

Summary

Transitory Space

(p. 26)

Tents form ready-made spaces, but ones that breathe and are open, connecting rather than separating. In the 1960s, Frei Otto and Archigram thought of tents as anti-architecture. Today, however, tents are integrated into architecture to create transitional zones at facades, roofs, entrances and atria which join inner and outer space.

Captured Space

Ron Herron
(p.27)

The given space. Two parallel brick buildings, solid and ordinary, built at the turn of the century, with a space between varying from 7 to 11 metres in width, some 40 metres long and about 18 metres high at the front and 15 metres at the rear. A contained space.

The opportunity — to capture and integrate the contained space and the space between — to hold and make use of it — a soft wrap — flowing, dipping and diving — tailored like a dress, to fit. An ambiguous enclosure that in daylight hours frees the space but at night holds, and gives clarity to the container.

A pre-occupation from my own and Archigram's history. Hard and soft space and form juxtaposed. The formality and solidity of the hard building, holding the space between, draped with a fabric cloak, casually thrown over the void and flying out over the rear lower solid to make a new space. A space captured, wrapped, fine tuned and made available.

Making reference to the soft enclosures of the bedouin, the circus tent, the work of Frei Otto and Christo, expressionism, and haute couture. The poetry of an optimistic, opportunistic architecture.

House in Vaise

Francoise Jourda, Gilles Perraudin
(p.32)

Since the beginning of the century, the abundance of energy has led to architecture which strives for completely homogeneous comfort at all times by using artificial climate control. This cost a more sensitive connection with the weather and with nature in general. Today, modern construction materials, industrial components and, above all, the possibilities for heat regulation and the multiplicity of heating systems make it possible to create different comfort zones within the living space which correspond to different climatic, functional or simply psychological conditions. Thanks to these new capabilities, we can relate to the surroundings in a way which is interactive (able to use climatic resources and to react to

them), rather than passive (defense against climatic "aggression"). As a result, the house may be seen as a living being which changes during its life and is also destined to die (biodegradable).

In line with this philosophy, several "schemata" have been developed:

- Respect for existing nature through minimal interference in the landscape.
- Maximal continuity between interior and exterior and the creation of protected exterior spaces.
- Adaptability and flexibility of the building skin.
- The erection of a "general protective roof," apart from the actual living space.
- Differentiation of materials by the function of the building skin.
- Ability to reorganize the living space.

The house in Vaise makes the entire garden available as living space, in that its large, protectively roofed terraces offer normal rooms to relax or play in the open air. The house "breathes" to a certain extent through the variation of opening and closing sliding walls, complemented by awnings which control the influx of light and the vegetation cycle inside and outside.

The roof of the house is conceived as a canopy which extends the protection offered by the foliage of the adjacent plane trees. It shields the living areas from the sometimes threatening sky, from overly strong light or from excessive solar rays.

In our attempt to realise a building which relates to the surroundings subtly and incorporates rather than opposes climatic conditions, we have decided that the pliability and geometric freedom of textiles make these materials most able to permit the creation of perceptible connections with the topographic surroundings.

Fabric Envelopes for a well-tempered environment

Guy Battle
(p.34)

Lightweight fabric tents are environmentally very sensitive and as such respond to even hourly changes in climatic conditions. They should be considered as "filters" rather than the traditional view of classing which is as weather "barriers." In this way they moderate and regulate the effects of the external climate rather than shut it out.

Thus lightweight fabric structures react almost instantaneously to incident solar radiation — immediately warming up, and likewise will cool down very quickly as the outside air temperature begins to fall. Either of these characteristics may be beneficial, depending on the climate and the building use.

In such a pure environmental form the building skin has a vital role to play in moderating the thermal, visual and acoustic environment.

Fabric materials have a number of characteristics that can have significant impact on the internal environment that must be considered.

