

Architecture as Multimedia

Jean Nouvel, the DR Concert Hall, and the Gesamtkunstwerk

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Only that art-variety, however, which wills the common artwork, reaches there with the highest fill of its own particular nature. RICHARD WAGNER

You do not have to move around much in cultural life these days before you experience many different attempts to combine art forms and create a total experience – *total art*. Often, though, such attempts are based only on the vague idea that if we gather a lot of stuff together – music with images, dance, film, architecture, etc. – something fantastic will probably come out of it; a new totality must arise that is greater than the sum of its parts and encompasses us in a new way. At least that is the idea. However, this is a derangement of the senses which is rarely based on any articulated or reasoned relationship among the arts, between seeming and reality. A lot of things are being proclaimed as *Gesamtkunstwerke* at present, but few of them relate to the actual problems of this tradition, which ranges back through the experimental art forms of the avant-garde to Richard Wagner's still controversial music dramas. The composer himself imagined an *artwork of the future*, a *Gesamtkunstwerk* that realized all the potentials of the individual arts by uniting them on the stage and conjuring up a new reality for the senses. Ever since, this dream of the unifying and boundary-transcending artwork has haunted the arts, film and multimedia.

The architect Jean Nouvel makes no great claim to have created total art. In many of his buildings, though, he has investigated the relationship between architecture and various other arts and media in ways that still make it useful to see him in the light of the tradition of Wagner. A quite obvious example is his DR Concert Hall for the Danish broadcasting corporation in Copenhagen, which has been inaugurated January 17, 2009. In this hall the architecture is not only meant to provide an acoustic background for the music; the surrounding walls are also to be projection screens for moving pictures. Nouvel's architecture offers an appropriate

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Jean Nouvel, DR Concert Hall, 2008, Copenhagen.
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Jean Nouvel, Lucerne Concert Hall, 1998.
Photo by Jean Nouvel, from his book *Luzern Concert Hall*, Basel 1998. © Atelier Jean Nouvel.

occasion for the consideration of the art of building both as a total experience in itself, and as a setting for the other arts.

In itself, any building forms spaces that can surround the body. We do not experience it only by letting the gaze stray; we must move around and into it ourselves. We sense passages and sequences of rooms, the fall of the light, and the materials. So the architecture is experienced as unfolding not only in space, but also in time: the time of motion, the rhythm of the day, the shifts in the light over the course of the year. Architects can approach this in very different ways and can play more or less consciously on a unifying effect. Some aspire to make the spaces and materials appear clearly defined, and to make the building transparent. Others work more towards creating an experience where the fixed forms can lose themselves in darkness, disappear in reflections, so that the materials and the sequence of spaces come out as surprises. Most architects will of course want a play of details and moods in their buildings, but Nouvel arranges the totality every time to test new limits. In particular, his own photos of his Lucerne Concert Hall from 1998 show his preoccupation with the multiplicity of effects. The forms of the building are in fact precise, the lines straight and the materials simple, but they are constantly challenged by the play of light and reflection. And if you imagine yourself moving around there, there seems to be an endless variety of light-impressions beneath the great roof overhang which unites all the facilities in Lucerne. There is a world of difference if you think about the corresponding overhang of Henning Larsen's Opera in Copenhagen, which, to quite a different degree, makes the light contour distinct forms.

You could say that architecture is only manifested expressively when we move through it in sequences of spaces and impressions. Independently of its solid substance, the fixed materials and forms, it is only really *performed* when we experience it. The German art historian August Schmarsow chose to compare the art of building to a musical work that only really exists when it is interpreted and performed.

One major distinction, no doubt, is that the musical performance thunders forth and fades away almost in the same instant in which it comes to life, whereas the erection of a building persists and may indeed be permanent. But how important is this distinction to our present question? Do the massive pile of purposely hewn stone, the well-jointed beams, and the securely arched vaults constitute the architectural work of art, or does the work of art come into being only in that instant when human aesthetic reflection begins to transpose itself into the whole and to understand and appreciate all parts with a pure and free vision?¹

The reflection is from 1893, and the thought later became an important precursor of the experiments with space and pure forms in modern architecture. As a parallel to music as *tone poetry* Schmarsow spoke of architecture as 'space poetry', and this could also be a fine name for Nouvel's work when he creates experiences and moods, and sometimes actually imagines situations and courses of events in the buildings. He often says that he thinks in terms of film performances, of actions for which the architecture is to form the setting. The effect of architecture is conceived not only as abstract play, but as possible meaningful spaces, as the emotions and memories that the art of film also tries to capture and play with. I will be coming back to this again.

