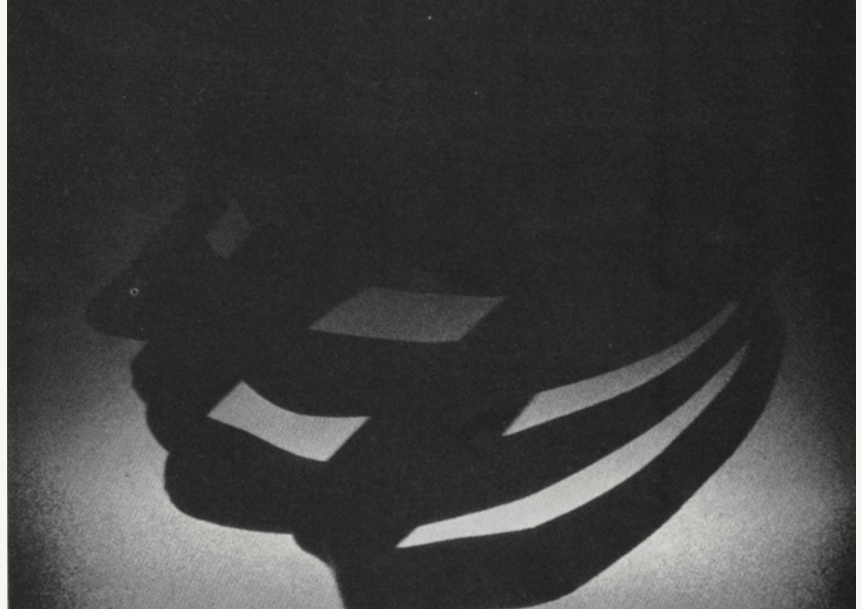
The body considered as hardware, a device to transmit and receive messages. Good hardware is hardware that gets the messages to their receiver without loss or delay. But the human body is not good hardware, it slows down messages, it loses something of them. We dream of its disappearance, of accelerated, minimal economic maintenance and repair.

Stephen Benton, *Rind II*, 1977. Collection of Eve Ritscher, London. Photo: Linda Law.

Zone 15

Inadvertent Musician: Installation designed by Rolf Gehlhaar and made with Philippe Presvot. A sonic space that reacts to the presence and movements of people within it, via the intermediary of ultrasonic detectors and a computer linked to a digital synthesizer.

Yet another music of the body (cf. zones 1, 2, and 5)? No, here the body is just an involuntary occasion for the actualisation of preexisting musical potential. Just as the wind, moving a church bell, makes it ring with its characteristic timbre. But is it so important for the musical agent to be voluntary? Can't it be considered in all cases as just one element of the hardware that renders sounds perceptible?

Soundtrack: Henri Michaux. 'Suddenly, a clash of the gong / A clash of the gong of colour, of a great quantity of colours, strong, so strong [...] / An entanglement, what one sees then, a drawing that seems as if it wants to enter into itself. / The line seeks / without knowing what it seeks [...]. / Stopping itself from "arriving", / a line of blind investigation [...].'

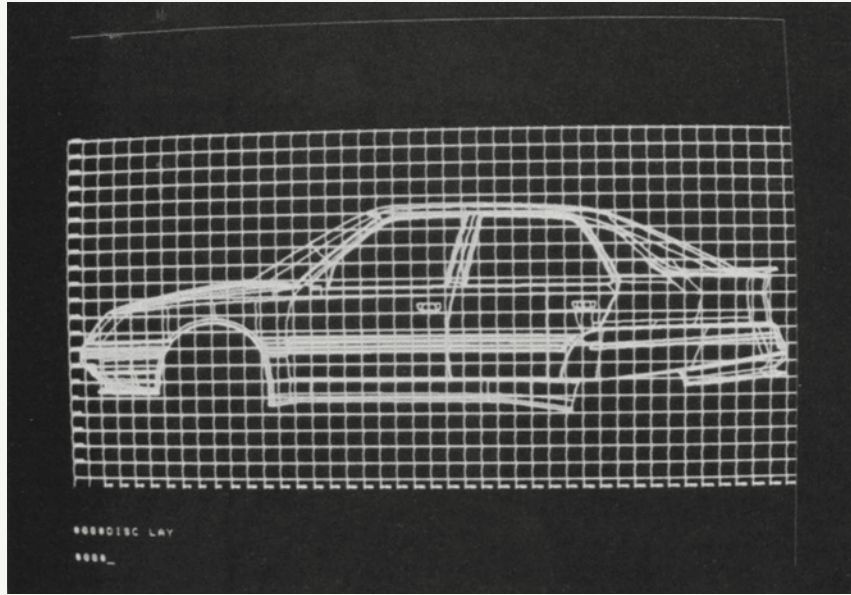**Soundtrack:** Maurice Blanchot, Dolorès Rogozinski, Eugène Savitzkaya. 'Within my reach is a world—I call it world as dead, I would call the dead earth [...]. He, invisible and outside of being [...]. I am seen.' 'A habitation, though, a series of enclaves / that would confine each body, / would hold it ensheathed [...] / A layer that seems dedicated solely to conservation [...].' 'A table was set, covered with a tablecloth of a thousand snakes, piled with trays as big as millstones.'

Soundtrack: Take off your headphones to hear the music made by your movements.

Zone 16

Auto-Generation: A robot carves out the front of a car body from a block of pre-cut polystyrene, following a 'wireframe' image projected onto the raw material [*matériau*]. (In this case the operation is simulated, but it is one that is nonetheless possible in a workshop).

Automation of a 'complete' process of fabrication such that one does not know whether the machine thinks or the mind fabricates. Here the 'creation' results from a state of high complexity rather than from an act.

Zone 17

Stellar Crucibles: On a large circular screen close to the floor, an audiovisual projection of astrophysics. On a semi-circular vertical screen around its edge, presentation of a legend comprising the corresponding formulae and remarks.

Stars are not fixed bodies, but laboratories, that is to say pieces of hardware [*matériel*], in which elements are transformed into other elements. These laboratories consume themselves (because this hardware [*matériel*] is its own raw material [*matériaux*]). Stars use themselves up, they are doomed to extinction. Our own sun still has around five million years to go.