- Visual transmission (opacity)
- Ultraviolet transmission
- Infra-red transmission
- External surface finish (colour, texture)
- Internal surface finish
- Air Permeability
- Durability

The choice of a fabric must be carefully tuned to the prevalent climatic conditions and the internal environmental requirements.

A building that demonstrates the successful application of fabric envelopes in a cold climate is Herron Associates fabric roof for the Imagination building.

The Imagination building in London by Heron Associates contains a superb 6-storey atrium with a simple but very effective fabric roof.

Unlike atriums in many buildings this one follows in true Roman Style. It is a transition space and "Meso-climate" that need not be conditioned to the same comfort requirements of the surrounding offices. Indeed the double skin fabric roof allows the transmission of solar radiation into the atrium, keeping it warm in winter. Recirculators transfer warm air at high level in the atrium to low level. In addition the atrium benefits from heat loss from the offices to keep it warm.

During the summer months, vents at roof level encourage natural ventilation and prevent overheating.

The translucency of the fabric permits excellent daylight transmission throughout the year thereby dramatically reducing the necessity for artificial lighting.

Transformable Space

(p. 39)

The room changes according to the weather and its different functions. The building is not a defined object, but a transitory situation, one of several possible conditions. The external space becomes internal space, the internal space, external space. The transformable skin adapts to different activities and temperatures.

Skin in Motion

Pierre du Besset, Dominique Lyon
(p.40)

The building is about living things; in order to present this visually, we have chosen forms of expression which refer to people and to the organic.

The facades on the side of the Avenue de l'Europe and the Chemin des Découvertes are made of textiles. They echo parachutes or modern dragons (wings) and consist of two layers of material which form compartments with gill-like wind holes. The wind fills them variably and sets them in motion. Air-shafts support them.

On the third and fourth floors, a glass wall completes the cloth facade, which functions like an awning. It is mobile and opens according to the sun's position.

Climate Control by convertible roofs

Bodo Rasch
(p.42)

In the hot and arid climate of Madina, the small courts designed for the new extension of the prophets Mosque do not only function as air outlets or simple ventilation openings for the entire Mosque building, they also have an effect as active coolers, provided that an opening and closing mechanism is set into practice appropriately.

There are two climatic functions concerning this: The first is, what was called traditionally the cooling tower. Its functions by the fact, that in a high building the court is at the floor cooler than the environment, due to the fact of being shaded and the radiation of the floor to the cold (if unclouded) sky. This cool floor actually cools air that is directly above it. Because cool air is heavier than warm air it must flow away sideways, while being replaced with warmer air from above. Thus an air flow is coming into existence that actually draws air down in a slow movement, and on days with little wind actually from quite high — being fresh compared with the heated up air close to the surroundings. This effect can be found responsible for the fact that the more southern a place is, the higher traditional buildings become while at the same time the courts get smaller. For example, typical Syrian buildings show seldom more than two storeys height and have large court spaces. In the Hejaz however the heights are already 4 to 6 storeys with very small courts, that often barely can accommodate a Diwam. Coming to Yemen one finds buildings of more than 10 storeys with tiny courts that are now mere cooling ducts.

The other effect is also based in the cooling capacity of the cold clear sky by means of absorbing radiation from the earthly ground.

If a court space covered during the day in order to prevent the sun's fierce radiation, when it is opened during the night, in order to let out the heat radiation from the ground to the sky, a cooling effect is achieved that relates to the degree of radiation of the floor during the night and the degree of protection against the sun during the day. This effect cannot only be achieved by convertible roofs — like the originally Muslim Toldos in Andalusia — but also by grills and semi-open structures, that cover the sun, but open to those parts of the sky where there is no sun (in general north). Also one can find these types of structures in traditional architecture from India to Morocco.

Taken all these effects into account and given consideration that the 27 small and 2 big courts of the extended mosque represent about a fourth of the overall surface, it seems to be possible to produce a cooling effect big enough to eliminate the need of any other cooling equipment; at least during the 90% of time.