Nouvel too mentions the leap from score to musical performance as a parallel to architecture, but his point is slightly different. He is talking about the crucial leap from drawings and ground plans to the erected building. "There is a huge difference between a graphic culture and an architectural culture, between writing a score and the music that we are going to hear, once it will be interpreted."² Architectural drawings and pictures can often take on their own life independent of the physical erection of the buildings. Many other things may come into play to give them a convincing effect. That is why Nouvel points to a graphic culture, which does not necessarily have much to do with the architecture that is built in relation to it. Architecture must be conceived and encountered, overall, as a physical experience in full scale, as bodily movement in space and time, as activity on many scales from the detail and the surface to the totality and surroundings of the building. As such, architecture can be understood as a kind of *Gesamtkunst* in itself, as the artistic realization of a physical reality. But it must at the same time be able to step back and function as a framework for social and practical functions, and for other arts.

Vision machines

When Nouvel himself points out this distinction between physical architecture and graphic-visual representation, it may seem surprising that at the same time he includes actual image projections in his architecture, as on the glass walls of the DR Concert Hall. In rebuilding and furnishing a hotel in Lucerne in 2000 he even used stills from films on the ceiling in all the rooms. This is a strong way of giving each room its own character, and since the furnishings and fixtures are very simple, it is up to the visually exuberant scenes to stamp the room with an atmosphere. The ceiling pictures offer themselves as possible scenarios for the guests' own performances and can also be seen from the street by the passers-by as associations with the many

destinies that are played out in the hotel. They are projection surfaces for the collective imaginings formed by innumerable strong film scenes from hotel rooms, from the abysses of travelling life. How this will work with the moving projections in the Concert Hall only time will show. If they are to reflect current activities in the hall, it will presumably be up to DR's media staff or artists to create a visual aspect. The architect only prepares the way for the obvious possibility of linking the concerts with DR's other activities and making the walls of the Concert Hall a display window or facade for the whole of DR. However, the idea is also that image projections on various scales with changing angles and dissolves will have an effect on the experience of the architecture. They can help to delineate shapes, deform surfaces and play on depths, reflections and degrees of transparency. The building in daylight will be quite different from the building in evening light, when the projectors can be lit.

Besides allowing the architecture to be expressed magnificently in physical form and space, in these examples a different dimension is added where the architecture also becomes a *vision machine*. The spaces of the architecture can form the experience of the images, and the images can challenge the experience of the space. Permit me to bring up the Festspielhaus that Richard Wagner had build in Bayreuth in 1872–74, because it is unusually well conceived of as a vision machine. The exterior of the hall is hardly more than an arbitrary shell around the internal functions, the audience and the stage spaces with all their mechanics. The interior, however, was an example of innovative thinking. First and foremost it represented a showdown with the class-divided audience space with balconies and boxes. Everyone was to have the same view, to share the same experience. The audience was not to look at one another, so all the seats were to be oriented towards the stage. The point was to see, not to be seen as in the Baroque theatre. We take it for granted that the lights are put out in the auditorium, but it was Wagner who was first to insist on ensuring total attention to the stage. The orchestra pit was even placed so low that the sight of the musicians could not disturb anything either. The pit, as he had earlier put it, collaborating with the great German architect Gottfried Semper in Dresden, was simply to function as a *mystical abyss* that shifted the scene from the auditorium, borne up by the music.³ The distance became indeterminate, so the actors would seem larger and the whole stage would appear as a higher reality. All of the architecture was thus thought out and oriented towards this focus on the stage, the undisturbed illusion for everyone. This is what we are familiar with not only from modern theatres, but especially from cinemas, which are to a great extent heirs of Wagner's vision machine. One

could say that the architecture steps completely into the background, but is still quite concretely a part of the realization of the other arts. Music drama and film can hardly be shown without this.

