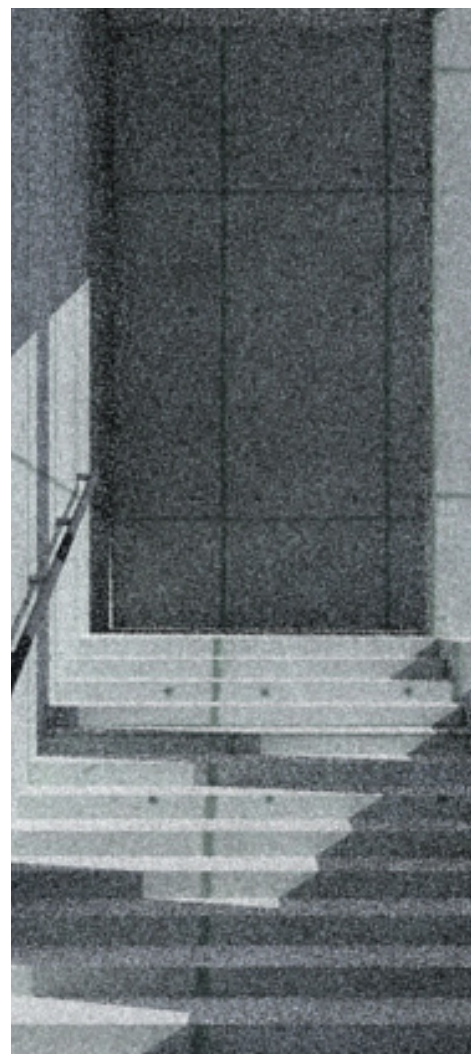


# the sublime light and the heterotopia

**graduation** robert wierenga

*This booklet contains a two-piece essayistic research. An architectural perspective, on the relation between the sublime and the heterotopia and the role light plays therein. Eventually the notion of the fōstopos arises: a place connected and elevated to 'the other place' by light.*

*The fōstopos is used as 'theoretical inspiration' for the design of my graduation project: a monastery for the Cistercian Order. The architecture of this order has been known for centuries as the architecture of light. In the monastery the spatial and ritual experience of light and the threshold with the surrounding landscapes are at the heart of its fōstopic character.*





# the sublime and the heterotopia

framing of the sacred

## article one

*The sublime as a philosophical notion is related to the heterotopias introduced by Foucault. Society is in need of such 'other places' as these places provide an unlimited space for the sublime within their borders*





## Introduction

In modern use 'That is a sublime idea!' merely states that something is a (very) good idea. The meaning of the sublime as something absolutely spectacular that strikes and overwhelms, awes the spectator or even as an idea that you can not grasp seems lost for the general public and seems only 'available' to boring philosophers.

Maybe this seems logical in an age where because of our blasé outlook, the overwhelming «!» input of information and everything advertised as being even better or absolutely great, the sublime is everywhere and ironically, therefore nowhere.

In his overview of the changes in the definition of the philosophical notion of 'The Sublime', Philip Shaw describes how the content and meaning of the term [within the discourse of philosophy] evolved from object oriented to mind or concept oriented towards the end of the 20<sup>th</sup> century.<sup>[1]</sup>

In the following part I summarize the changes Shaw writes about using the translated original texts. After that I will discuss the *ergon*, its *parergon* and Foucault's *heterotopias* to get a better grasp of the final part where the sublime and the heterotopia are related and their relationship explained. As a conclusion the monastery will be used to illustrate the argument with an example.

## Changes in the notion of 'the Sublime'

From Longinus towards the contemporary thinkers on the sublime like Gilbert-Rolfe, the meaning or definition of the philosophical term 'The Sublime' and the explanation of the *sublime experience*<sup>[2]</sup> has changed back and forth, maybe evolved and has finally (?) reached a more 'post-modern' state

where everybody has a different opinion and no one states the same. Although this is odd for something generally considered as 'the experience of the absolute' before, there is now no absolute answer to the question: '*What is the sublime?*'.

However there is one tendency that is probably the most consistent... It slowly builds up starting with Burke's '*A Philosophical Enquiry Into the Origin of Our Ideas of the Sublime and Beautiful*' in which he describes the definition of the sublime experience as a state of mind resulting from a property of an object outside our mind:

*'The passion caused by the great and sublime in nature, when those causes operate most powerfully, is astonishment; and astonishment is that state of the soul, in which all its motions are suspended, with some degree of horror. In this case the mind is so entirely filled with its object, that it cannot entertain any other, nor by consequence reason on that object which employs it. Hence arises the great power of the sublime, that, far from being produced by them, it anticipates our reasonings, and hurries us on by an irresistible force.'*<sup>[3]</sup>

Already before him, in 1701, John Dennis an English dramatist defines the sublime as the result of an interaction between object and mind with the words:

*'Yet nature itself could not be perceived as sublime without the operation of mental processes. 'Take the Cause and the effects together', he writes, 'and you have the Sublime'. [...] The sublime feeling of 'delightful Horror' and 'terrible Joy' was brought about therefore by the interaction of mind and*

<sup>1</sup> Shaw, P., *The Sublime* (2008) Routledge

<sup>2</sup> as a mode of consciousness

<sup>3</sup> Burke, E., Phillips, A., *A Philosophical Enquiry Into the Origin of Our Ideas of the Sublime and Beautiful* (1998) Oxford University Press, p. 53

*object. The cause of sublimity could not be located solely in one or the other.'*<sup>[4]</sup>

Both Burke and Dennis in their definition were surpassed by Kant in his '*Kritik der Urteilskraft*' (Critique of Judgment), where the sublime is no longer a result of a property of the object but of our mind and the idea the mind connects to the object.

*'But suppose we call something not only large, but large absolutely [schlechthin, absolut], in every respect (beyond all comparison), i.e., sublime. Clearly, in that case, we do not permit a standard adequate to it to be sought outside it, but only within it. It is a magnitude that is equal only to itself. It follows that the sublime must not be sought in things of nature, but must be sought solely in our ideas; but in which of these it resides [is a question that] must wait for deduction.'*<sup>[5]</sup>

The gradual change of definition from a property of an object to that of (an individual or social perception) of a concept or idea is not surprising for two reasons. First the enlightenment called for a raise of man to the pedestal where before only a supernatural power could stand. God was seen as the source of all sublime, so the sublime was found in nature: majestic mountainous landscapes, endless oceans, his creation (created by a word<sup>[6]</sup> insofar it is a concept or conceptual), but now the seemingly infinite capability and capacity of the mind of man had overthrown this sublime creative power.

### Ergon and Parergon

Second the distinction between the *sublime* and the *beautiful* was a much discussed subject early on in aesthetic theory (and still is). Kant argues that the difference between the sublime and the

beautiful has to do with core and ornament, with *ergon* and *parergon*:

*'Even what we call ornaments (parerga), i.e., what does not belong to the whole presentation of the object as an intrinsic constituent, but [is] only an extrinsic addition, does indeed increase our taste's liking, and yet it too does so only by its form, as in the case of picture frames, or drapery on statues, or colonnades around magnificent buildings. On the other hand, if the ornament itself does not consist in beautiful form but is merely attached, as a gold frame is to a painting so that its charm may commend the painting for our approval, then it impairs genuine beauty and is called finery. Emotion, a sensation where agreeableness is brought about only by means of a momentary inhibition of the vital force followed by a stronger outpouring of it, does not belong to beauty at all. But sublimity (with which the feeling of emotion is connected) requires a different standard of judging from the one that taste uses as a basis. Hence a pure judgment of taste has as its determining basis neither charm nor emotion, in other words, no sensation, which is [merely] the matter of an aesthetic judgment.'*<sup>[7]</sup>

The *ergon* is (the body of) the work (of man: the work of art or architecture) whereas the *parergon* is its supplement. Kant introduced the column as a *parergon* to the Greek temple (see above: the '*magnificent buildings*'), the *ergon*, as an analogous example to reason the working of the sublime. Before he elaborates on this and other examples, he acknowledges that there is (in the words of Derrida) no '*suitable*'<sup>[8]</sup> example because the sublime is not one of the produces or effects of art, or architecture in that matter,<sup>[9]</sup> nevertheless he continues his argument. The column is for the temple merely a framing, a supplement to that which resides inside, but because it belongs neither to the temple nor to the outside, it is half part of

<sup>4</sup> Dennis, J., *The Advancement and Reformation of Poetry* quoted in: Shaw, P., *The Sublime* (2008) Routledge, p. 30 [shaw]

<sup>5</sup> Kant, I., translated by Pluhar, W. S., *Critique of Judgment* (1987) 3<sup>rd</sup> Edition by Hackett Publishing, \$25 p. 105/250 [translator]

<sup>6</sup> *The Bible*, King James (2000) Genesis 1:9-10  
*'And God said, Let the waters under the heaven be gathered together unto one place, and let the dry land appear: and it was so. And God called the dry land Earth; and the gathering together of the waters called he Seas: and God saw that it was good.'*

<sup>7</sup> Kant, I., translated by Pluhar, W. S., *Critique of Judgment* (1987) 3<sup>rd</sup> Edition by Hackett Publishing, \$14 p. 72/226 [translator]

<sup>8</sup> Derrida, J., *The Truth in Painting* (1987) University of Chicago Press, p. 122

<sup>9</sup> Although Libeskind for example is dealing with the impossibility of representation in the Berlin Jewish Museum.



fig. 01 | *parergon becoming ergon: temple of Poseidon, Greece*

Only the colonnade, the framing still stands and has now become the work itself, where thousands of tourists every year visit the remnants of the Temple of Poseidon in Sounion, Greece. Parergon becoming ergon.

the temple half part of the outside.