The convertible roof with the court space would suffice as cooler for most of the time, thus saving 70 to 90% of the total energy costs for the cooling of the building.

Place des Arenes, Nîmes

Peter Clash
(p. 46)

A modular canopy of 2m x 14m helium filled fabric panels zipped together, provides absolute flexibility of length, width, height, enclosure and shape in this entry. The canopy is held down by cables that are adjusted for height and shape by reels housed in plastic foundation pads. Walls to enclose the site are created by suspending further fabric panels along zip lines.

Space as Mise en Scène (p. 47)

The fixed boundaries of architectural space disappears. Light, sound, temperature and textiles make the room appear and disappear. "Soft space" replaces "hard space." The mise en scène changes with human activities. Textiles enclose the events, which are the actual spatial experiences.

A Path as Mise en Scène

Fitch RS
(p.48)

The idea underlying the Fitch architecture office's design for an Arab pavilion at the 1992 Seville world's fair is the mise en scène of the area's history, its modernization and Islamic tradition. The playful form of the exhibition rooms results from the requirements of the mise en scène. The individual rooms are held together by a wall that surrounds the pavilion and a tent that roofs the ensemble. The tent covers the building and free spaces equally. Interior and exterior space flow into each other. The visitor is slowly lead into the artificially staged world.

The space is staged with projections, light, sound. The first stop on the path simulates a desert night: a nomad tent stands under a "heavenly vault," people sit around a hearth, the bubbling of a coffee pot and the sweep of the wind over the sand is heard. On reaching the "Origin of Islam," the room becomes light. Stepping on a moving belt, the visitor travels through the six regions of the realm. He then arrives in an audiovisual theater, in which the present-day country is shown.

Fitch RS specialize in exhibition building and museums. They have consulted for firms such as Foster Associates, Walt Disney, Starvision and Centre of Alternative Technology.

Diatope

Iannis Xenakis
(p.50)

I wanted to deal with the abysses that surround us and among which we live. The most formidable are those of our destiny, of life or of death, visible and invisible universes. The signs that convey these abysses to us are also made of the lights and sounds that provoke the two principal senses that we possess. That is why the Diatope would like to be a place for the condensation of those signs from the many worlds. Rational knowledge coalesces with intuitive knowledge, or revelation. It is impossible to dissociate one from the other. These abysses are unknowable, that is to say, knowledge of them is an eternal and desperate flight, composed of milestones — hypotheses across the epochs.

Architectural. The firm of the plastic shell of Diatype is a materialisation of a project which I have had in mind for more than twenty years. The effect of architectural forms has a quasi-tactile influence on the quality of the music or show that is performed here: The form of Le Diatope, because of the laser trajectories, had to conform to the following principle: a maximum of free volume for a minimum of enclosing surface. The classical answer is the sphere. But the sphere, beautiful in itself, is bad for acoustics and less tangibly rich than some

other, double-curved, warped or skewed forms. Whence the current configuration, which makes use of hyperbolic paraboloids, thus shaping a kind of enveloping form, closed and opened to the world at the same time by the convergence of its geometrical construction.

Musical. The music of La Légende d'Er is made of the following families of sounds:

- a) instrumental, for example, the sonorous shooting stars of the beginning and the end, or the sounds of the African jew's harps, or of the Tzuzumins (small Japanese hourglass drums).
- b) noises, for example, clapping special blocks, scrapings against cardboards...
- c) realised by mathematical functions on a computer and converted from digital to analog at the Centre d'Études de Mathématique et d'Automatique Musicales (CEMAMu). The music is on a seven-track tape. Each track is distributed over the eleven high-quality loudspeakers arranged under the shell of Diatope. This static or cinematic distribution is realized by means of a special computer program.