The Festspielhaus in Bayreuth became a monument of the new popular revival Wagner wanted, but it is interesting to compare its monumentality with the momentary aspect that was at the same time the essence of the music drama. Music is the most transitory of the arts, and the audience was to be captured by the action of the moment and carried along into the dimension of time. Crucial to the *Gesamtkunstwerk* was the simultaneity of the expression in the different arts. Words, music, action, dance and images were to reinforce one another and create a living effect on the stage. Although many people may associate Wagner with the bombastic, with overdressed Valkyrie and swan knights, his original aim was in fact to challenge the artificiality of art and to gather the arts into a living, pulsating whole in flesh and blood on the stage. The words came alive in the singing, the emotions were given power by the music, and stories became action with the performers. All the resources were conceived in combination so that the senses confirmed one another, and appearance could become reality. The paradox is that this potentiation of art into reality was of course dependent on the perfect illusion. The festival hall was conceived as a complete machine for producing the illusion, and all the technology behind the effects had to be hidden. We may think something similar is the case with film today. Film is at once the art form closest to reality, able to draw on the raw exposure of the close-up and follow and fix transitory realities, and the art of pure illusion where there is no materiality. Cameras, strips of celluloid and computers do not belong in the picture. For Wagner, as in film, reality is actually of so little importance that it quickly becomes a matter of making the unreal real, whether this is a higher reality or just special effects. A striking example is the scene in the first part of *Parsifal* where the hero himself notices a mystical transformation:

Parsifal. I scarcely move, yet already it seems I have travelled far.

Gurnemanz. You see, my son, here time becomes space.⁴

In this case it is music in particular that transforms the scene and brings Parsifal and Gurnemanz through the landscape to the castle of the Grail Knights. The interplay of the different arts creates loopholes between time and space, something film has perfected with its cutting technique where the film music links shifting sequences together. Film and multimedia art are the obvious heirs of these features of Wagner's vision of the artwork of the future. For that reason it is also interesting to follow



The auditorium and stage of the Festspielhaus, 1872–74, Bayreuth, with a scene of *Parsifal* 1882.

Nouvel's investigations of various crossovers between film and architecture that relate to these paradoxes. This is not a matter of cinema building or of unidirectional vision machines as in Bayreuth. He plays film and architecture off against each other in many other ways. On the one hand, in architecture, as the most concrete art form with an apparently unavoidable materiality, he has fixed forms dissolve in light and shade, while on the other hand he uses film projections almost like clothing materials that evoke texture and a new materiality in the wall surfaces.

Losing oneself in film and architecture

There are some resemblances between our experiences of film and of architecture that are worth including in these reflections on Nouvel's work with architecture as multimedia. When the German philosopher and literary scholar Walter Benjamin considered the new potential of film in the inter-war years, at first he pounced on the revolutionary power that seemed capable of blowing away architecture. "Our taverns and our metropolitan streets, our offices and our furnished rooms, our railroad stations and our factories appeared to have us locked up hopelessly. Then came the film and burst this prison-world asunder by the dynamite of the tenth of a second, so that now, in the midst of its far-flung ruins and debris, we calmly and adventurously go traveling. With the close-up, space expands; with slow motion, movement is extended."⁵ Via editing and multiple points of view, film seems able to get around everywhere, lay everything bare and capture realities that might otherwise escape the senses.

Secondly, though, there was also a similarity between film and architecture that Benjamin could use to elucidate how we experience and absorb film as an art form. In the 1930s, film mainly took the form of a fixed genre for the general public, a mass medium driven by the film industries in Hollywood, Babelsberg and other centers. The distracted pleasure of the masses in film is contrasted with the ideal art experience where the individual focuses on and engages with the artwork. Benjamin thought, however, that architecture is another example of the way we experience art in more ways than individual absorption. "In contrast, the distracted mass absorbs the work of art. This is most obvious with regard to buildings. Architecture has always represented the prototype of a work of art the reception of which is consummated by a collectivity in a state of distraction."⁶ Although we may well admire a building like a tourist, we also get our experience of architecture by frequenting it, by moving around in it and by using it with others. And these are in fact crucial impressions that can influence us just as decisively as absorption. Whereas architecture among

other things influences how we perceive our surroundings, how we move around and communicate, film can affect the way we perceive events, how we act and interpret one another. The crucial thing is, however, that both art forms affect us as a totality, a context of which we have no overview, but in which we lose ourselves and by which we are supported. They involve meanings and moods that are tied to a totality of the senses of a context of action. In this there may be a sort of poetry of place or event that the other arts do not capture. There are many unremarked dimensions of everyday life upon which we would never dwell if film and architecture had not captured them. If Nouvel can even think of his buildings as 'locations', where particular actions can take place and particular moods can arise, this is presumably first and foremost because we think in terms of the codes of film today and see many situations in filmic terms. But at the same time it must be because the sensibility of film partly matches that of architecture. He himself considers stage design in general as an eye-opener for architecture, as a 'science of behaviour'.