Derrida in *'The Truth in Painting'* concurs with Kant's argument, then uses it as a stepping stone for his own argument with more implications:

*'What constitutes them as parerga is not simply their exteriority as a surplus, it is the internal structural link which rivets them to the lack in the interior of the ergon. ... Without this lack, the ergon would have no need of a parergon. The ergon's lack is the lack of a parergon.'*<sup>[10]</sup>

He elaborates, strides further, if *'this definition'* (which he derives from Kant's *Analytic of the Sublime*) *'of the beautiful as definable in its contour [is true] and of the sublime de-fined as indefinable for the understanding'*,<sup>[11]</sup> an additional step to put his foot to shore: so *'If art gives form by limiting, or even by framing, there can be a parergon of the beautiful, parergon of the column or parergon as column. But there cannot, it seems, be a parergon for the sublime.'*<sup>[12]</sup>

Mark Cheetham, Art professor at the University of Toronto, elaborates in his book *'Kant, Art, and Art History'* on the inadequacy of the presentation of the sublime by the mind, that Derrida brings about, by stating something seemingly opposite: that the

sublime is (merely) a limiting operation or framing action of the mind in order to deal with the ideas that we associate with an object:

*'[The pleasure that arises from the sublime consists, therefore, precisely in the setting of, rather than the overcoming of, limits, for reason, unlike imagination,] 'can put such a border in place and take emotional pleasure from this accomplishment. The experience and pleasure of the sublime [...] stems from the activity of framing itself, from the parergon.'*<sup>[13]</sup>

<sup>10</sup> Derrida, J., *The Truth in Painting* (1987) University of Chicago Press, p. 59

<sup>11</sup> Derrida, J., *The Truth in Painting* (1987) University of Chicago Press, p. 127 [me]

<sup>12</sup> Derrida, J., *The Truth in Painting* (1987) University of Chicago Press, p. 127

<sup>13</sup> Cheetham, M., *Kant, Art, and Art History: Moments of Discipline* (2001) Cambridge University Press, p. ? quoted in: Shaw, P., *The Sublime* (2008) Routledge, p. 118 [shaw]

## Heterotopias

Cheetham's expansion of Derrida is interesting because his explanation of how the mind deals with the sublime, is very similar to how the mind deals with certain spaces. These spaces are the *heterotopias* which Foucault describes in his essay 'Des espace autres'. From the Greek *hetero* meaning other, and *topos* meaning place, the heterotopia is thus an 'other place'. It is outside all places, but it has a real location, and it is therefore not a *utopia*<sup>[14]</sup> (e.g. Heaven) or a *dystopia* (e.g. Orwell's 1984) but in the same way as the here before mentioned dystopia and utopia<sup>[15]</sup>, the heterotopia also reflects on, or mirrors, how society works or acts.<sup>[16]</sup>

## Set apart in the polis

Heterotopias are places with different properties than normal continuous places, with which they have a (sometimes invisible but nevertheless) perceptible boundary, because of their virtual place outside the ordinary. When De Cauter elaborates on these heterotopias and links them to how the Greek *polis* was build up, he first shows the clear outline between the different parts of the polis and the way they are related to each other. The polis had three subdivisions within the skin or wall of the city, the Emporium:

- **Idian** (private or economical space)  
everyday use → *oikos*
- **Koinen** (public or political space)  
everyday use → *agora*
- **Hieran** (holy or sacred space)  
only holy-day → *heterotopia*

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<sup>14</sup> As used in English. Eutopia, which in Greek is a homophone; pronounced the same, but with a double meaning: both οὐ (*not*) translating to 'nonexistent place' and εὖ (*good or well*) meaning 'perfect place'. The latter has become the modern meaning.

<sup>15</sup> An interesting third I could add here is the *atopia* (placelessness, unclassifiable, of high originality) meaning 'that which has no place', or 'that which cannot be placed'. This place also has, like we will see with the heterotopia, a close relation to the sublime.

<sup>16</sup> Foucault, M., *Des espaces autres* (1967) in *Architecture, Mouvement, Continuité*, n° 5, octobre 1984, p. 46-49. Translated by Miskowiec, J., <http://www.foucault.info/documents/heterotopia/foucault.heterotopia.en.html> (visited 28-01-2009)

The Hieran is neither political nor economical and therefore a heterotopia. Within it there were two important sacred spaces, the Stèla (monument for the dead, place of the past) and a Templum (temple, place of the future and eternity).

De Cauter gives examples of how the intrusion of the three spaces into each other raises problems for society at large. The intrusion of the political in the cultural<sup>[17]</sup> and vice versa, causes religion dictated by the state, state dictated by religion, etc.<sup>[18]</sup> In order to prevent these intrusions from happening, there were social codes for and architectural indications of, the transition between the different spaces in the city.

## Principles of the heterotopia

Foucault tries to give a constitution of what heterotopias are a heterotopology. He does this by giving six principles to recognize or determine a heterotopia:

1. All cultures constitute heterotopias, but there is no absolute universal form. There are two main types:

### I. The heterotopia of crisis

the forbidden place that is made 'nowhere'.  
(boarding school, retirement homes, honeymoon trip, menstrual hut, asylum, monastery, etc.)

### II. The heterotopia of deviation

those in which deviant things can take place.  
(dark rooms, monastery, etc.)

2. The precise function of a heterotopia can change over the course of history.  
(the Christian cemetery before secularization and now, the garden, a monastery, etc.)
3. The heterotopia is capable of juxtaposing in a real space several other places. (fig. 02)  
(cinema, theatre, the traditional Persian garden, monastery, etc.)

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<sup>17</sup> De Cauter broadens *Hieran* to culture wherein religion (the sacred), sports, art, etc., lie, in order to accommodate his argument about **modern** society.

<sup>18</sup> summarizing De Cauter, L. in a lecture '*Heterotopie*' (04-03-2005) <http://homepages.ulb.ac.be/~rgeerts/inlthewet/DeCauterheterotopie.html> (visited 28-01-2009)



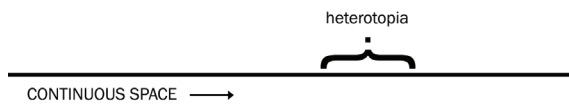


fig. 02 | principles of a heterotopia: space

The heterotopia is capable of juxtaposing in a real space several other places.

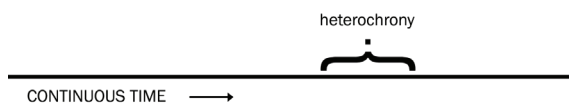


fig. 03 | principles of a heterotopia: time

Heterotopias open up to time, the heterochrony places itself out of time in order to accumulate indefinite time or definite time.