Visual. The visual acts are built from mobile configurations, either of points (electronic flashes) or of lines (laser beams). The 1680 flashes form galaxies in movements, thanks to the rapid turning on of the flashing lights (every 1/25 second), and all kinds of interpenetrating, disappearing, rebounding, transforming figures. It goes without saying that the organization of these light gestures in their continuity or their discontinuity is regulated by tangles of mathematical functions ranging from functions of imaginary (complex) numbers to probability distributions. The beams of the four lasers are taken in charge by some four-hundred special mirrors as well as by optics designed for the intended effects. In short, just as our universe is formed from grains (of matter) and straight lines (photon radiation) ruled by stochastic laws (probability), this spectacle offers a reflection of it which is miniature but symbolic and abstract. So music and light unite together. In some sense, this is a kind of cosmic "harmony of the spheres" which, by means of art, becomes one with that of thought.

One must create a space which is strong, rigid, but which nevertheless allows for a richness in arrangement, in the permutation of things and events. This space, it would at first be like an envelope which would serve as a sonorous shelter, as thermal insulation. At the Diatope we used a fabric that had no sonorous inertia, but that nevertheless reflected a part of the sound, and there was no untimely echo, rather a satisfying diffusion of the sound.

The envelope need not be unique because there are many things arranged around the periphery. What? Sources of lighting, eventually sources of sound, and then the direct contact of the production department with the space... To allow for the most liberty, we need a sort of metallic net on which to hang all sorts of things, like islands fastened to the envelope. Behind the cloud of these objects, there is the shell, the actual cover.

Just as the first membrane, the netting, is open and pierced, it is the second membrane, this shell, which will serve as reflector. While visible forms always play a role, we can also be sensitive to invisible forms. The human eye and ear are sufficiently skilled and cunning to sense the proximity of forms from afar. Finally, we must connect this closed space with the

exterior. Now and then, one must be able to leave the events of the interior.

Let it breathe

Toyo Ito
(p.53)

To imagine the scene of a cherry blossom party, where people drink sake with friends on a red carpet in a light tent under the trees, is to understand the innermost character of Japanese architecture. People gather upon the information that the cherry blossom is in full bloom. A primitive architecture of carpet and tent is there. People's behaviour in coming together exists first. The architecture only comes into being to envelop the scene. This architecture does not confront, but assimilates with nature completely. The cherry trees alone create a unique space, and when the petals dance in the wind, they usually enhance the beauty of the scene. If a carpet is spread on the ground, and tents are pitched by considering the favourable wind and sunshine, the architecture is installed as a minimal filter to visualize the natural phenomenon with nature rather than against it. Cherry trees stretch their branches above the tents, and flower petals incessantly fall upon people, who fully enjoy the pleasant encounter. The party reaches its prime when the sun sets and dusk deepens, the scene becomes veiled with darkness. Some start singing and others dance to music. As the night wears on, people become weary of pleasure, take down the tents, and go home, leaving the cherry blossoms behind, floating in the dark like white clouds. The end of the party means simultaneously the end of the architecture.

Designing architecture is an act of generating vortexes in the currents of air, wind, light or sound. It is not constructing a dam against the flow, nor resigning oneself to the current. For instance, if one erects a pole in the river, changes are caused in the water currents around the pole. If one puts two poles near each other, the movement of water changes in a complex way due to their interference effects.

In nature, the place where people gather is determined by the terrain, location of trees, or direction of the wind. If it is an urban space, the place where people gather is selected by more artificial factors, such as transportation among them. In both cases when architectural factors such as columns and screens are placed in the space by taking into account the wind, sound, information, flow of transportation, etc., the mode of flow changes instantly to cause small eddies around such installations. This effect could be a minimal device for creating a place for the gathering of people. In order to turn it into an architectural act, it is necessary to impose some kind of organization on these architectural factors. It may be named a structure or a style in an abstract sense, but when given a form, the lace of the event becomes an architecture. In other words, an event will not end as a mere event but remains, to be incorporated into a stable and orderly system.