Making people aware of the scale of the building, displaying its largest internal dimension, playing on the largest depth of field are constant motivations for me. And this comes from scenography. For me, again, architecture is the science of behaviour. Scenography and behaviour lead to the developments of scenarios, imagining or presupposing life in an apartment, for example: chasing one another from one room to another, how a murder would occur, how to make love in the dwelling, how to eat in the bedroom.⁷

The spaces are not to be designed specifically for a murder or some other fateful scene, but the architect must think about how the users dispose and stage themselves and act in accordance with the setting. The architect creates that setting and must accept responsibility for evoking moods by establishing the poetry of the situations through the sensibility of the architecture. Nouvel himself points out that he captures and 'amplifies' experiences through architecture: "I often say that an architect is an amplifier, he is someone who is going to capture emotions or sensations and who is asking himself: 'What can I do with that?' If in the end this emotion has been strong enough for me, I am going to crystallise myself on it and I am going to amplify it, so that nobody can miss it: if I am interested in it, I am going to oblige everybody to look."⁸ Here again we get an underscoring of how architecture can be understood as a mass medium via which the architect channels an experience to everyone who frequents the building.

The distraction can also be found in Wagner's music drama. Although the composer did what he could to capture the audience's full concentra-

tion in the Festspielhaus, the philosopher Theodor W. Adorno thought that the music dramas bore the marks of being addressed to a citizenry that was exhausted from hard work and hectic city life. Of course they did not meet a need for distraction by being light and entertaining – on the contrary, they were persistent, rambling, gesticulating in a continuous flow of sensory impressions: “The audience of these giant works lasting many hours is thought of as unable to concentrate – something not unconnected with the fatigue of the citizen in his leisure time. And while he allows himself to drift with the current, the music, acting as its own impresario, thunders at him in endless repetitions to hammer its message home.”⁹ Adorno had a shrewd eye for the manipulative straining for effect in Wagner. He wrote this in 1938, that is, almost at the same time as Benjamin was writing about film and architecture, but he was far more sceptical about mass media and the culture industry, and it was features of these that he saw already developing in Wagner. At the same time, though, he was fascinated by the fact that Wagner, as the heir of Romanticism, might be the man who had created an art form addressed to modern man and thus related to modernity for better or worse. One could say that music in general belongs to the arts in which one must lose oneself; but Wagner drew particular consequences from this in his calculated use of it alongside the other arts.

At this point, we should consider whether it makes sense to compare the Romantic ideas of the *Gesamtkunstwerk* with the modern use of multimedia across huge historical changes in aesthetics, culture, and politics. Benjamin addressed the new forms of art following the rising mass media and technological development in the spirit of the avant-garde artists. They combined art forms and modern media in the attempt to transgress the borders between art and life, between work of art and reality. In this they shared the wish for an artwork of the future, a *Gesamtkunstwerk* realized as a new culture. They inherited the central ideas of Wagner, some even explicitly, but not his, at best, ambivalent political thoughts or his escape from modern technological reality. Adorno, though, acknowledges in Wagner an artistic sensibility as he in his musical dramas unwillingly felt the very first dilemmas of the later roaring culture industry. For the modern artist there was a lot to learn from Wagner as case study, but not as a model to follow.

The critical, modernistic focus of Adorno on the technical realities and artistic material of modern art is now being mixed with all the digital technology by new multimedia art forms in order to engage with the hyperreality of our media culture. The future is now, and there is an obvious exchange between mass media and multimedia art. The multimedia ex-

periments do not aspire to a new *Gesamtkunstwerk* in any narrow sense, even though it encounters and addresses a lot of the dilemmas that we meet in the traces of Wagner's ideas. Elsewhere I have tried more specifically to point out other relations between Wagner and modern design and contemporary art,¹⁰ but I see no 'reappearance' of Wagner. Rather, it is in broader cultural events and the wide tactics of commercial branding that clichés of the *Gesamtkunstwerk* seem to appear, and artists will have to make new responses.