Content [*matière*]

Zone 18
Shadow of a Shadow: Work by Joseph Kosuth.
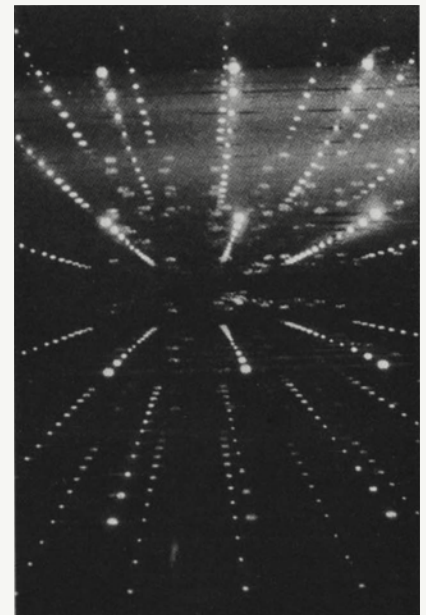One and three shadows: the 'real' shadow, its image in a photograph, its definition in a dictionary.

Trace of a Trace: Series of photographs selected by Mike Mandel and Larry Sultan.

Reciprocal Space: Hologram by Stephen Benton. Physics experiment: a laser beam projects the image of the raw material [*matériau*] through which it passes. On the screen, the Fourier 'transform'.

Stolen Light: Works by Georges Seurat, Giacomo Balla, Michel Larionov, Nathalie Gontcharova, Robert and Sonia Delaunay, Larry Bell, Dan Graham, Kazimir Malevich, Simone Martini.

A zone of light, of testimony. The content [*matière*] of an object exists only through the traces it leaves. Criminals destroy these traces as they go, investigators try to uncover them. Shedding light on the event? But it must already have 'seen the light of day'. So all is photo-graphy. The photon is the master of 'contents [*matières*]', of realities. What it does not touch, we will know nothing of.

CAD 'wireframe' representation of the Vera Plus car prototype. Photo: Jean-Claude Planchet/CCI.

Chinese archives of the 11th century: *The Invited Star* (Crab constellation).
Photo: collection of the Service Astrophysique, CEA.

Stephen Benton, *Crystal Beginnings*, 1977. Collection of Eve Ritscher, London. Photo: Linda Law.
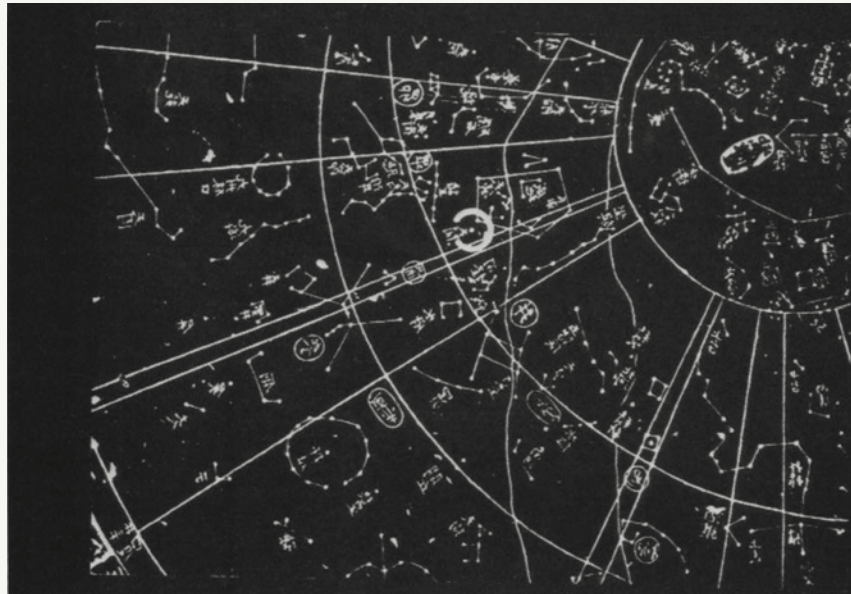
Soundtrack: Heinrich von Kleist.
'[...] — And the advantage that this puppet would have over a human dancer? — The advantage? First of all, a negative one, my excellent friend, namely, this, that it would never be self-conscious. For self-consciousness arises, as you know, when the soul is situated in some other point than in the centre of gravity of the movement.'

Soundtrack: Original montage.
['At the centre / Of stars / Their hearts are furnaces / Millions of degrees / Where simple cores / Grow into larger ones / Through reactions / Energy is released / Matter is ignited / And when everything / Has been burned / The star has finished / Its work / Some sign their deaths / In light / And disperse / Into space / The resulting species / Ready to start over.']

Soundtrack: Jacques Roubaud.
'. object, the unalterable / the subsistent (that which subsists / black [...] / . the total of light is the world /. objects: without colour / like a number /. image: / only / native land / of an object [...] /. photography is the manipulation / of light / on paper. / shadow: inverse elegy'

Zone 19

Unrepresentable: Transparent phytotron containing a controlled vegetation, in a forest setting. Readout by sensors of some of the parameters that govern the growth of plants. On the screen, a display of the physical data.

Calculated Images: Video projection of new synthetic images. On a computer monitor, an interactive display of synthetic images in real time: a feather that moves on the screen when the visitor breathes.

Universality of representation. Enclosed within the representable, we try to push back its limits. The synthetic image is produced by calculation, not analogically. It still offers itself as a simulacrum—but the simulacrum of a fictive reality (a fictive 'content' [*matière*]). Inversely, complexes of known variables await their visual representation. — Inversion of reality and its simulacra.

Stages in the development of a synthetic image of a snowflake. From the journal *Le Débat*, no. 24, plate VII, Paris: Gallimard, 1983.

Zone 20

Painted Scent: Works by Jean Siméon Chardin, Marcel Duchamp, Piero Manzoni, Jannis Kounellis.

Simulated Aroma: Device comprising air-blower and fume hood. The visitor is invited to try to identify the aromas.