The act of creating architecture in a city like Tokyo is like playing chess. It is a completely relative game. Buildings on the right and on the left of the site differ in volume, form, height, materials and structure. There is no knowing when these buildings will be demolished and replaced by something else. It is an

endless game. What context can we hope to plot against such a fleeting urban scene? What we can achieve is merely a temporary but new tense relation in the urban space as on a chessboard. To do this we can simply throw in a new vortex, to stimulate the space and induce a new flow.

A new vortex is like a tent for an improvised theater on a vacant lot. We only need architecture like a video image — which appears for an event and is then erased or disappears when the event ends. The city of Tokyo no longer required formalistic expressions, let alone monuments.

About two years ago, I was asked to design a restaurant/bar in Roppongi. Within two weeks after the decision on change, the application for a building permit was filed, and the construction was completed four months later. We naturally could not afford to elaborate the plan. When legal regulations such as the rate of building volume to lot and the limit of oblique line are applied to the lot with a complicated contour, the volume of the structure is automatically determined. Therefore, the only tasks left for the architect are to plan what kind of a shelter to build within the maximum building volume of the lot and what kind of an interior space to create.

Taking these conditions into consideration, a tent would have sufficed as an architecture. In fact, the possibility of a tent was thoroughly examined. However, a temporary construction is under the same legal regulations as permanent constructions unless it is pulled down within a year. Further, a restaurant is required to provide not only shelter from wind and rain, but also airconditioning. The costs allowing such performance necessities are not much less than ordinary permanent constructions.

The construction ended up being a building which looks like a tent hut, but, in fact, was built with steel frames and a metal roof presenting a simple and blunt appearance like a loft. In the interior of this restaurant named "Nomad" (JA8611/12) countless aluminum expanded mesh panels and pieces of metallic fabrics float like a cloud, and the ceiling painted in blue appears as the sky. I imaged a space where people gather and eat under a sheet of cloth like a stall in Southeast Asia.

Desire of a client or an occupant of an architecture usually finds expression in its shape and material. The conclusive cosmology which a construction inevitably acquired as it established itself as an "architecture", for example the monumentality, expressivity or show of force which asserts the existence of the architecture, finds expression in due course. And this expressivity and show of force oppress and alienate nomadic bodies which recognize the space as an ephemeral residence. To the contrary, since a temporary, unsophisticated film does not force any meanings just like a temporary enclosure at a construction site, it seems to give the bodies fresh and pleasant feelings.

Film based on Performance

In view of the contemporary relationship between bodies and architecture, what can a film for architecture be? To tackle this problem, I have tried to grasp architecture from an angle of how to cover the site of performance putting an emphasis on people's performances. Seizing every opportunity, like design exercises at the university and overseas workshops involving young architects, I pursued this theme. For example, for a theme of "residence", I asked

students to construct the sites of performances which seem important to them using only furniture. The space for eating, the space for sleeping, the space for working, the space for a rest—small cores were formed on the flat floor by furniture expressing each student's attitude and style of get-together. Since furniture silhouettes people's attitude, we can clearly picture people's behavior and ways of get-togethers by simply looking at the arrangement of furniture. Next, we assembled necessary elements around the furniture. These elements include architectural components like a piece of wall, pillar, a part of ceiling, window, and home electric appliances like lighting apparatus, TV set, audio-visual facilities and air-conditioned equipment. Various objects start floating softly and freely in the surrounding spaces around the furniture. Then, we combine these soft and small cores step by step according to the closeness of the relationship between them. Even at this stage, we try to avoid, until the last moment, bringing in a homogeneous and absolute grid-like structure. In order to integrate this site for performances to form one, single space finally, we need a logical systematization. However, we keep it at a level of partial architectural changes as far as possible. We try to hide the entire picture of the architecture until the last moment. In other words, this is a challenge to create an architecture by filling out the space only from inside and not receiving any restrictions from outside.