Multimedia art based on the computer can be seen as the latest field for the fulfillment of a dream of unifying the arts in a total experience, a performance with music, colours and images. In considering architecture as multimedia, I am thinking more generally of a multiplicity of media, but the new architecture also merges with the computerized media in several ways. This applies both to experiments with walls as display screens and visualizations of construction projects where the material presented is no longer influenced so much by a graphic culture as by computer animation technology. At present, for example, we can only form an impression of the DR Concert Hall from computerized images. The concert hall itself will also be a step into that field, which may be particularly exciting because it couples media technology with both a strong sculptural and architectural manifestation in the exterior of the concert hall and the more or less traditional musical life the building is to house. Creating new contexts is a challenge, as they are not simply given by the shared housing.

There is a central concept in computer-based multimedia art that helps to describe the form of the experience. *Immersion* concerns the way we are surrounded and absorbed by sense-impressions. We submerge ourselves in the virtual reality that the multimedia often constitutes, and we pass into a new universe. A multimedia performance is the initiation of a full-scale artistically created reality, which surrounds the senses so that at some level we must react with the whole sensory apparatus and perhaps also act in the work ourselves. *Distracted* may sound like the wrong term in this calculated sense-storm, but it has features in common with the experience of film and architecture. Perhaps it is a matter of an intoxication of the senses or even a trance where the experience carries us away and sinks into us, as with Wagner. This kind of art not only reproduces reality as a reflection of life, it tries to transcend the boundary between art and living reality, as we read in the book *Multimedia. From Wagner to Virtual Reality*. "Throughout history, art has often been referred to as a mirror of life. But by building upon the twin notion of association and collaboration, computer-based multimedia may well become more than a

mirror of life. Already we have seen how multimedia blurs the boundaries between life and art, the personal and the mediated, the real and the virtual.¹¹ This transcendence of the boundaries is true not only of the new multimedia art, as it might seem here, but of the whole tradition from Wagner through modern art in the wish to overstep the boundary between art and life by combining the arts.

Where a computer-based art form can perhaps go a step further is in interactive works where the audience *participates*, themselves determining the course of events or even the form. This interactivity transgresses the conventional work of art in another way. The important thing here is that the viewer gets beyond passive watching, merges with the work and becomes part of it in the experience. And that was exactly Wagner's idea from the beginning, from the formulation of his vision of the artwork of the future as a unity of the arts in 1849. He imagined a *common* or collective work, where not only the composer, the musician and the singer are part of the creating collectivity, but also the spectator helps to create the effect of totality. "Thus he moves, through his watching and hearing, completely on to the stage; the performer is only an artist by fully becoming part of the audience."¹² Although the audience in purely physical terms stayed in their seats and did not change anything in the course of events, it was thus an important idea that the work of art only realized when all of those involved gave themselves to it and shared its life. One can also trace this thought through modern art, where artists have tried in many ways to make living contact with people and make the work effective in or for the spectator. Previously, I have described this feature which runs through modern art with the paradox 'forfeiture as redemption',¹³ for the forfeiture of concentration and overview is often the precondition for *living one's way into the work* and *redeeming* the meaning – and being redeemed oneself by art.

The view of the architectural experience that I have been moving towards with both Walter Benjamin and Nouvel himself involves the viewer too – or rather understands the viewer as user, involved and acting in the architecture. Benjamin formulates this as a dual reception: "Buildings are appropriated in a twofold manner: by use and by perception – or rather, by touch and sight."¹⁴ By the tactile experience Benjamin does not mean that we physically grope around, but that in our everyday use we draw on many other things than registration through our sense of vision. We draw on bodily experiences and feelings in our assessment of space and distances, and judge the rounding, weight and materiality of forms without thinking about them in any detail. Similarly, we can experience new buildings, new

spaces, by occupying them, losing ourselves in them and letting them in under our skins as mood-spaces. In one sense, architecture is an ideal for the other arts today, precisely because it is in its nature that the viewer/user must react to the totality, act in the situation and sense it with the whole body. This fascination with the challenges of the architect is something the Danish artist Olafur Eliasson, among others, can express.