A double movement of simulacra: the pictorial work, which once tried desperately to represent aroma, now takes it as a raw material [*matériau*] (the coffee in the Kounellis work); inversely, synthetic chemistry fabricates aromas that the nose finds truer than nature. Reality and fiction trade places, muddying the distinction between the two.
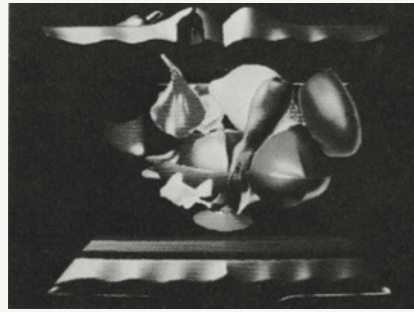
Synthetic 3D images. Still from the film *Gastronomica*, Illegal Command, ATI-Université de Paris VIII, Centre mondial de l'informatique.
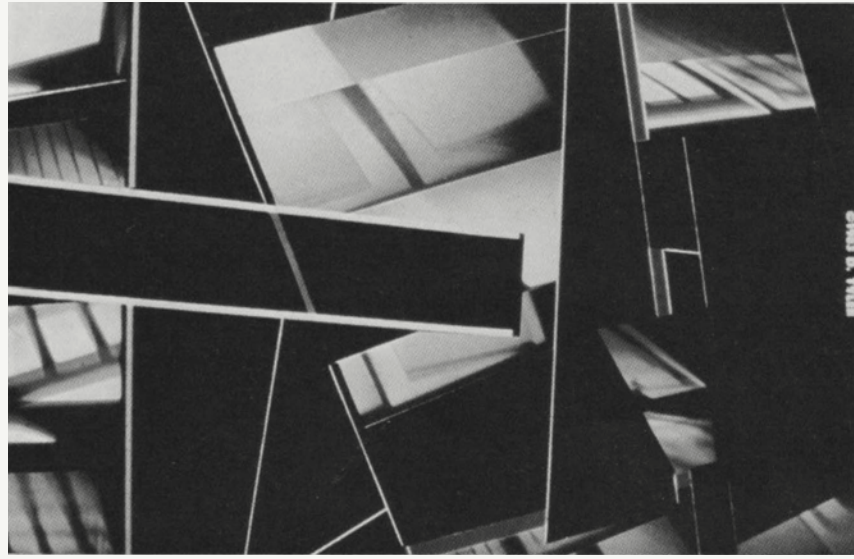
Doug Tyler, *Dream Passage, study nº. 1 (Equation of Time)*, 1983. Collection of the artist, Chicago. Photo: All rights reserved.

Photo of a maquette by Peter Eisenman.
Photo: All rights reserved.

Zone 21

Simulated Visits: Scale model of a bus, its windows replaced by monitors connected to a videodisc player.

Simulated Depth: Three holographic works by Doug Tyler. Integrated prototype for the reproduction of cine-holographic film, presented on a laser monitor: work by Claudine Eizykman and Guy Fihman.

Inverted Reference: Works by Peter Eisenman.

The hegemony of the conceived over the perceived. The building is less important than its representation on paper. The eye can take a walk through fictive sites on demand, thanks to an interactive videodisc, that is to say thanks to the digitisation of the image. In holography, a non-Cartesian optics founded on the interferential properties of the propagation of the light produced, a relief appears from a flat surface, but without this being a subjective effect; and in cineholography, a relief in movement is produced from a moving strip. The new complexities of images teach the eye to see otherwise, and to see other things. Reality and fiction as rivals (cf. zone 20).
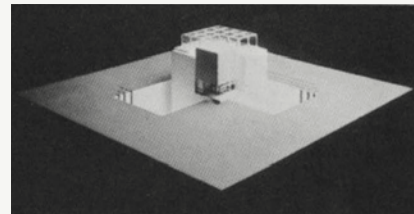
Maternity [*maternité*]

Zone 22
Speed Dressing: Cabin equipped with an optical device that allows the visitor to try on various clothes virtually.

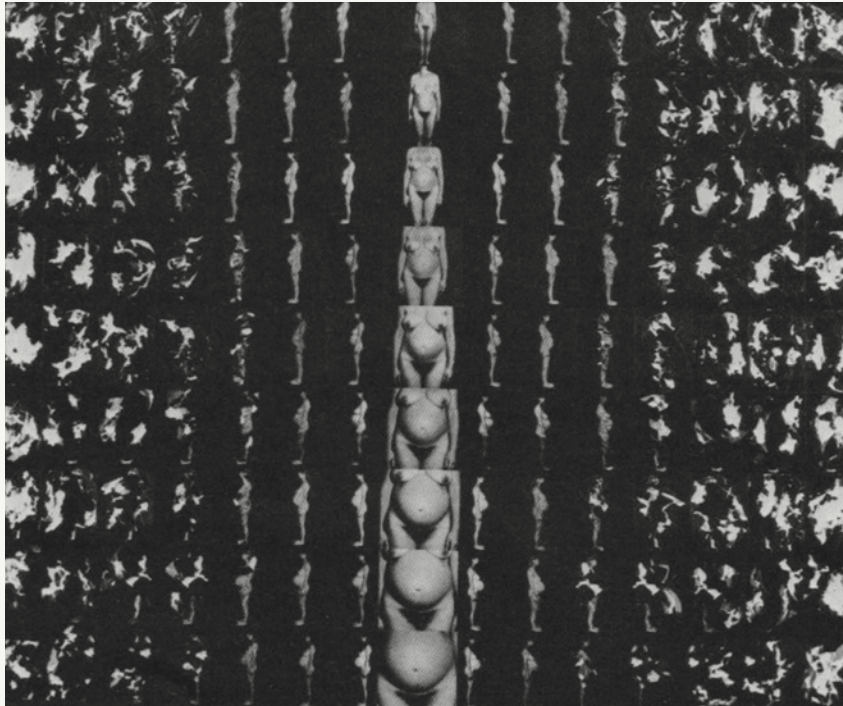## The Three Mothers: A diagram representing the various currently possible modes of design is projected on an enlargement of a photographic work by Annegret Soltau.