4. Heterotopias open up to time, the heterochrony places itself out of time in order to accumulate indefinite time or definite time. (fig. 03)  
(museum, library, archive, monastery / festival, fairgrounds, theme park, etc.)
5. Heterotopias have a certain system of opening and closing, for example rites, initiation, ceremony and purification, etc.  
(Hammam, sauna, monastery, etc.)
6. Heterotopias have a function in relation to all the space that remains; they reflect, compensate, expose, hide, etc.  
(monastery, certain Jesuit colonies, Las Vegas, etc.)<sup>[19]</sup>

Most principles deal with the filling of some emptiness or lack in society. At the very least they expose this lack without filling it. Society could not do without these heterotopias, but they themselves could also not do without society. If heterotopias would comprise society, if they would exist without boundary or limitation, problems would arise. The theater that always stages, exists. The perpetual festival or life in a theme park, are things real or

<sup>19</sup> Foucault, M., *Des espaces autres* (1967) in *Architecture, Mouvement, Continuité*, n° 5, october 1984, p. 46-49. Translated by Miskowiec, J., <http://www.foucault.info/documents/heteroTopia/foucault.heteroTopia.en.html> (visited 28-01-2009)

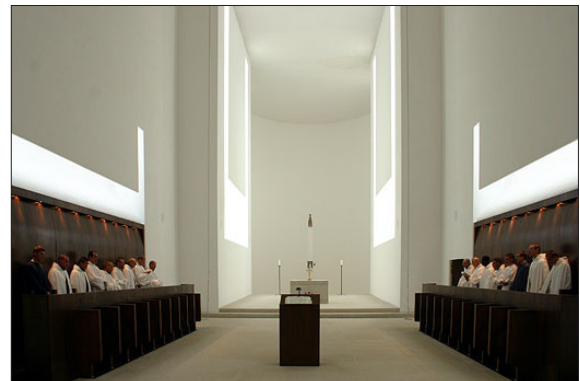


fig. 04 | Nový Dvůr Cistercian monastery, architect: John Pawson

In The Cistercian Monastery in Nový Dvůr, Czech the minimalist hand of architect John Pawson is visible in every detail. A monastery is a perfect example of a heterotopia.

staged, the crisis that manifests in the flight for the ordinary.

The unusual becomes ordinary, the extreme is not enough. In the wealthier parts of South-East Asia, like South Korea there is a Second World forming, where the socially accepted 'standard deviation' is smaller, and therefore people identify with and spend more time as their online (game) character than they are spending as themselves.

Virtual reality has quickly become one of the newest heterotopias<sup>[20]</sup> but responds to a need that is man-old: escape from the normal. By its virtual character, virtual reality in it self is a heterotopia and by its properties the majority of the activities taking place there are of a heterotopic disposition. The influence, and consequently the intrusion and interference, of a government relative to the individual, is small as yet, as a result of which the heterotopia of **deviation** is the common ground of the activities that take place in the unlimited space the virtual provides.

The virtual 'other places' don't have an actual location like those we know exist for the traditional heterotopia, therefore the difference between utopia and heterotopia becomes smaller, for only the datacenter is left as a real place.

Partly due to this, time and place are not connected

<sup>20</sup> Or found a new, altered, form for existing heterotopias. Think of digital libraries, archives and also chatrooms, fora and other anonymous 'places'.

anymore. There is no longer a here and now, only a there and then. Or maybe even that is not longer there and only an everywhere and anytime is what we constitute as our (virtual) life schema. The present or what is left of it is being passed (made past) by the 'network'. Where no longer time and place are relevant but information and access. However information is no longer connected to space as it is accessible from everywhere. It only matters where you are when you do not have access.

### The Cistercian monastery

This introductory side step or deviation kept me from a more old-fashioned heterotopia, the monastery. I will use it as an example to illustrate the sublimity of the heterotopia – although Foucault did not use the monastery as an example of a heterotopia it adheres to every principle, which I will show below – and the need of framing of a heterotopia in order to prevent intrusions from the different parts of society into each other.

The first Cistercian monasteries were started around the turn of the first millennium in France on swampy barren land or within remote inaccessible woods, as far from society as possible, as not to be burdened with its influences (Principle.1,II). The monks wanted to devote their life to worship, so a system of working monks (lay monks), providing the necessities of life and an income, soon came into being. The lay monks worked the land to enable the worshipping monks (choir monks) to spend the day in devote service.

This system became so successful that the monasteries in time accumulated so much financial wealth that they could invest in more products and services, which they first put to use to increase their independence. The mills and quarries they built were then used to benefit the tenants of the estates and the farmers, of the lands they acquired by benefaction. Through their financial position and the way they conducted as employers and landowners they became a regulating and (by means of the general influence of the Roman Catholic church) a governing power. Their original position away from society became one where

they made their growing influence felt within society (Pr.2). The intrusion of religion into state, as far as they were still distinguishable, was a fact. The counter reaction, which in the course of the centuries arose several times, was one of reversion to the core of monastic life (Pr.1,I&II).<sup>[21]</sup> The most famous monks were those who went to the extreme with this reclusion like Francis of Assisi or Benedict of Nursia who was seen as the founder of Western Christian monasticism. Though probably the most extreme was St. Simeon Stylites the Elder<sup>[22]</sup> who spent thirty-seven years sitting on... a column.

Although this seems hardly temporal, serving 'the Eternal' and to reflect the eternal life in this temporal state on earth is a main principal of monasticism. In that sense a monastery is a heterochrony, it treats time differently, it gathers the eternal within the temporal (Pr.4). The same applies to the transcendence of earth to paradise, a heavenly place outside of continue space, not anymore a utopia but a real space (Pr.3).

Once leaders, innovators and centres of knowledge (Pr.3,4,6), nowadays monasteries as a result of secularization and the marginalization of the collective existence as known in a monastery,<sup>[23]</sup> perform a role in the margin of society or in fact outside the margin (Pr.6).

To enter a convent<sup>[24]</sup> is therefore to place yourself outside (Pr.5). Because this transition from within to without society takes a serious 'step' it requires a certain system of opening and closing; passage, in this case a ritual or ceremony to guide you from your past life to the new.

### The Sublime Heterotopia is a semantic pleonasm

The lack in society is apparent because of its need of parerga (p.4 Derrida: *the ergon's lack is the lack*

<sup>21</sup> Saint Bernard of Clairvaux (1090 - 1153) was the founder of what would later be known as the Cistercian Order.

The conventuals had to withdraw themselves from society again and follow the rule of Saint Benedict in a more strict way. Nowadays the Cistercian Order is divided in two main branches the 'Cistercian Order' and the 'Cistercian Order of the Strict Observance' (better known as the Trappists).

<sup>22</sup> the Greek word style meaning pillar or column.

<sup>23</sup> compared to the tendency of a more individualistic approach to coexistence in modern communities.

<sup>24</sup> a monastery with a commune with a secluded and closed character.

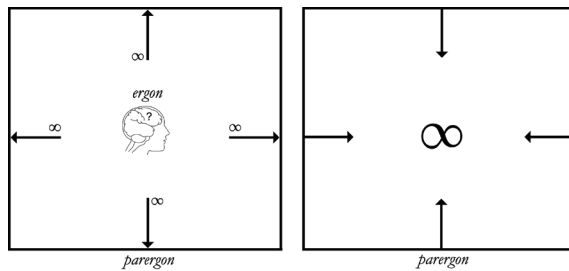


fig. 05 | operation of the mind when encountering the sublime

**Derrida** The sublime lies in the unbounded, that which has no boundary.

**Cheetham** The sublime lies not in the unbounded, but in the setting of the limits, the activity of framing.

of a *parergon*), of supplements, of heterotopias. Heterotopias function as *parerga* but they reflect the lack in the *ergon* in that way. As Derrida stated, the *ergon* can be the *parergon* and the vice versa holds up too; the heterotopia as a world in itself that lacks the *parergon* of the real world which it needs in order to be a heterotopia.

If we return to the Latin *sublimis* 'a combination of *sub* (up to) and *limen* (lintel, literally the top piece of the door)' <sup>[25]</sup> the word itself implicates that: 'there is no sense of the unbounded that does not make reference to the placing of a limit or a threshold. [...] there is no limit which does not assume the existence of the unlimited.' <sup>[26]</sup> The two diagrams in figure 05 depict these statements.

The observation of and the thinking about the origin and the expanding of the universe is a good example to visualize the ideas of both Derrida and Cheetham.

If you would be on a planet in an arbitrary galaxy somewhere in the universe then all other galaxies will be observed as 'flying away' from that galaxy. The idea, of our planet as the middle of the universe is thus probably more universal than we think; the idea wouldn't be alien to extraterrestrial beings. In physical cosmology Hubble's Law states that the velocity with which these other galaxies recede ('are flying further away') - observed through the

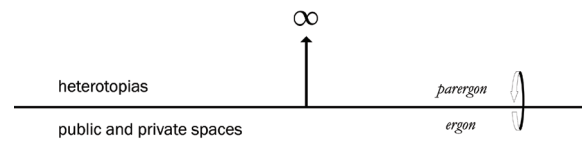


fig. 06 | Last principle of the heterotopia: sublimity

A heterotopia is 'an other place' outside normal places, where a sublime idea, activity or program because of its enclosure can take an unlimited form. But towards the normal it needs a boundary. This boundary is the axis around which the heterotopia reflects on the normal.

red shift in the light spectrum of the transmitted light caused by the Doppler effect - is proportional to their distance from the earth.