Darkening and dissolution

If it is tempting to go so far in comparing Nouvel to the Wagner tradition and the modern multimedia versions, this is not only because he has worked with concert halls and opera houses, and has used image projections and thought in terms of film scenes. In general, his architecture is marked by conscious work with totalities, effects and stagings. I have already mentioned the striking use of darkness and light, which can both define and dissolve forms. Darkening can mean a sharpening of the senses, where we notice other factors. Some of Nouvel's works almost seem to constitute a form of *night architecture* with dark materials and artificial lighting, where the effect has to be experienced at night. Darkening can help control particular effects, and shifts in lighting can transform substance and material totally. In daylight the effect is quite different – the encounter between stark daylight and dark figures, dark spaces. Often the dark materials have a glossy surface, which reflects the daylight and bends the strong light beams far into the interior spaces. Some people will feel that the effects are too calculated and theatrical and that they confuse effect with reality – like the objection to Wagner. But this is a matter of the physical reality of architecture, which is simply being challenged by various effects. We can experience physical space in many ways and at the same time ascertain the tangible substance of the materials.

The essential thing probably is to understand the architecture as a substance in which we are implicated ourselves, and of which we are a part. When clear forms and lines can blend into darkness or backlight, we find ourselves in a universe of forms where there is no clear background against which the clear figures emerge. There are often black figures on a black ground, or the opposite – white elements on a white ground. If you move around in the space, the forms that stand out and perhaps fade into the background again vary. The material appears, so to speak, more as continuous context than as distinct elements. That almost sounds like a Baroque formal world, but as mentioned before, it is built up from the sharp lines, right angles and precise surfaces that make up the vocabulary of modern architecture. The amount of precision can be so great, however,

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Jean Nouvel, Visualization of the foyer, DR Concert Hall, entry for the competition, 2002. © Atelier Jean Nouvel.
Jean Nouvel, Visualization of the DR Concert Hall foyer, 2002. © Atelier Jean Nouvel.

Jean Nouvel, Foyer of the Court Building, 2000, Nantes. © Atelier Jean Nouvel.

that the forms nevertheless begin to shimmer. With a Baroque expression, Nouvel himself has spoken of 'precise mist'. Getting the indeterminate mood or the transitory effect just right can require the greatest accuracy. Another aspect is that it is not only figures and ground that are folded in and out of each other. Matter is experienced as a continuum where space and mass can also merge into each other. Nouvel mentions this after speaking of the world-picture of modern physics: "Now we know that emptiness is not empty; we know, and not since long ago, that the void is in fact full of quarks: emptiness is full."¹⁵ The space of architecture can be thought of as full, as substance, force field or mood to be modeled. Negative form is conceived of as positive or vice versa, so that space and mass are folded over into each other. In Nouvel's play with materials the illusion can also make mass dissolve. Darkness dissolves in light as well as the opposite as seen in the court building in Nantes, 2000.

So before I make Nouvel out to be a prince of darkness, I feel I should note that in many cases daylight too is permitted to play the leading role. On the south side of the Arabic Cultural Institute in Paris, which was finished in 1987, there is a whole facade with thousands of shutters that react to the intensity of the light and regulate its incidence. The precision mechanics create a paradoxical effect of filigree on this light-screen and, at the same time, a faceted play of light and shade in the spaces behind. On the whole, technology plays quite a central role in Nouvel's architecture, so he could pass for a high-tech architect as well as for a stage director. And the technology certainly is not hidden away to conceal the illusions, as the reproach goes with Wagner. It forms an essential part of the expression.

Nouvel himself speaks of an *aesthetic of dematerialization* as an explanation for his play with forms that dissolve in light or shade. He associates it with the historical development of construction technology, which has created ever lighter and more delicate materials, glass screens and slender structures.¹⁶ The tendency seems to be towards dissolution of the substance of architecture into completely airy structures – and that was in fact what many of the pioneers of modern architecture dreamed of. Nouvel thematises it in many ways and creates a visual play with the substance of architecture, as in the project for the Tour Sans Fin from 1989, intended for sitting beside von Spreckelsen's triumphal arch in La Défense, Paris. The idea was that the tower would appear to lose itself in infinity, because it was to be transformed gradually from an impenetrable black substance at ground level to a wholly transparent construction at the top. This would be a manifestation of the continuity of matter from darkness to light, of architecture as an endless link between earth and sky.