Who makes habit, who makes the child? These messages of life, of meaning, who fabricates them and sends them? Is the mother who conceives her little one in her womb and wraps them up in the swaddling clothes she has made for them herself now a figure of the past? We choose the ready-to-wear, and try it on as quickly as possible. We choose the method of conception, the surrogate, and the mode of insemination. When can we expect speed conception?

Annegret Soltau, *Schwanger*, Frankfurt, 1980–82. Photo:

Zone 23
Precooked: Display of pre-prepared, freeze-dried and powdered ready meals. On screen, traditional recipes.

Prespoken: Microcomputer equipped with a program that allows it to 'respond' with generic replies to questions posed by the visitor. On the screen, extracts from *Épreuves d'écriture* (see Catalogue, vol. 1).

Do you still believe that you are the master of words and meals? The nourishment in food and the replies in conversation both come ready made. Who is their author?

Macro photograph of an integrated circuit. Photo: Bull.
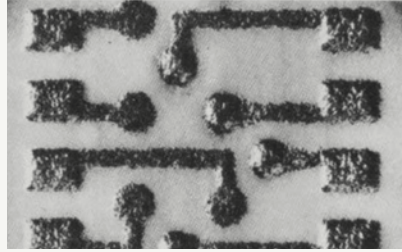
Zone 24
Currency of Time: Direct transmission on the screen of the stock market and economic data from several financial centres. Ingots, paper securities from before their financial dematerialisation. A series of clocks set to different time zones.

Painted Trade:
Works by Quentin Metsys, Simon Vouet, Marcel Duchamp, Andy Warhol, Philippe Thomas, Raoul Hausmann.

The value of money, of the painting, is calculated via their equivalents in exchange. It does not incarnate some quantity, external to the latter, of precious metal or aesthetic appreciation. The demise of both the gold standard and the taste standard. Hegemony of circulation, whose only measure is time. Payment times are speeded up (electronic money), we pay for the duration of credit (interest on loans), and even for the time between the intention and the act of buying (options exchanges). Is the painting anything more than an ornamented cheque? It bears all the hallmarks of being one.

Raoul Hausmann, The Spirit of Our Age: Mechanical Head. *L'Esprit de notre temps*, 'Tête mécanique', 1919, Paris, Musée National d'Art Moderne/Centre Pompidou. Photo: Musée National d'Art Moderne/Centre Pompidou, Paris.

Soundtrack: Hans Christian Andersen, François Rabelais.
'Not only were their colours and its design exceptionally beautiful, but clothes made of this fabric had the marvellous property of being invisible to anyone who didn't know how to do their job, or was otherwise hopelessly stupid [...]. What! said the emperor to himself, I don't see anything! [...] Oh! How beautiful, said the emperor, I give it my most hearty approval!' 'Rising through the diaphragm to just above the shoulders, at the point where the (ascending) vena cava splits into two, he took a left turn and exited through the ear on that same side. [...] I'm sure that you will not believe in such a strange birth [...]. [And yet] if such had been God's will, would you claim that he could not make it so?'
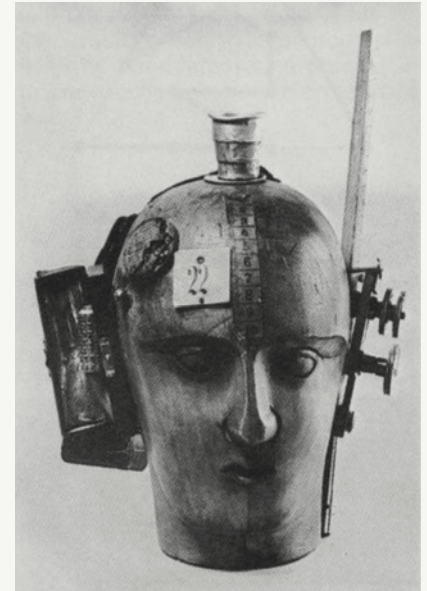
Soundtrack: Roland Barthes, Lewis Carroll.
'[...] The young artist who makes lace out of fish and peppers [...] if he prepares our food in front of us, conducting, from gesture to gesture, from place to place, the eel from the breeding pond to the white paper which, in conclusion, will receive it entirely perforated, it is not (only) in order to make us witnesses to the extreme precision and purity of his cuisine; it is because his activity is literally graphic.' '"The question is," said Alice, "whether you can make words mean so many different things." "The question is," said Humpty Dumpty, "which is to be master—that's all."'

Soundtrack: Dolorès Rogozinski, Jean-Joseph Goux.
'There is no guarantee that the quantity of money printed should remain in a fixed relation to the quantity of gold inside the central bank [...]. What remains is a fluctuating system of relays and relations in which money can only be exchanged at the very end, in a settling up that is always put off until later.' 'Just as Kandinsky and Mondrian gave up searching for any empirical reference, and began to promote pure painting, just as modern art emancipated itself from the constraints of figuration, [...] money, orphaned, frees itself from its original source of value.'

Zone 25

Neglected Terrain: Two-screen audiovisual montage. In a display case, samples of traditional construction materials from a specific 'terroir', from works by Frank Lloyd Wright and Alvar Aalto.

All Kinds of Authors: Branching multicoloured illuminated circuits where various paths are lit up in response to requests sent by the visitor. The question being: for such and such a desirable 'cultural' product, who should be paid royalties, and on the basis of which types of rights?

Even in modernism, the building remained an offering made by culture to nature, by a society to an authority: mother earth, god, the sovereign, the nation.... From where does today's building draw its authority? And how about the cultural work? We are lost in copyright, in so far as contributions to the final product become more numerous as its complexity grows. Is there even such a thing as a final product?

Labyrinth of Language

Zone 26 (and zones 27, 28, 29)
sixteen sites divided into eleven sections

Sections 1 and 2

Evanescent Text and
Dematerialised Text including:
Stories to Order: the visitor makes combinations of preformed phrases. The combinatory rule is aleatory or formalist.
Aphorisms, Rimbaudelaire, Mallarm: syntactical or narrative moulds which the visitor fills with terms chosen from lexical databases.
Artificial Alexandrines, News to Order, Renga: programs for automatic syntactical structuring on the basis of dictionaries of terms chosen by the visitor.