Only objects receding from the earth with a velocity lesser than the speed of light, can be seen on earth as the transmitted light had 'enough time' to reach the earth. If the universe is expanding with a velocity greater than that of light - and according to recent theories it has: if not recently, it certainly has at the genesis of the universe - we cannot observe the limits of it. There are presumably objects with a velocity that is greater than that of light, which we will never see, and are therefore beyond the visible horizon of the universe. <sup>[27]</sup> And thus the universe is infinite or at least not known to be finite. (Derrida, the sublime lies in the unbounded, that which has no boundary) <sup>[28]</sup>

After Einstein the infinity of the <sup>[29]</sup> universe is not seen as an insolvable problem anymore. Within the discussion on the configuration of the part of the universe from beyond the visible horizon to its

<sup>25</sup> Shaw, P., *The Sublime* (2008) Routledge, p. 1

<sup>26</sup> Shaw, P., *The Sublime* (2008) Routledge, p. 119 [author]

<sup>27</sup> The accuracy of the Hubble telescope with its scope (or observation limit) of twelve billion light-years defines the current definition of that visible horizon.

<sup>28</sup> Although, according to current theories, the age of the universe hints on a finite one. The problem is that we determine the age of the universe via the same data.

<sup>29</sup> Or our universe, as some scientists hypothesize a multiverse, an unlimited amount of universes.

outer rim<sup>[30]</sup> (if existent) there is the same problem of distance both in time and space to observe the earth. The ever expanding limits of the universe that are beyond the visible horizon therefore are only reachable by a propulsion which exceeds the speed of light or travels back in time.<sup>[31]</sup> The only propulsion we now have is our mind, and it is fueled by our imagination. (Cheetham) With that imagination we can both 'see' distant past and 'foresee' future, although these two particular notions have an uncertainty attached to their definition within the discourse of cosmology.

When compared with the way Derrida and Cheetham comprise the sublime experience it is clear that Cheetham's argument is closer to the original Latin compound of the word sublime. To Derrida the sublime is only found in the unbound, the unlimited and it can not be framed by reason nor any other framing procedure. Whereas Cheetham states that the pleasure that since Burke is accompanied with the sublime lies in the making of the boundary, the conquering of the unbounded by reason, *the placing of the threshold* in heterotopic terms.

So for a heterotopia, 'an other place' outside normal places, where a sublime idea, activity or program (freedom, the self, deity, crisis) which for society beholds a certain threat (**terror**), but because of its enclosure is not threatening (virtual distance and therefore **pleasure**) can take an unlimited form (noted that the sublime is found in formlessness according to Derrida). But towards the normal i.e. the continuu, it needs a boundary. This boundary – or threshold because through certain disclosure procedures it can be traversed – is the axis (fig. 06) around which the heterotopia (the enclosure of the sublime) reflects on the normal. Within the heterotopia, as in virtual reality, the sublime can happen, nowhere.

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<sup>30</sup> Which if the speed of light is the greatest velocity in the universe is estimated to be around fourteen billion light-years of age

<sup>31</sup> If we would be able to build such a propulsion for a 'timecraft' it would have paradoxical or parallel problems of its own. Just check <http://plato.stanford.edu/entries/time-travel-phys/> and [http://en.wikipedia.org/wiki/time\\_travel](http://en.wikipedia.org/wiki/time_travel) for the possibilities and problems of time travel





## Credits

- **Photograph front**  
*Lovers Stone*  
St Kilda, Scotland (1975)  
Hamish Macmillan Brown
- **Figure 01**  
*Temple of Poseidon*  
Sounion, Greece (2007)  
Gregory Varano
- **Figure 04**  
*Church of the monastery*  
Nový Dvůr, Czech (2004)  
Unknown photographer

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# the sublime light

## article two

the experience of the  
sublime through light

*The sublime light and the meaning that it gives to the architectural space capturing it is analysed for three different buildings: the Pantheon, Corbusier's St Pierre de Firminy Vert and the Church of Light by Tadao Ando.*

*The sublime light that can connect 'place to other place' emerges as a characteristic of the architectural expression of this special type of heterotopia: the fōstopos.*





## Introduction

Light is used by the forces that rule (religions, ideologies and dictators) to express or generate an association with the sublime. Think of Gothic cathedrals, Mayan sun temples, or a very specific example, the ‘*Lichtdom*’ Albert Speer, Hitler’s architect, designed for mass party rallies in Nuremberg. Anti-aircraft searchlights pointed straight towards the sky, creating a “Cathedral of Light” that brought a feeling of mystery and belonging to the gathered masses.

To control the experience of the spectators an orchestrated environment is made. Architecture acts as the tool to conduct light to induce a sublime experience on its beholder. However architecture or light alone<sup>[1]</sup> seems not enough. To invoke the sublime there needs to be more than an orchestrated spatial design. The sublime experience produced by architecture rests on a bilateral structure. A twofold; a carrier and a concept. Architecture and meaning.<sup>[2]</sup>

In the following part I will shortly discuss the sublime concepts as attached to darkness, shadow and light. After that I will examine three ‘architectural’ cases where light is used in this twofold way. It is no coincidence that these examples are all intended as places of worship:

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<sup>1</sup> ‘With regard to light, to make it a cause capable of producing the sublime, it must be attended with some circumstances, besides its bare faculty of showing other objects. Mere light is too common a thing to make a strong impression on the mind, and without a strong impression nothing can be sublime.’

Burke, E., *On taste: On the sublime and beautiful; Reflections on the French revolution* (1909) P. F. Collier & Son, p. 70

<sup>2</sup> Or in the examples used *message* would be a relevant alternative.

1. **The Pantheon**, Hadrianus  
*Metaphor* - Reference to the Other(s)
2. **Saint-Pierre de Firminy-Vert**, Le Corbusier  
*Analogy* - Reference to the Natural Sublime
3. **Church of the Light**, Tadao Ando  
*Symbolology* - The Cross of Light

## Light versus Darkness

Light and Darkness are used as absolute opposites, to refer to concepts as Good and Evil, and almost all discussion taking place about Good and Evil can be placed in that metaphor. Can they exist without each other? Which came first?

As light is dynamic energy, and the first state of the cosmos was at the best one of static energy, no matter which theory or doctrine your belief is, darkness came/was first. And as it was there before light first the ‘absence of light’ is briefly discussed. In some sense this definition states that light and darkness are no absolute notions as they always need the other to function. For some reason though we never refer to light as ‘the absence of darkness’. But I believe when Louis Kahn states that even a room which must be dark needs a small amount of light to know how dark it *really* is, the reverse holds too.

## Darkness, the privation of light

That light has a more obvious association with divinity, doesn’t necessarily mean that it is more likely to produce a sublime experience. According to Burke: ‘A quick transition from light to darkness, or from darkness to light, has yet a greater effect. But darkness is more productive of sublime ideas than light.’ However “Darkness [...] is sublime, provided it does not invest objects of which we stand in dread, or rather [it is] under all



fig. 01 | "Lichtdom" during the NSDAP Party Rally of 1938

The 'Zeppelinfeld' with its large 'Zeppelinhaupttribüne' (360 meters wide) at Nuremberg. Surrounded with 130 anti-aircraft searchlights and attended by large masses this was the design for a near religious experience Albert Speer was aiming at for the Nazi-party rallies.



fig. 04 | Illustration from the comic Sin City by Frank Miller

*circumstances, sublime, but if it be connected with objects calculated to produce an extreme degree of terror, the attention, from being directed to the objects of our apprehension, is not at liberty to analyze the emotion which darkness in itself and by itself, is calculated to produce".<sup>[3]</sup> So absolute darkness, a total privation of light, although more capable of producing the sublime, is by its potential overpowering degree of terror, inclined to cause fear without pleasure. Darkness 'produced by light' however is a similarly apt notion to produce the sublime.*

### Shadow, the place where light does not reach

Shadow; anamorphic image of an object made out of darkness and created by light. A shadow is not like darkness the absence of light but a place where the light does not reach. Without light there is no shadow. This combination of 'light creating and

darkness created' makes the shadow an ambiguous notion. Therefore it is used as something which indicates or makes a stand between good and evil. Although shade itself can be pleasurable, the image of a shadow and its 'shadowy' concepts, tend to be associated with fear; of the unknown; of a foe; fear of fear itself. In language this becomes obvious, when the shadow is used in expressions (as a 'literal' presentation) to produce a sublime concept. However the written/linguistic representation always refers to its visual representation.

As is the case with shadow, the 'textual' light normally refers to its visual representation. Interestingly there is a reverse example: the halo or aureola that surrounds the countenance of people and sometimes even animals that are considered holy. The halo refers to the *written* account of Moses and other biblical figures which radiated light from their shining faces. Of course our imaginative capabilities ensure us of a visual depiction nonetheless.