The building in which dematerialization has perhaps been implemented most thoroughly in visual terms is the Foundation Cartier from 1993, also in Paris. In principle, it is simply some large glass screens on the boundary to a park with large, old trees. The outermost screen stands alone, with trees both in front and behind it. Between the next screens exhibition rooms and offices have been added. However, the arrangement is so simple, bright and light, that one could get the impression of looking through them into the park behind. In practice, of course, one can identify an office block in the project, but the screens continue beyond the block and offer a sense that they are just layers upon layers, transparent dissolves. If what I have given is mostly an impression of how Nouvel models *black on black* to play with depth which loses itself in the shadows, this is an example of how he has worked equally often with *white on white* with light or, rather, how he plays with depth by means of several transparent layers, one upon another. The transparency might be expected to lead to clear exposure of the contents, but the reflections and layering of the various grids of the constructions still make the interior lose itself in the distance and obscure the depth dimensions. Once more he is forcing a material to its utmost level, until it shifts into its opposite. Although the glass demonstrates its pure transparency, with the screens among the trees, the glass house with its many layers still forms an opaque, impenetrable core. But it is impossible to see the boundary. In the DR Concert Hall too the basis is being laid for a play with transparency, but in this case it will be at one level only. The original idea with the competition project was to dress the building in a blue screen of different translucent materials such as netting or textiles that catch or reflect image projections in various ways. After dark the projections this would make dissolve into many layers and dimensions. Now the blue screen is made of one material, and the dissolving and layered effect will be made by the projections themselves.

Dissolutions of transparent planes form a play of light that veils order and depth and can at the same time be regarded as an investigation of complexities in the modern world. This has been a central theme in modern architecture since the early modernists. They thought of the new organization of modern society as the layering of many more dimensions than before. With the development of technology, speed and the flow of information far greater simultaneity of many factors in modern life came about, and architecture had to be able to visualize that complexity and attune the senses to it. They also wanted transparency in the processes of society, but demanded familiarization with its inevitable complexity

as well. We find some of the strongest ideas about this in the work of the Bauhaus artist Laszlo Moholy-Nagy, who actually worked with transparencies and dissolutions of structures and images in both light sculptures – so-called *light-space modulators* – and visual media like photo and film. One is reflections in glossy surfaces, where the surroundings penetrate the picture surface as super positions of art and reality, so to speak. The context is incorporated, the premises of the image are articulated and the boundary between work and reality is transcended. Nouvel takes exactly this aspect from visual art and transfers it to architecture, where it is at least as crucial a challenge that architecture must both reflect its context and articulate its framework, its premises.

Moholy-Nagy did not himself work directly with architecture, but he did conceive of this experiment being applied to and culminating in an architecture of the future which would be at once complex, light and airy, so that it could reflect the social organism and accommodate living development. He shared Walter Benjamin's interest in film and architecture, and the *bursting* of the old walls by film montage became a constructive basis. In 1929 he articulated his vision as follows: "That is, architecture will be understood, not as a complex of inner spaces, not merely as a shelter from the cold and from danger, nor as fixed enclosure, as an unalterable arrangement of room, but as an organic component in living as a governable creation for mastery of life."¹⁷ That could still be seen as a challenge for architecture, and in the book in question, *Von Material zu Architektur*, Moholy-Nagy takes the same course from materials through image-formation and transparency to a dematerialized architecture as we have just seen with Nouvel. As an extension of this, it is thus reasonable to see Nouvel's work with images and film, illusions and transparency, as an attempt to create architecture as a *governable creation for mastery of life*. Moholy-Nagy saw art and architecture as counter-gambits to society's specialization and alienation; to such an extent that they were to activate and gather all the life-elements, all the realities of modern society, into an all-encompassing work that was at the same time life itself. This was his critical updating of the notion of the *Gesamtkunstwerk* as the artwork of the future.

Architecture inhabits this borderline between art and reality, between total art and the simple framework of life. Architecture has both the artistic resources and the physical realities at its disposal to create an experience and awareness of this threshold between art and life. Nouvel's exhibition at the Louisiana Museum of Modern Art in 2005 functioned as a different kind of example of this, since he worked with minimal but

effective interventions around the area of the museum. While I spoke above of architecture as a vision machine in solid form, Nouvel's benches around the terrain and in the interiors showed that architecture in its simplest form is simply the process of marking a place, literally it is a point of view and a mood indicated by a concept or a symbol that also prepares the ground for an experience. In this case the strategy of the architect simply was to mark existing spaces and places. At the same time the minimal interventions rendered the museum's existing architecture visible as a vision machine that aims precisely to fuse the experience of the place and its content, nature and art, in one overall effect. It is fascinating how architecture can thus range from the act of pulling out all the artistic stops for the staging of a total experience to the simple marking of a place, which in itself thus becomes a total experience. Both ends of the spectrum can operate effectively on the borderline between art and reality.