Section 3

Logical Number Series: A series of numbers having been entered by the visitor, the machine continues it and displays its logic.

Number Game: The visitor enters six numbers into a microcomputer terminal, and then a 'goal number'. The machine displays the calculation that will yield the 'right number'.

M.1: A knowledge engineering tool which makes use of a database; the tool is used to teach and test the use of software packages for diagnostics. Can be used by the visitor.

Section 4

Access: Screen pages produced by artists on an assigned subject.

Book Screen: On a remote server, writers' responses to various themes (e.g. writing and new technologies).

Iconography: Documentary images on videodisc (BPI). All of the stored images are accessible to the visitor.

Brick: material used by Frank Lloyd Wright.
Photo: Jean-Claude Planchet/CCI.

Drawing by Saul Steinberg, extract from *Le Masque* (Paris: Maeght, 1966).
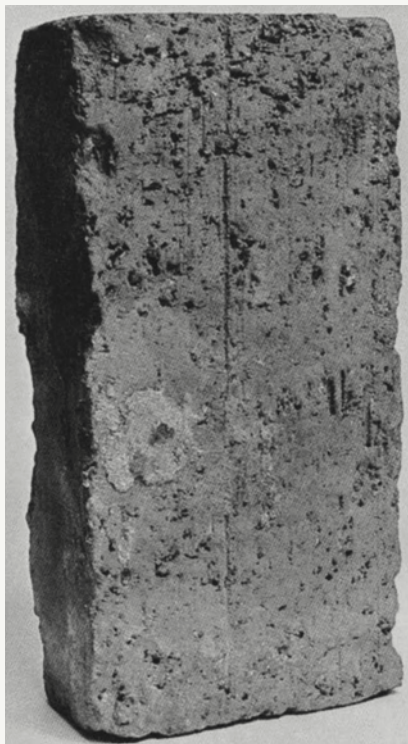
Soundtrack: Yves Klein, Roland Barthes.
'This house must be constructed using new "air" materials, blown into walls, partitions, roofs, furniture. This air must be conditionable, of course, so that the very material of the building itself provides the general ambient heating or cooling for the entire house.' 'The text is a tissue of quotations drawn from the innumerable centres of culture. [...] The voice loses its origin, the author enters his own death, writing begins.'

Soundtrack: Jorge Luis Borges.
'The universe (which others call the Library) is composed of an indefinite, perhaps an infinite number of hexagonal galleries [...] / There are five shelves for each of the hexagon's walls; each shelf contains thirty-five books of uniform format; each book is of four hundred and ten pages; each page, of forty lines, each line, of some eighty letters which are black in colour. [...] First: The Library exists *ab aeterno*. [...] Second: The orthographical symbols are twenty-five in number. [...] / [T]he Library includes all verbal structures, all variations permitted by the twenty-five orthographical symbols, but not a single example of absolute nonsense.'

Section 5
Ladders: Interactive system that generates stories out of 'pre-texts' extracted from various works.

Oronge Juice: Interactive novella with various readings: the visitor plays the role of the investigator.

Section 6
The Lost Object: Interactive telematic fiction. The visitor, after having been informed that part of the 'novel' has been destroyed, is invited to rewrite it using the debris that remains.

Section 7
Trace of the Voice: Spectrographs of sounds (violin, clarinet, spoken vowel) called up by the visitor.

Section 8
Words Are Objects: Video piece on oral poetry.

Section 9
Modular Stories and Songs: Video and sound modules, selected at random by the visitor, are combined to make stories or songs for the eye and ear that always produce some meaning.

Section 10
Trials of Writing: Via Minitel, access to the initial 'commentaries' of authors on the experience of writing (cf. Catalogue, vol. 1), transcribed for videotex. Visitors can call them up by keyword (50) or by author (26).

Section 11
Words On Stage: works by Joseph Kosuth, Ian Wilson, Robert Barry, Claude Maillard.

Machines can fulfil certain mental and/or language-based functions, taking our place or acting as interlocutors. As yet only simple functions, but we are only at the beginning. The old disciplines—logic, mathematics, rhetoric, poetics—are formalised by being formulated in machine language and read in electronic writing. They are connected to one another via more and more complex interfaces. They can or could act as code for executive machines. — Imagine: all the intelligent machines on the planet are a brain, all the mechanical automata and all the receivers are an active and sensitive body. This being does not have a human form, does not occupy space, and does not abide by the time of humans. Will humanity's ultimate purpose be simply to have designed and made this new being? Linked to the immense library of particles that is the cosmos, it is the most complex book or work of that cosmos and the most improbable one, which perhaps subsumes all the others.

Ruins of the Holland House Library in Kensington, London, 1940. Unidentified photographer, National Museum Record, London.

Zones 27, 28, and 29, included in zone 26, involve broadcasts produced by the interactivity between the visitor and the device. They cover, respectively: 'Trace of the Voice', 'Words Are Objects', and 'Modular Stories and Songs'.

The Ungraspable

Zone 30
Deferred Time: Two corridors of
around ten metres length, apparently identical, each equipped with a monitor. Time delay procedure. Work by Catherine Ikam.

Presence of the deferred, absence of the immediate. Time is not unilinear. At every moment the present, future and past co-exist. The present instant is ungraspable. We are always either too late or too early for it. It passes.

Zone 31
Exit Corridor and Chamber:
Projection of Egyptian bas-relief (cf. zone 1), immaterialised by its image.