<sup>3</sup> Sir George Mackenzie, Bart. F.R.S., 'Theory of Association in Matters of Taste', in: *Southern Review*, Vol. VII No. 14 Art. IV. (August 1831) Charleston A.E. Miller, p. 390-391

### Cultural aspirations of the Shadow

In popular visual culture—film and comics—shadows act to portray fear and (approaching) evil. Alfred Hitchcock, the famous director of psychological thrillers and suspense films, puts it like this: “*Give them pleasure—the same pleasure they have when they wake up from a nightmare.*” That pleasure is the exact pleasure found in the sublime; the terror just witnessed, by waking up, (re)moved to a safe distance.

In order to provoke the sublime, these visual media exploit the (formlessness of) shadow in several ways:

- The anamorphic shadow which displays the shadow colossal in relation to its source; the large shadow on the wall, as the approach of a figure, the shadow a predecessor, a foregoer. Because its source can not be seen, it takes on the formlessness and therefore infinity which we associate with the sublime. (to cast a shadow) e.g. *Shadows and Fog* (1991) Woody Allen
- Within the same category lies the image of the mysterious sinister silhouette behind the screen, with his projected shadow visible *en profile* for his quivering pawns. His projection not recognizable and therefore transformed in the archetypical image of the faceless evil mastermind.<sup>[4]</sup> (remains a shadow) e.g. *Dr No* (1962) Terence Young/Ian Fleming
- A last well known example, depicted often in Frank Millers graphically strong comics: the darkened silhouette in the door, image of the unknown intruder, approaching and invading our most private spaces. (shrouded in mystery, in shadows) e.g. *Sin City* (1991) Frank Miller

The pattern in these examples is evident: the shadow does not advert itself, but refers to something which is due. Unlike light, ‘the shadow’ is a simulacrum that obscures or masks the truth. However because of its sublimity ‘the shadow’ works

<sup>4</sup> This technique is used in film for other purposes too. Filming the silhouettes on the tent’s canvas to suggest sex (as a substitute to the filming of ‘forbidden’ actual sex). In children’s cartoons even fights take place between shadows instead of real characters for largely the same reason.

like the philosopher Baudrillard’s statement:

“*The simulacrum is never that which conceals the truth—it is the truth which conceals that there is none. The simulacrum is true. Ecclesiastes*”<sup>[5]</sup>

It gives a sense of authenticity to the presumed qualities of its source while the real qualities lie in the shadow itself. The shadow thus becomes an *inverted* simulacrum as the sublimity of the shadow equals or exceeds the estimated qualities of its source. Shadow therefore is the place where, as it is shielded from light, truth does not reach.

### Divinity and the Sublime Light

Although in some eastern cultures darkness and shadow have a positive divine connotation, light, certainly within Christianity, has always naturally superseded darkness as an indication of the sacred, as darkness is more commonly associated with the negative instance of a supreme being.

The first instance of the use of the sublime regarding light is the well known third verse of the bible in the book of Genesis: “*And God said, Let there be light: and there was light. And God saw the light, that it was good: and God divided the light from the darkness. And God called the light Day, and the darkness he called Night. And the evening and the morning were the first day.*”<sup>[6]</sup> It can not be more sublime, as to bring light where there was no light before, not even an understanding of light, is surely sublime.

To bring the light to life and therefore life to light is the first sublime act. That image of someone creating light where there was no light before is the –utopian– image which architects strive for. However what is left for us is only the manipulation or directing of the light. Of course in doing so the architect can change the qualities of the light. Designing darkness, shadow and light still is the only (remaining universal) way to *directly* (re) present the sublime in architecture. Other ways

<sup>5</sup> Where his sentence is a simulacrum itself (as intended) by adding the ‘authenticity-marker’ Ecclesiastes, although there is not a verse in Ecclesiastes which resembles his statement.

Baudrillard, J., *Simulacra and Simulation* (1994) University of Michigan Press, p. 1

<sup>6</sup> Genesis 1:3-5, *The Bible* (1611) King James Version





fig. 02 | *Dante and Beatrice gaze upon the Empyrean*

Engraving by Gustave Doré of the Empyrean, the highest reaches of heaven, believed by the ancients to be a realm of pure fire or light, the abode of God and the Angels.

rely on the indirect referential way of pointing towards a sublime concept. The universality of the meaning that is attached to sublime light will be shown in the discussion of the three examples of the use of sublime light within architecture. The 'mere light'<sup>[7]</sup> is subject to interpretation as it adheres to cultural and social differences, because *"The social comprehension of light is a means of understanding social positions in ways that may be real or imagined, but are bound up on the social and cultural associations of certain lightscapes"*.<sup>[8]</sup> But *"The idea of the sublime as a mode of divine excess, disclosed only at the point where the orders of beauty collapse, is already in place. Thus order vies with chaos, the regular with the irregular, the small with the vast, and the rational with the imaginative"*.<sup>[9]</sup> Here Shaw distinguishes 'beautiful'

<sup>7</sup> See the section 'Artificial Light' (Burke) further on

<sup>8</sup> Bille, M., Sørensen, T. F., *An Anthropology of Luminosity: The Agency of Light* (2007) Journal of Material Culture, Vol. 12(3): 263–284, p. 280

<sup>9</sup> Shaw, P., *The Sublime* (2008) Routledge, p. 30



fig. 03 | *Muse performing 'Starlight' at the MTV music Awards*

from 'sublime' light. The sublime is associated with divinity, but does not lie in order, the regular, the small, the rational: in the predictable. In his book *'Masters of Light'*, Plummer divides light in architecture into categories, the category, 'mobile light', gratifies, because of its unpredictability, its 'life', as a 'movement=sublime=divinity' one: *"The most dramatic examples of mobile light in twentieth-century architecture, as we might expect, are found in religious buildings where light's coming and going still has a trace of divine intimation. The belief that 'light is God' may have faded, and God as a numinous presence may have disappeared at an institutional level. Nevertheless an arrival of light out of darkness, and its evolution through time, continue to arouse a spiritual feeling of awe and wonder, reminding us of light's daily miracle—to revive a sleeping world with signs of life, by setting it into motion."*<sup>[10]</sup>

<sup>10</sup> Plummer, H., *Masters of light: twentieth-century pioneers* (2003) William Stout Books, p. 102

When Plummer, who seems to make the same distinction as Burke does,<sup>[11]</sup> discusses sublime instances of natural light in architecture, that movement of light is again accentuated:

*“Primarily from eras when mobile light was revered as a sign of divine incarnation. It was not the ancient forms that were re-created, but their kinetic patterns of animation—the radial streaks of rising and setting sun at Stonehenge, the sudden and dramatic horizontal sunbeams into Egyptian temples, the revolving shaft of vertical light within the Pantheon, the revolution of colored light around the walls of a Gothic cathedral, the spotlight rays aimed like fingers into a Baroque church.”*<sup>[12]</sup>

The immense possibilities, with the advancement of our technological age, of the use of artificial light has created an ascent to the use of the ‘mathematical sublime’ and there have been many experiments with light to create a sublime experience or connotation.

### Artificial Light

Burke makes a distinction between ‘mere light’ and ‘overpowering light’. Light with either great magnitude or strength (the sun) and light which moves with extreme velocity and ferocity (lightning) are likely to produce the sublime.<sup>[13]</sup>

Kant adds another possibility: the multitude (magnitude in infinity) of light, the amount of light seemingly infinite; uncommon in nature, but if artificial light produces the sublime it hinges on this ‘mathematical sublime’.<sup>[14]</sup> An example of the use of artificial light (from multiple light sources), in an effort to achieve the sublime effect, is the

lighting during music concerts. A virtual infinity of light sources, light beams, with different or changing colours. Add to that the smoke, the altar like stage with the spotlight on the high priest: the singer or the soloing member of the worshipped band and the concert becomes the modern divine experience. In the following paragraph an older example of an orchestrated divine experience will be discussed.