The Pao As A Dwelling of Tokyo Nomad Women

A few years ago, I produced a model house titled "The Pao As A Dwelling of Tokyo Nomad Women" for an exhibit held at a department store in Chibuya. Single women who are drifting in the vast plain of information, Tokyo, are the ones most enjoying this urban life. Then, what is a house for them? Their concepts of house encompass the whole city, and their lives are like collages, made by experiencing fragments of city space. The locus of these collages differ slightly day to day and, therefore, the nomads never become tired of the ever-changing collages.

However, there are many, in addition to the nomad girl, whose lives are scattered and who barely build an integrated image of a house by combining fictitious city spaces. Now, almost all city dwellers are forced, more or less, to enjoy a put-together life like a collage based on false experiences. Performances previously enacted inside a house are cut into pieces and extracted for dispersal to city spaces; they become more diversified than before, more specialized, more identified, and less real. The cafe and laundries are classic examples. Now, fast food shops, take-out-shops, convenience stores and even saunas are robbing the house of not only the living room and dining room, but also the kitchen and bathroom as well. To put it strongly, it seems to me that there might come a day when a bed and a TV set and a trash basket suffice for a house. Private residential space is being absorbed by city spaces and therefore allows us such an image.

We are beginning to feel more comfortable in the fictitious space of images rather than in serious, real spaces. The city will continue to lure Android-like bodies, to offer spaces full of false experiences, and to cultivate Androids worthy of this stage.

Projection and non-simultaneous space
A conversation with Joachim Krausse by
Nikolaus Kuhnert and Philipp Oswalt (p.57)

ARCH+: How can a mise en scène define a space?

Joachim Krausse: With the mise en scène, the separation or connection of the individual senses must be designed — seeing, hearing, smelling, touching etc. The perception of space must be dealt with.

Psychologists have studied the perception of space in general. When entering a room, you involuntarily inhale as you cross the threshold, so the first thing you notice is how the room smells. That determines the perception of the room. Then comes the auditory experience. You unconsciously register the sound of the room — the *atmo*, as the film-makers say. This *atmo*, the sound of the space, very effectively communicates its size, which is sometimes difficult to measure visually. The material you walk on, the tactile perception your feet make, is also very important for your impression of the room. Only then comes what you see.

If you want to define a space, you have to deal with these individual sensory functions. It is not that easy to make a particular space. In exhibits where apartments are built as 1:1 models, the feeling of the space is never there, because the *atmo*, the acoustic of the space are not considered.

In artificial environments, the dissociation of sensory perception into individual functions makes it possible to produce completely new spatial impressions by combining different perceptual spaces. For example, when you move through the city with a walk-man, you see the open sky and hear music produced in a closed space. In a stage set, the space changes constantly. It is no longer static.

When the architect wants to design the individual channels of sensory perception, he basically has to design scenarios, scenarios of action and movement sequences, in the space he is designing.

Before the First World War, Adolf Loos, Josef Frank and Stirnad dealt with these questions in that they understood the room as a path, as a process. The room as process can only be designed with the help of scenarios. Out of the universe of all action possibilities, you have select series, construct, make series of spaces, distribute functions and materials. This has much to do with theater and film-making. It would be interesting to approach the designing of a room this way and to forget architecturing.

Many architects have become interested in the mise en scène. Toyo Ito, for example, works with a design method like the one you have just proposed. He first designs furnishings, in other words, a scenario, and then what goes around it.

Architects have noticed in the meantime that the staging of the everyday world has escaped them, that it has been taken over by the media. Portables, ghettoblasters and walk-men are examples of space you can carry around with you which replaces architectural space. Television defines the perceived room, while the constructed room, designed by the architect, fades into the background, becomes secondary.

The same thing happens when you read. When you open a book, you become absorbed in it, you are absent. You enter another space, a media space. And the space produced by media is becoming increasingly widespread. A movement from architecture to the media has taken place. Traditionally, it fell to the architect to direct the everyday world. That is why the Baroque holds such a fascination today. Then, everything from the daily life of the court, the ceremonies and festivals, to urban planning was totally directed. And since architecture has lost this direction of the everyday, architects have begun, and rightly so, to think about the mise en scène again. By that I do not mean a particularly formal ambition in relation to the design of buildings. That completely misses the problem.