Life and meaning—are they still given to us by a mother, as a message to deci-pher, to be honoured and returned to her when the time comes? Disruption of this ancient belief.
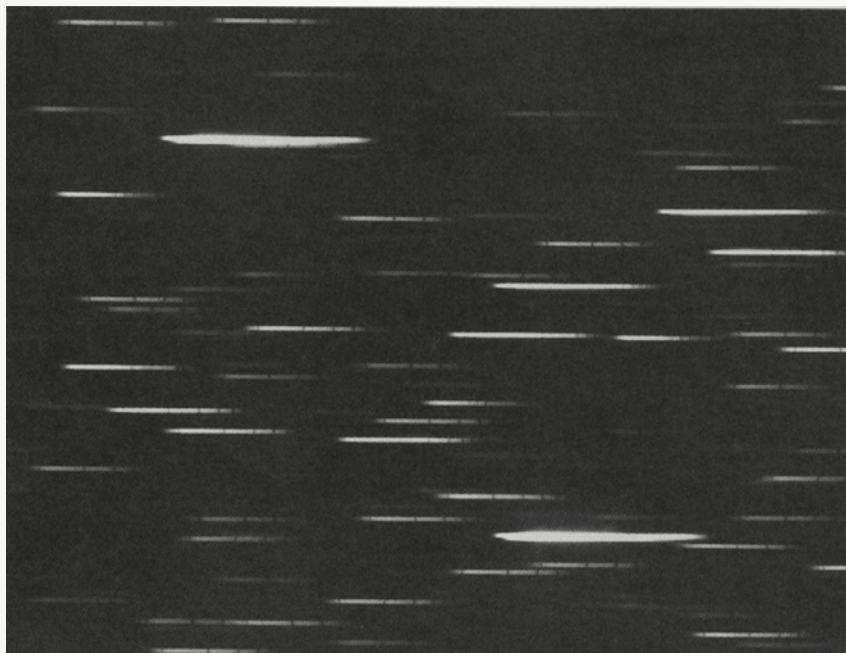
Spectrograph of stars. By the time their signal reaches us, they may already be extinct. Photo: CNRS.

Fragment of the wall of the temple of Karnak North. Montage by Marianne Peltzer using a procedure devised by Jiří Kolář.
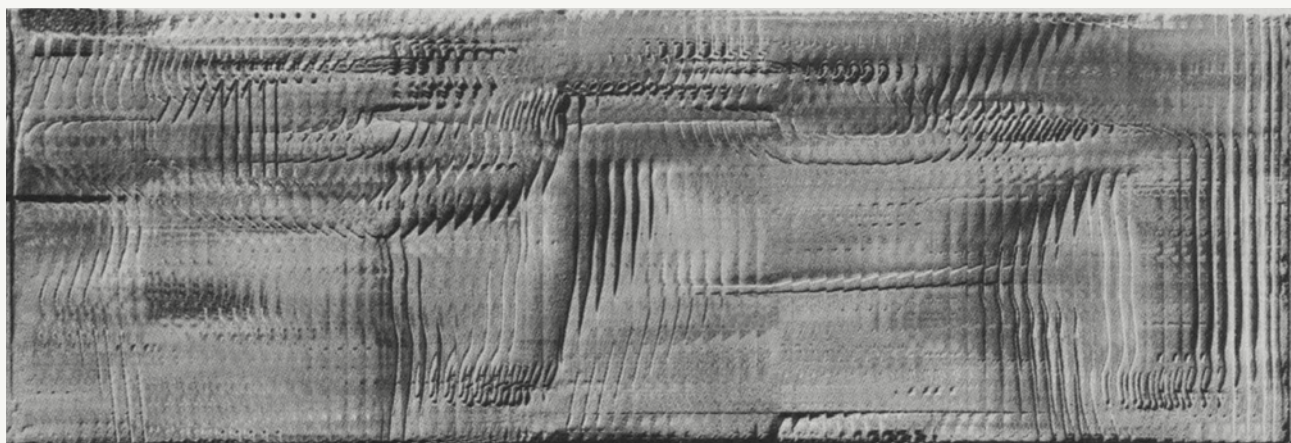
Soundtrack: Original montage.
[Since matter 'immaterialises', space is counted in time. The unit of measure is the speed of light. It approaches that which is distant, distances that which seems con-tiguous. We want to 'gain time'? That is to say: to vanquish our rival, the duration of our lives, measured and beat out by our animal body, limited by death. To lengthen it or cram it as full as possible. We count it backwards, on the basis of 'life expec-tancy'. So that everything that happens to us comes too late and too early.]

Soundtrack: Original montage.

Catalogue

Instead of the catalogue traditionally published to accompany an exhibition, two published products are available.

The first is the print publication *Epreuves d'écriture*, from an experiment in collective, interactive, and remote writing carried out on microcomputers equipped with word processing and communications software, launched in 1984. The machines were placed in the houses of around thirty authors (writers, philosophers, scientists, etc.). Each had the use of an Olivetti M20 (central unit, screen, double disc drive, unit for connection to the PTT network). At Centre Georges Pompidou, an Olivetti M24 stored the texts received, and sent those requested by the authors. For two months, on the basis of a list of fifty words these authors were able to freely add to their own texts and those of other authors, and to experience the time and space of different modes of writing.

The Authors

Hubert Astier - Nanni Balestrini - Mario Borillo - Christine Buci-Glucksmann - Daniel Buren - Michel Butor - Paul Caro - Michel Cassé - Daniel Charles - François Châtelet - Philippe Curval - Jacques Derrida - Marc Guillaume - Philippe Lacoue-Labarthe - Bruno Latour - René Major - Jean-Claude Passeron - François Recanati - Jean-Loup Rivière - Maurice Roche - Pierre Rosenstiehl - Jacques Roubaud - Isabelle Stengers - Dan Sperber - Michel Tibon-Cornillot - Jean-Noël Vuarnet.

Rules of the Game

Moving from graphic inscription to electronic display, gauge the effects of 'new machines' on the formation of thought.
1. You receive a list of fifty words relating to the problematic of the exhibition 'Les Immatériaux'.
2. You give your definition (one to ten lines maximum), on paper, of some of these words (fifteen to twenty maximum).
3. Your definitions, along with those of the other authors, are taken and memorised.
4. You access this memory via a word processor placed at your disposal for the entire duration of the experiment.
5. Your machine is linked via a network to those of the other authors.
6. This arrangement enables you to:
– return to your initial definition for any purpose (refutation, completion, alteration)
– connect with other authors in order to add either to their definitions or their own additions, for any purpose.
7. In particular, we would like you to comment on the modifications that this situation brings about in your experience of writing.