### Metaphoric reference, the Pantheon

Other examples are possible, the Mayan or Aztec temples, the Pyramids of Gizeh, even most megalithic sites, as they (as archeologist discover more and more) are aligned with the sun, the stars or the moon and sometimes even planets. However the Pantheon—which is an astronomical device of some kind; an inverted<sup>[15]</sup> solar observatory—is interesting because it has served different powers (religions, emperors) using the same architecture to refer to a changing reference.<sup>[16]</sup> The essence of the building has never been altered since the emperor Hadrianus had it built (c. 120-126 AD). The users *have* changed, and drawn from their different beliefs, the metaphoric association with the rotunda and its *oculus* represents a different Power each time. However apparently its way of evoking awe upon its visitors, believer or unbeliever, is universal. Through this quality the Pantheon has become “*a paradigm of the literal and metaphorical use of light to shape space*”.<sup>[17]</sup>

How did it achieve this paradigmatic status? Initially it seems logical to state that its original function beholds and indicates universal appeal, (the *pan*=all *theon*=gods) being a temple for all the gods. But that changed in “*the year 609, in the depths of the Dark Ages, the emperor in Constantinople gave permission for Pope Boniface IV to consecrate it as*

<sup>11</sup> See the section ‘Artificial Light’ (Burke) further on

<sup>12</sup> Plummer, H., *Masters of light: twentieth-century pioneers* (2003) William Stout Books, p. 102

<sup>13</sup> *Mere light is too common a thing to make a strong impression on the mind, and without a strong impression nothing can be sublime. But such a light as that of the sun, immediately exerted on the eye, as it overpowers the sense, is a very great idea. Light of an inferior strength to this, if it moves with great celerity, has the same power; for lightning is certainly productive of grandeur, which it owes chiefly to the extreme velocity of its motion.*

Burke, E., *On taste: On the sublime and beautiful; Reflections on the French revolution* (1909) P. F. Collier & Son, p. 71

<sup>14</sup> Kant, I., translated by Pluhar, W. S., *Critique of Judgment* (1987) 3rd Edition by Hackett Publishing, \$25 p. 103-113/248-257

<sup>15</sup> Instead of observing the sun directly, the shaft of light is traced to the circular disc it produces on the rotunda wall.

<sup>16</sup> To the other, the higher, the unknown. ‘*There is enough to study in its tangible state and more than enough in its intangible content.*’

MacDonald, W. L., *The Pantheon: Design, Meaning, and Progeny* (1976) Harvard University Press, p. 24

<sup>17</sup> Semes, S. W., *The Architecture of the Classical Interior* (2004) W.W. Norton, taken from an excerpt at [http://www.architectureweek.com/2005/0831/culture\\_1-2.html](http://www.architectureweek.com/2005/0831/culture_1-2.html)

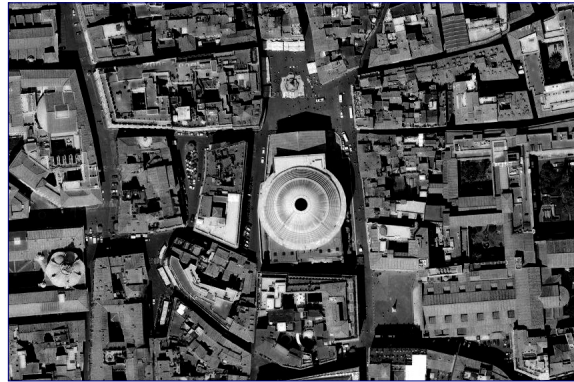


fig. 05 | The oculus of the pantheon as seen from above

The scale of the dome and the void in its center compared to the square and the buildings surrounding the Pantheon.

a church, *Sancta Maria ad Martyres*<sup>[18]</sup>, ‘after the pagan filth was removed’.<sup>[19]</sup>

Its function changing, but its architecture still erect,<sup>[20]</sup> “its form record an attempt to describe something of the awe in which man has always held the universe, visible and invisible, something of man both insignificant and meaningful. It is truly a building of immanence, of no firmly held and dogmatically expressed religious belief”,<sup>[21]</sup> the Pantheon has something which radiates this universality: sublime light.

Within (religious) architecture it is often attempted to invoke a sublime experience with the use of light. It is frequently tried with a combination of two

approaches: a direct, by light, and an indirect way: by a reference to a sublime concept (that could be implied by the way the light is shaped, wrought, etc.). The Pantheon, in this last associative respect is topped with an universal symbol of infinity, wholeness, universality, etc: the circle. Because of its universality as a metaphor its quality as a reference to a particular concept is diminished and its *inherent* meaning(s) replaced. The observer charges, attaches, the metaphor with his own specific meaning and therefore (at least partly) replaces the inherent reference. By doing so the viewer, withdraws a reference from himself instead of the metaphor. The universal appeal is thus a kind of self-inflicted individualism.

This is a negatively formulated argument for the metaphor of the circle, but Semes in his ‘*The Architecture of the Classical Interior*’, says more or less the same of the use of light, albeit with a more positive inclination:

“Light is perhaps the one unambiguous symbol available to the architect should the occasion call for it, regardless of style or culture.”<sup>[22]</sup>

This ‘regardless’ of style and culture has to do

<sup>18</sup> Now known to the Roman Catholic church as the *Santa Maria della Rotonda*

<sup>19</sup> MacDonald, W. L., *The Pantheon: Design, Meaning, and Progeny* (1976) Harvard University Press, p. 14 quotes John the Deacon, in the *Monumenta Germaniae Historia* (1848) Hanover, 7.8.20:

‘Another Pope, Boniface, asked the same [Emperor Phocas, in Constantinople] to order that in the old temple called the Pantheon, after the pagan filth was removed, a church should be made, to the holy virgin Mary and all the martyrs, so that the commemoration of the saints would take place henceforth where not gods but demons were formerly worshipped.’

<sup>20</sup> Some say because the church, by then wealthier than the roman emperor, could take better care of the building.

<sup>21</sup> MacDonald, W. L., *The Pantheon: Design, Meaning, and Progeny* (1976) Harvard University Press, p. 89

<sup>22</sup> MacDonald, W. L., *The Pantheon: Design, Meaning, and Progeny* (1976) Harvard University Press, p. 14



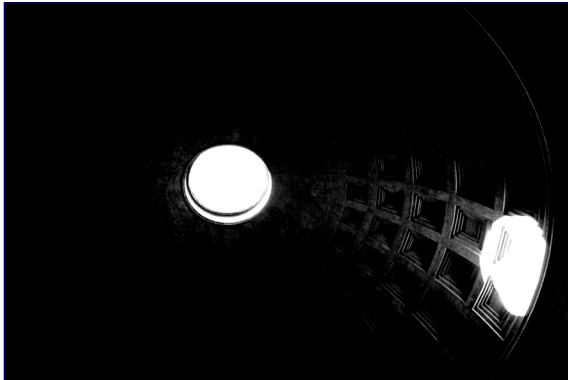


fig. 06 | light tracing the coffers inside the dome

The oculus, where light and circle come together, serves as a junction of the metaphoric possibilities of both circle and light.

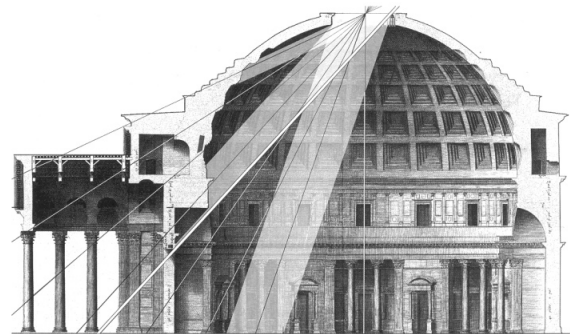


fig. 07 | longitudinal section indicating the angular sun rays

The section shows the angular rays of the sun through the oculus into the interior of the Rotunda at different times of the year. The summer and winter solstices are shown, as well as day and night. A small beam that shines into the arch of the door deserves particular attention. Here the sun creates a small patch of light that announces the beginning and end of the half-yearly summer period.

with the availability of light. While the intensity of its radiance, its angle with the horizon and the longevity of its course through the firmament is different everywhere and all the time, the sun has been worshipped as a bringer of light, a provider of life, all over the world. The 'un-ambiguity' lies in the inability to alter light itself, if you can not alter it, you can not make it yours. It leaves us the withholding (as opposed to the admittance) and in the process of that, the shaping of light.

Light having this non-ambiguous status is perfect for going down the metaphorical road. Since a metaphor is 'always a point of departure', some kind of 'trigger of associative thinking'.<sup>[23]</sup> The resulting reference can change, as we have seen for the circle, per observer (referent). The referenced (sublime) concept being determined by his own frame of reference.<sup>[24]</sup>

The *oculus*, where light and circle come together, serves as a junction of the metaphoric possibilities of both circle and light: "Order, peace, harmony,

*unity – these where the immediate meanings of the Pantheon, cast in a religious setting. Above all it is the garment of light worn by the rotunda which connects the individual with the heavens, and which, appearing in movement on the architecture, bridges the intangible and the tangible*".<sup>[25]</sup> The profound connection of heaven and earth, direct translation of the large dome of the Pantheon, a staggering 43,3 meters of the ground, as the 'vault of the heavens'.<sup>[26]</sup>

If you do not consider the Pantheon as a world in itself but regard the connection with that which is outside: the sun becomes the eye; the *oculus*, its

<sup>23</sup> Franck, O. A., *Metaphors in architecture: Libeskind's Jewish Museum in Berlin*, in: Doevedans, K., and Harst, van der, G., eds., *Het kerkgebouw in het postindustriële landschap* (2004) Uitgeverij Boekencentrum, Zoetermeer, p. 210

<sup>24</sup> Although a frame of reference can be largely defined by a group, religion, era, etc.