With his benches at Louisiana, Nouvel also added the concepts of language or even poetry to the resources of architecture. Concepts like dizziness, frailty, memory etc. added the conceptual dimension of thought to the experience of the individual, specific places or views. At a much larger scale Nouvel has used poetry written on the façade of the Zlaty Andel building in Prague from 2000 alongside a huge picture that seems to be an angel out of the films of Wim Wenders. We have taken the path from concrete matter to illusion and dematerialization, and language along with music is one of the transitory, purely conceptual resources. But at the same time it is part of the goal of the whole effort of uniting the arts: that is, to affect thought and bring ideas forth. It is characteristic that a conceptual dimension emerges from the work with several arts, with multimediality. We find exactly that with Jean Nouvel too, for whom concepts are always located among the other building-blocks in the conceptualization of buildings. The dream of the *Gesamtkunstwerk* was to combine the most transitory arts, music and theatre, poetry and film, with the most concrete – architecture, design and sculpture – in a living form, a realization. My purpose here has not been to make the reader see Jean Nouvel as the inheritor of ideas from Wagner or others in the *Gesamtkunstwerk* tradition. These just make up the general background of the modern concept of art and the experimental forms. I hope that the historical parallels can suggest how, in its own right, his architecture can realize all its potentials by reflecting itself in the other arts and showing how many dimensions can be unfolded in a conscious play with architecture as total art, architecture as multimedia.



Jean Nouvel, Zlatý Anděl, 2000, Prague. Photo by the author.

Notes

1. August Schmarsow, 'Das Wesen der architektonischen Schöpfung' (inaugural lecture 1893), Leipzig 1894, 8. Translated as "The Essence of Architectonic Creation", in *Empathy, Form, and Space* (Santa Monica: Getty Center for the Arts and Humanities, 1994), 285.
2. Jean Nouvel, *Luzern Concert Hall* (Basel: Birkhäuser, 1998), 82.
3. Beat Wyss, "Ragnarök of Illusion: Richard Wagner's Mystical Abyss at Bayreuth", *October* 54 (1990).
4. Parsifal: Ich schreite kaum, doch wähn' ich mich schon weit.
Gurnemanz: Siehst du, mein Sohn, zum Raum wird hier die Zeit.
5. Walter Benjamin, *Illuminations*, ed. Hannah Arendt (New York: Schocken Books, 1969), 236.
6. *Ibid.*, 239.
7. Extract from an interview in 1992 published in the catalogue *Jean Nouvel Emmanuel Cattani et Associés*, (Zurich: Artemis, 1992), 28.
8. Jean Nouvel, *op. cit.*, 80.
9. Theodor W. Adorno, *In Search of Wagner*, trans. Rodney Livingstone (London: New Left Books, 1981), 32.
10. Anders V. Munch, "Design as Gesamtkunstwerk", *Scandinavian Journal of Design History*, vol. 11 (2001), and "Gesamtkunstwerk as Modern Concept of Art", *SITE* 9–10 (2004).
11. *Multimedia. From Wagner to Virtual Reality*, ed. Randall Packer and Ken Jordan (New York: W. & W. Norton, 2001), xxxii.
12. Richard Wagner, "Das Kunstwerk der Zukunft" (1849), in *Gesammelte Schriften und Dichtungen*, vol. 3, Leipzig n.d., 151.
13. The catalogue *Olafur Eliasson. The Blind Pavilion*, Venice Biennale 2003, where you can lose yourself for a for a long time in the circular structure of unnumbered pages before you find my article, "Forfeiture as Redemption. Gesamtkunstwerk between effect and reality".
14. Benjamin, *ibid.*, 240.
15. Efrén Garcia Grinda, "A Conversation with Jean Nouvel", *El Croquis* 112–13 (2002): 18.
16. *Loc.cit.*
17. Laszlo Moholy-Nagy, *Von Material zu Architektur* (1929) (Mainz: Florian Kupferberg, 1968), 198. Translated as *The New Vision*, (New York: W. & W. Norton, 1938), 18of.

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