The words

Artificial / author / capture / code / confines / body / dematerialisation / desire / law / writing / space / façade / vague / gesture / inhabit / image / immortality / improbable / interaction / interface / language / light / mirror / currency / matter / raw material / hardware / matrix / maternity / meander / memory / metamorphosis / multiple / mutation / nature / navigate / order / proof / prosthesis / network / seduce / sign / simulation / sense / simultaneity / breath / time / translate / speed / voice /

The second product is made up of two components: an *Inventory*, a file identifying each of the sites in the exhibition, illustrated and with commentaries; an *Album*, a notebook including facsimiles and working documents (sketches, schematics) describing the journey of the design of this event by the team responsible: the work in progress.

Videotex guide

Including a guide to the 'sites' of the exhibition and a transcript of the experiment in collective, interactive, remote writing. Can be consulted in the exhibition site on a microbase server (Project Assistance) via forty minitels, and from outside on the Pluriel server of G.CAM, accessible by dialling 615.91.77—access code OK1 or OK2 or OK3, Section: 'voir', and 614.91.66—access code CLIPP, Service IMMA.

A videotext mini-guide that can be queried upon entry to the exhibition and is periodically updated, giving information on the events programme associated with the show.

Publications

A work from the collection 'Alors' published by the Centre Georges Pompidou/CCI:

« 1984 » et les présents de l'univers informationnel ['1984' and the Presents of the Information World] Colloquium with thirty-three authors.

The birth of new problematics concerning the relations between informatisation, culture, and society.

Issue 35 of the journal *Traverses* published by the Centre Georges Pompidou/CCI:

'Le Jour [Dawn]'

The new means of propagation of light and their new domains of application change the measurement of time. The new techniques help to explode old notions not only of time, but of space. Unlike the solar day, the artificial day dawns at all times, in all places.

Special publication by Éditions Autrement in association with Centre Georges Pompidou/CCI. Collection edited by Elie Théofilakis:

Modernes et après. Les Immatériaux [*Moderns and After. Les Immatériaux*]

The 'materials' of our modernity—ideas, models, and forms, but also bodies and matters...—are plunged into disorder in the technological whirlwind. And yet the after-modern is there, and affirms its new arts of existence.

Publication of a video cassette on the exhibition, produced by the Conseil Audiovisuel Mondial for l'Edition et la Recherche sur l'Art (CAMERA).

Publication of a video cassette with three documents on the exhibition:

curators' journey
journal of the exhibition
reflections on the taking down of the exhibition

Coproduction between UNESCO, CNRS Audiovisuel, ACREDIM, Vidéothèque de la ville de Paris.

Associated Events

Sounds and Voices

What could be more immaterial than sounds? But what could be more material [*matériel*] than the hardware that produces and manipulates them? IRCAM presents four series of programmes bringing together artificial sounds, voices, and instruments.

Concerts by Luigi Nono, *Sofferte onde serene... Guai ai Gelidi Mostri* (French production), a work which combines vocal writing in the tradition of the Venetian madrigalists with the most cutting-edge electroacoustic research being undertaken by the Experimental Studio of the Heinrich Strobel Foundation of the Südwestfunk Freiburg. From 5–9 March. Concerts at 20:30.

Work by the winners of the 12th International Competition for Electroacoustic Music in Bourges (1984) at 18:30. Works by Marco Stroppa, Thomas Kessler, Brian Fernyhough, for instrumentalists and electronics, at 20:30.
An international panorama of the latest research in the use of cutting-edge materials. 22 and 23 April.

Karlheinz Stockhausen concerts. The composer presents *Kathinka's Gesang* (world premiere, commissioned by IRCAM) and other recent works in which live electronics meet acoustic instruments. From 9–14 May. Concerts at 20:30.

Gérard Grisey—Steve Reich concert. From Grisey: *Chant d'amour* (world premiere, state commission). From Reich: *Mein Name ist...* Electroacoustic voices and research. 3 June. Concert at 20:30 (unless otherwise indicated).
IRCAM-Projection space.

Cine-Immaterials

Made up of a timed flow of still snapshots, cinematographic motion is by its nature immaterial. Narrative cinema has above all developed dramatic movement and fictional power capable of immaterialising all the productions of the imagination (from the invisible man to the shrinking man).
Invented in order to see and to know movement, cinema, in its scientific uses, continues to explore phenomena of all kinds, spatially (from the infinitely small to the infinitely large) and temporally (from the infinitely slowed down to the highly accelerated).
In contrast, a simple raw document can be a curiosity that manifests an unusual space-time.
But cinema is also apprehended for its own sake by artists who do not limit themselves to photographic cinema alone, but also practice graphic, electronic (also called video) and even holographic cinema....
So many different determinations and possibilities that all belong to cinema and make it one of the great 'sites' of 'Immaterials'. 45 screenings bring together films and videos around themes defined in relation to the other 'sites' of the exhibition: narrative cinema, scientific cinema, raw documents, artists' films.
Devised by Cinédoc/Ciné-MBXA. Every Monday, Wednesday, and Friday at 5pm in the *salle Garance*.
An timetable of the day's programme will be available to the public at each screening.

Creative Workshop for Children

On the theme 'photocopy, telecopy': make, communicate, and exchange images instantaneously at a distance. On Wednesdays from 14:00 to 17:00, between 28 March and 15 July. Children's workshop in liaison with the exhibition 'site' 'All Kinds of Copies'.

On the Subject of the Exhibition

Seminar: Architectures, Sciences, Philosophies

Within the framework of a policy devoted to high-level research which the President of the Centre Georges Pompidou, in liaison with the Directive Council, intends to develop beginning in 1985, the Espace International de Recherche Philosophique Interdisciplinaire (EIRPI) was created. A seminar entitled 'Architectures, Sciences, Philosophies' (on 'Immaterials') is scheduled for 24, 25, and 26 April at Centre Georges Pompidou. This international meeting was organised by Christian Descamps, in liaison with Jean-François Lyotard and the 'Immatériaux' team.
Over the three-day seminar, researchers of different nationalities will come together to address the themes:

the modern and the postmodern in architecture (24 April);
the notion of proof in the contemporary sciences (25 April);
the notion of matter in contemporary philosophies (26 April).