<sup>25</sup> MacDonald, W. L., *The Pantheon: Design, Meaning, and Progeny* (1976) Harvard University Press, p. 91

<sup>26</sup> 'What seems more certain is that the dome was intended as a symbol of the heavens, the abode of the gods, ruled over by Zeus-Jupiter, the Sky God and Sky Father. His place, if not marked by an image in the rotunda, was the void seen through the oculus.'

MacDonald, W. L., *The Pantheon: Design, Meaning, and Progeny* (1976) Harvard University Press, p. 89

pupil;<sup>[27]</sup> releasing the powerful panoptic gaze of the god(s) down upon the observer.

Hadrianus built the Pantheon to secure his apparent association with these vehement gods to ensure “*the intimate connection of the forces of the cosmos with the ruler and his subjects*”.<sup>[28]</sup> it would give him an ‘eternal’ advantage to the rulers of the world before and after him. But his power, although in some way preserved in remembrance through the Pantheon faded away like the brilliant disc of light moves with increasing speed “*along the last, smooth portion of the dome, and then suddenly it disappears, as if it had been drawn abruptly out through the oculus*”.<sup>[29]</sup>

### Analogy of the Natural Sublime

Within the Loire valley, in a town called Firminy, the last church designed by Le Corbusier, never finished in his lifetime, has finally been completed.<sup>[30]</sup> l’Eglise Saint-Pierre has never been used as it was intended. Recently opened as an art gallery and showcase for Le Corbusier and other architects, and not consecrated as a church, it nevertheless brings a sacral experience to its visitors.

The wall behind the altar radiates light at the time mass would normally be held. The light piercing through the perspex cylinders cast in the eastern concrete wall forms a display resembling a starry firmament. With some knowledge of that

firmament you could discover the constellations of Orion and its nearby neighbour Taurus. The light rays emitted through the 22 centimeter thick wall, are transposed onto the other walls as curvilinear lines. Together with the light coming from several other sources, mostly coloured (the light is guided through an architectural *luminaire* a kind of diffusing aperture with painted sides to colour the light), the overall effect is an enchantment of the space.

At first I wanted to discuss the use of analogy to reference the ‘natural sublime’, the sublime as it happens in nature, the *non-man-made* sublime.

But why an actual constellation and not just a random or fantasy collection of perforations to represent the starry sky? The constellation of Orion, according to José Oubrierie the assistant of Le Corbusier and later project architect of the church, has no particular “*connotation catholique, islamique, mythologique*.” It has no connotation at all: “*Bref tout ce que vous pouvez imaginer se terminant par ique*.”<sup>[31]</sup> As we will see Orion and his constellation *have* a deeper meaning. And if maybe Oubrierie was not aware of it, Le Corbusier certainly was. His interest in Catharism the belief of some of his forefathers, and –although his architectural work does not show a preference for masonry– there is certainly an ‘interest’ in *freemasonry*.

In France during the sixties it was obligatory to be a member of the Roman Catholic church, or at least a Christian, to acquire a commission for a church. And although Corbusier was above all a believer in himself “*it was precisely his simultaneously evangelical and pagan joy in sun, space, and verdure which allowed him to boast to his friend Edgard Varèse that he had been described to the Archbishop of Besançon as a true Christian, ‘but a Christian of 5000 years before Christ’*.”<sup>[32]</sup> His view on his “*mission as architect-urbanist was entirely in keeping with the spirit of his early upbringing*:

<sup>27</sup> The size (7,8m) of the pupil determines the amount of light that enters the eye of the beholder. In this case the light comes from the eye of Zeus-Jupiter-Helios, the sun.

‘*Zeus-Jupiter-Helios, the supreme god allied with the Great Sun, was himself inside the rotunda, his effulgence visible but intangible. The sun, said the ancients, is the eye of Zeus, and in Hadrian’s Pantheon the greatest of the gods was epiphanized in light.*’

MacDonald, W. L., *The Pantheon: Design, Meaning, and Progeny* (1976) Harvard University Press, p. 91

<sup>28</sup> MacDonald, W. L., *The Pantheon: Design, Meaning, and Progeny* (1976) Harvard University Press, p. 89

<sup>29</sup> MacDonald, W. L., *The Pantheon: Design, Meaning, and Progeny* (1976) Harvard University Press, p. 75

<sup>30</sup> Due to financial problems the completion of the church from first sketch to opening took a staggering 46 years:

**1960–1965** Conception, *Le Corbusier, José Oubrierie, assistant*

**1968–1979** First stages of realization, *Association Le Corbusier pour la construction de l’Eglise de Firminy-Vert*

**1968–1970** First construction project, *José Oubrierie and Louis Miquel*

**1970–1979** Second construction project, *José Oubrierie*

**2002–2006** Final project and construction

<sup>31</sup> ‘*In short everything you can imagine ending with ‘ique’.*’ ‘-ique’ is like the English ‘-ism’.

Oubrierie, J. in Bonnin, F., *Eglise Saint-Pierre de Firminy-Vert, un chantier d’achèvement filmé* (2007)

<http://www.batiactu.com> (visited 03-09-2009)

<sup>32</sup> Eardley, A., *Le Corbusier’s Firminy Church* (1981) Rizzoli, New York, p. 8

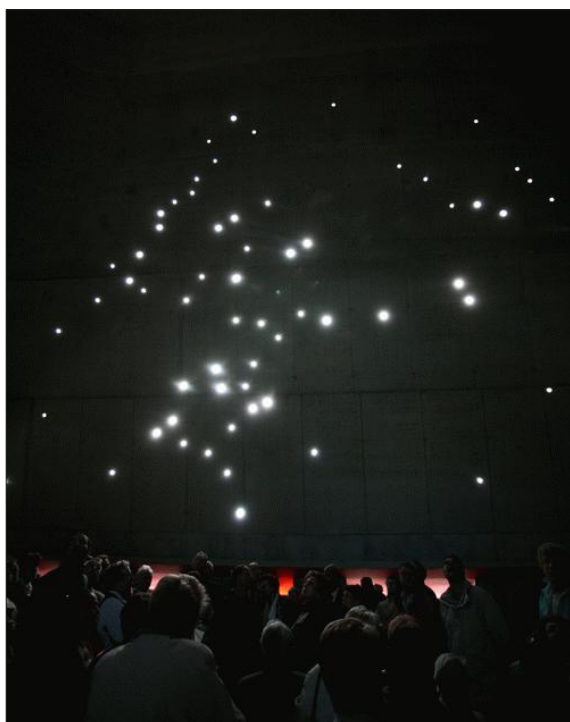


fig. 08 | visitors looking up to the starry 'wall'

When it's dark in the church the light can be seen resembling the 'natural sublime' starry sky.



fig. 09 | 17th century depiction of Orion hunting

Compared with fig. 08 tilt the picture some twenty degrees to the right to have them aligned. Not all the stars of the actual constellation are on both depictions, why they are left out is uncertain. One explanation could be the accuracy of the 17th century depiction. The accuracy of the position and amount of the stars is questionable.

he came, after all, from a Cathar family whose Protestant heresies embraced the sun as the provider and regulator of all earthly life;”<sup>[33]</sup> And when he said about the Firminy church that “this framework will lend itself to possible solar festivals recalling to men, once a year, that they are children of the sun, something entirely forgotten in our unfettered civilization, crushed by absurdities particularly in architecture and urbanism”.<sup>[34]</sup> He was no doubt aware that “such an overt celebration of the sun in a church dedicated to the Christian god would necessarily be received as an intolerably offensive

pagan gesture by a Catholic congregation”.<sup>[35]</sup>

The astronomic nature of the building is especially clear on the solar rise of the constellation of Orion (June 29th) the holy day of Saint Peter (Saint Pierre) to whom the church is dedicated. Within the wall behind the altar that astronomical event is carved out. What does the astronomical reference to Orion signify? An early commentary on the book of Job provides the suggestion that Orion is the symbol of the martyrs, but the Mithraic tradition has a more significant reading of the constellation.<sup>[36]</sup> Orion

<sup>33</sup> Eardley, A., *Le Corbusier's Firminy Church* (1981) Rizzoli, New York, p. 9

<sup>34</sup> Le Corbusier, *Le Corbusier et son atelier rue de Sevres 35*, in: *Oeuvre complete 1952-1957* in: Eardley, A., *Le Corbusier's Firminy Church* (1981) Rizzoli, New York, p. 12

<sup>35</sup> Eardley, A., *Le Corbusier's Firminy Church* (1981) Rizzoli, New York, p. 12

<sup>36</sup> The Mithraic tradition, a mystery religion which became popular among the military in the Roman Empire and after that has interested different groups among others the freemasons.