What is the role of the viewer, the user in a mise en scène?

There are basically two possibilities for designing the mise en scène. On the one hand, there is the kind of mise en scène which operates terroristically as a simulated world which can only be passively received. A high resolution television with quadraphonic sound which turns an entire wall into a screen completely dominates you. When you sit in front of it, actually in it, you are engulfed by it, you live in this diorama, you cannot withdraw from it. You drive a car in bed.

On the other hand, there are interactive forms of the mise en scène in which the viewer becomes an active subject. For example, there is performance art in which the action artist does not determine the public's behavior. Through his free movement in space, the actual form of the performance is found. That is also the main direction in modern music, in particular with John Cage. Cage is very strongly influenced by Buckminster Fuller's idea of ephemerization. In his music, silence, interruption, plays a role similar to that of the disappearing skin in Buckminster Fuller. Cage tries to awaken the listener's music through silence.

In terms of architecture, this means that the very withdrawal of the architecture, its disappearance, activates the viewer's imaginative world. (See ARCH+ 95)

That is what is so pleasant about textile buildings. You can think of a circus tent, in which it is so easy to produce a dramatic silence.

Cage works with another means of activating the listener as well, chance. A certain amount of indeterminacy and chaos rules and must be newly ordered by the listener, in contrast to a completely ordered world, a programmed mise en scène which largely excludes a personal interpretation. The non-clarity, the multiplicity of possible readings challenge the listener to create an order.

The same thing happens with seeing. The concept of projection is ambiguous. There is not only a projection of technical images, but man projects ideas and images. The sense of sight works projectively, the eye is simultaneously camera and projector. It is an active organ.

For example, Malevitch's white square calls forth the viewer's projections, in contrast to a television.

The decisive turning-point in post-Einsteinian

physics is the consideration of the observer. You can no longer place yourself alongside an event and speak as a subject about an objective state. The separation of subject and object is definitely over. Instead, there is a continual reciprocal effect between the two, an interactive oscillation. Ephemeral structures encourage this interplay, allow both. They are equally suited to both kinds of projections, inner as well as outer.

The theory of relativity also destroyed the idea of the homogeneous absolute space. In the space-time continuum, the observation is dependent on the space at the point in time. Likewise, an architectural space which is no longer homogeneous, but differentiated into various areas through light, sound, warmth, etc. enables the viewer to influence his situation by moving in different spatial conditions.

This movement in space opens new spatial experiences when individual sensory experiences are designed independently of each other. When someone has a walk-man on and goes through the city, it can have a stimulating as well as an ear-splitting effect. The normal sensory relationship, the harmony of optic and acoustic reality, are destroyed. An optical event is overlaid with a completely independent acoustic experience. New sensory relationships must be constituted. The human projective capacities are activated, although the acoustic world in itself is fully determined.

By moving in space, you are able to compose sound and image tracks. You sit at the cutting table, so to speak. That is a very good example of non-simultaneous space. Non-simultaneity is the main property of the modern concept of space. For a long time, that has not been understood, although Einstein discovered the non-simultaneity of the universe. Completely misunderstanding Einstein, Gideon writes in *Space, Time, Architecture* of the discovery of a principle which would equally penetrate everyday life, art and physics, and which Einstein allegedly carefully defines in 1905: the principle of simultaneity. Einstein wanted to prove that the world is non-simultaneous. Gideon made a basic error at the crucial point in his book.

Why is Einstein's space nonsimultaneous?

Einstein's space is nonsimultaneous because in the space time continuum, events only partially overlap. Looking at a starry sky, you do not see what actually exists. You see things together which never existed at the same time, and which do not exist anymore. What you see can only be seen from your standpoint and at that moment. It is no longer possible to talk about simultaneity. The challenge for the architect today is to deal with nonsimultaneous space.

English translation by Capers Rubin