The evening sessions (21:00) are open to the public.

Debate: Aftermodernity

On the occasion of the publication of the book *Modernes et après: Les Immatériaux*, edited by Elie Théofilakis, published by Éditions Autrement, a debate around the book's theme: aftermodernity, a new human condition with effects on everyday life, biogenetics, the arts, humanities, law, and philosophies. With the participation of the principal contributors: Edmond Couchot, Michel Cassé, Paul Caro, Pierre-Alain Jaffrenou, Paul Virilio, Christian Descamps, Jean-Luc Weissberg, Jean-Marc Philippe, Jean-Pierre Raynaud, Jean-Jacques Beneix. Debates chaired by Elie Théofilakis. (As part of the *Revue parlée* series). 15 April at 21:00, in the *Petite Salle*.
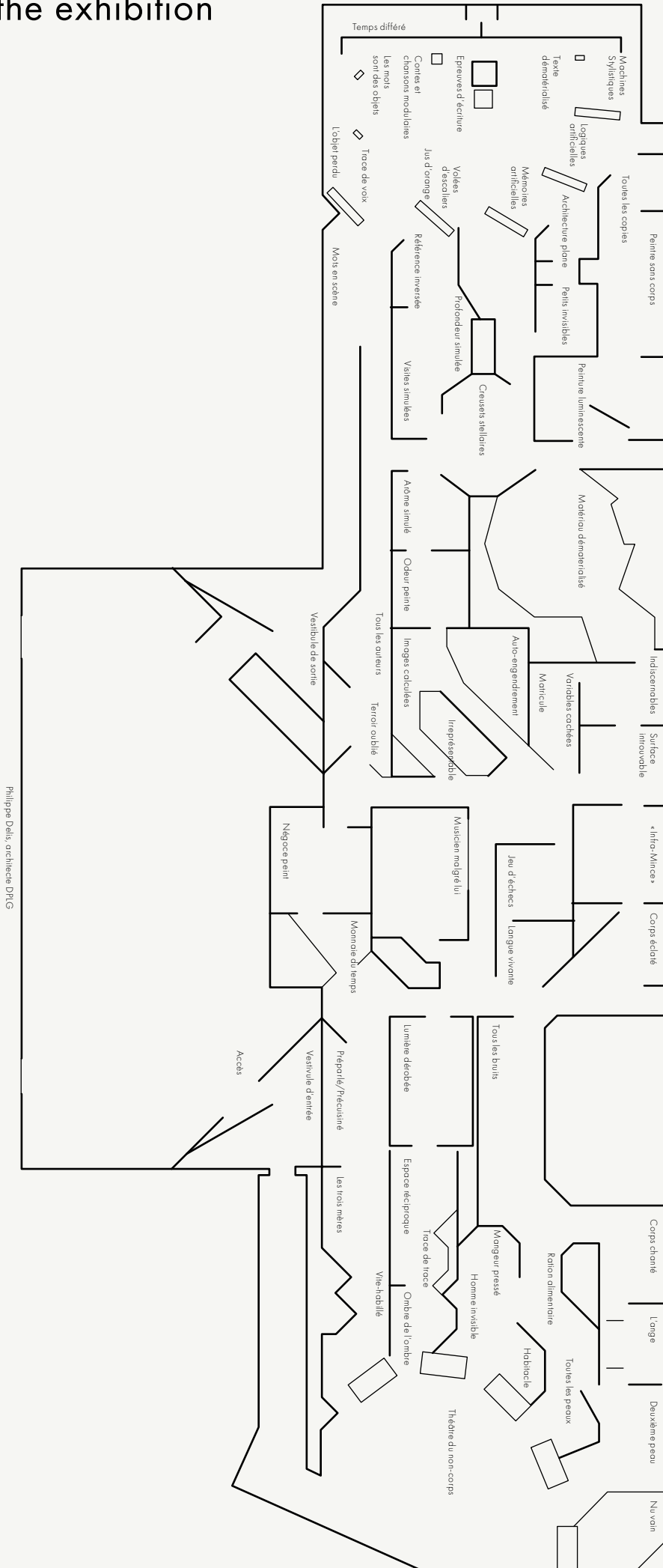
Discussion: Architecture, realisation and derealisation

An approach to architectural 'content [*matière*]' as object, but also as a product of a sensibility beyond the tangible. With Paul Virilio, Henri Gaudin, Alain Guiheux, Jean-François Lyotard and Valère Bertrand. (As part of the *Rencontres architecture et construction*). 27 March at 18:00 in the *Petite Salle*.

For members and correspondents, debate around the main themes of debate raised by the exhibition. 22 May at 18:30 in the *Grande Salle*.

Further events (among others, People and Culture debates on 'Educational Utopia' and 'The Media Exhibition') will complement this programme during the exhibition.

plan of the exhibition

Temps différé

Machines Stylistiques

Texte dématérialisé

Epreuves d'écriture

Logiques artificielles

Architecture plane

Mémoires artificielles

Toutes les copies

Peinte sans corps

Contes et chansons modulaires

Jus d'orange

Volées d'escaliers

Petits invisibles

Peinture luminescente

Les mots sont des objets

Référence inversée

Profondeur simulée

Trace de voix

L'objet perdu

Creusets stellaires

Mots en scène

Visites simulées

Arôme simulé

Odeur peinte

Matériau dématérialisé

Indiscernables

Surface introuvable

Vestibule de sortie

Tous les auteurs

Images calculées

Auto-engendrement

Matricule

Variables cachées

Terroir oublié

Irreprésentable

Négoce peint

Musicien malgré lui

Jeu d'échecs

« Infra-Mince »

Corps éclaté

Monnaie du temps

Langue vivante

Accès

Vestibule d'entrée

Préparité/Précuisiné

Lumière dérobée

Tous les bruits

Les trois mètres

Espace réciproque

Trace de trace

Mangeur pressé

Homme invisible

Ration alimentaire

Corps chanté

L'orange

Vie-habillé

Ombre de l'ombre

Théâtre du non-corps

Habitacle

Toutes les peaux

Deuxième peau

Nu vain

Philippe Delis, architecte DPLG

6 Francs