Speidel, M., *Mithras-Orion: Greek hero and Roman army god* (1980) Brill Archive





fig. 10 | the curvilinear effect the perspex cylinders produce

The reflection in the perspex cylinders gives an interesting kinetic effect on the exposed concrete walls.



fig. 11 | sublime light in a nonreligious context

Beams of sunlight streaming through the windows at Grand Central Station illuminating the floors where the passengers pass to their different destinations.

being Mithras and killing the bull (Taurus which is next to the constellation of Orion). (see fig. 08 and 10) Orion-Mithras, the God of a teaching that was rediscovered by (neo-)Catharism. This *gnosis* identifies Orion-Mithras as a bringer of light, a gate to the Gods, or the deification of man himself. In 1920, Charles-Édouard Jeanneret-Gris named himself Le Corbusier, 'the crow-like', a name taken from his mothers gnostic Cathar ancestors. Corax the Latin for crow, is the first rank (of seven) within the Mithraic tradition. Not only the Mithraic but also the Egyptian<sup>[37]</sup> and Hebrew reading address Orion:

*"His name is given as Ha-ga-t, which means this*

<sup>37</sup> Orion's importance for the Egyptian cults is best explained by the alignment of the pyramids of Gizeh, representing the light of the heavens on earth, to the stars in the "belt of Orion".

*is he who triumphs. The hieroglyphic characters below read Oar. Orion was anciently spelled Oarion, from the Hebrew root [or] which means light. So that Orion means coming forth as light. The ancient Akkadian was Ur-ana, the light of heaven."* <sup>[38]</sup>

So the light in the church has a double meaning which in a way 'enhances' itself; it is self-reinforcing. Orion as a bringer of light brings light through the constellation of Orion, the bringer of light, etc.; a tautological 'Droste'-effect! Birksted argues that Le Corbusier was a member of the masonic Loge, and claims the discovery of the origin of the idea for the implementation of the constellation of Orion in the *"Saint-Pierre in Firminy-Vert, with*

<sup>38</sup> Bullinger, E. W., *The witness of the stars* (1967) Kregel Publications, p. 125

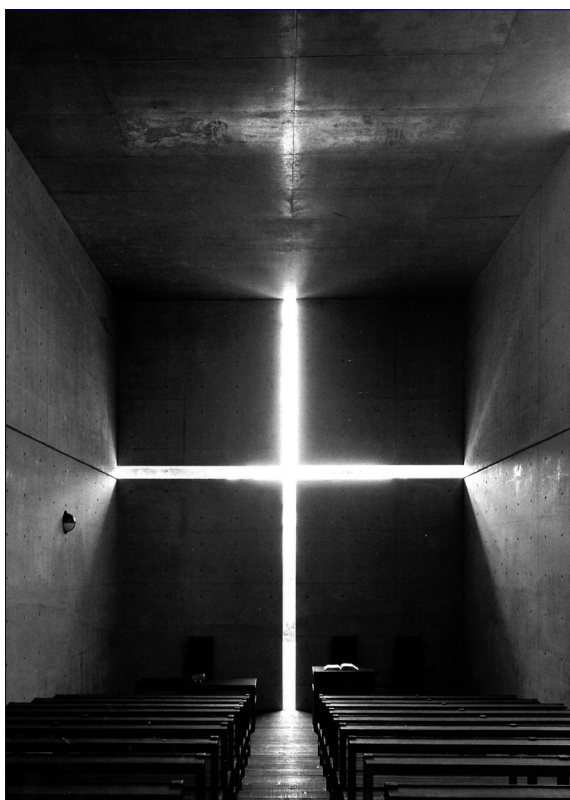


fig. 12 | The cruciform incision in the Church of the Light

The light coming through the cross is reflected on both ceiling and floor and retains the cruciform shape.

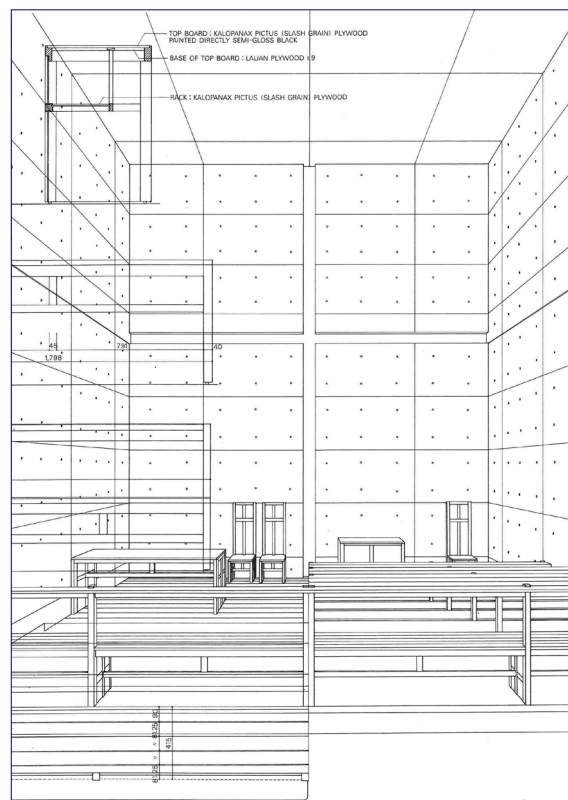


fig. 12 | Central perspective design drawing with the cross

The church-goer is led in such a way that there is no 'escape' from the view on the cross.

its pyramid-on-cube and its "astral symbolism" [...] [it] recycles the Masonic star-spangled dome of the Loge L'Amitié." [39] Superficially the design of the French architect seems in line with the beliefs of his commissioners, but a closer look gives away the hidden meanings Le Corbusier attached to the building by inserting the architectural astral analogy.

#### The Cross of Light, void of a symbol?

"Symbols do not act on the mind in the same way as texts: they generate thought and, as the field of thought is infinite, they have never suggested everything. If we advocate symbolism, it is because we have recognized it to be the

most powerful stimulant of autonomous thought, derived from oneself. [...] Now, the superiority of symbols consists in muteness that prevents them from preaching anything, while giving rise to reflection.... But the person who is brought by symbolism to meditation no longer detaches himself from it, for the image makes the mind work untiringly." [40]

If the early plan for the roof light had been followed, the Saint-Pierre could have been used to discuss the last example, that of symbolism, as well "but the cruciform incision admitting perhaps too generous or too unmysterious a light to the interior, which we find in the earliest scheme for the roof (EG FIR 5758), was quickly superseded by

39 Birksted, J.K., *Le Corbusier and the Occult* (2009) MIT Press, London, p. 311 [author]

40 Wirth, O., *Le Symbolisme* (1930) in: Birksted, J.K., *Le Corbusier and the Occult* (2009) MIT Press, London, p. 312 [author]

*an other light box – the two canons à lumière in the final project having precisely the same intended function [...] namely to illuminate the high altar on Good Friday morning and Easter Morning.”* <sup>[41]</sup>

The cross of light that dominates the small church, Tadao Ando designed in 1987 for a parish in Ibaraki (Osaka, Japan), makes a better example of the use of symbolism and light.

The urban situation of the church is planned in such a way that the church is separated from its surroundings. The introspective character of the Japanese experience of spirituality is visible in every detail. However once inside the gaze is fixed on *“the cross, the 16mm float glass is fixed in the concrete without a frame to heighten further the dramatic effect of the light streaming through it.”*

<sup>[42]</sup>The cross is not created, but left empty and fills with light. The void the cast concrete leaves, without even its (western) symbolic shape, has a deeper meaning in Japanese culture.

*“In Zen, and Zen art, ‘being’ is considered to be the self-unfolding of the unformed ‘Nothing’ or ‘God’. In particular, the function of the beautiful is to spark an epiphany of the absolute and formless void which is God. True emptiness is the state of zero. This is expressed by the equation zero equals infinity, and vice-versa. Accordingly, emptiness is not literally a lack of content or passivity.”* <sup>[43]</sup>

Tadao Ando expresses this emptiness in his architecture, like Le Corbusier wanted to make the home the new temple, <sup>[44]</sup> he gives a spiritual sense, ‘adding emptiness’, to every space. To attain this effect they wield the same tool: *“Light is the*

*special medium which he [Ando] uses to clarify the emptiness in his architecture”* <sup>[45]</sup>

In a church which is dominated by the stark contrast between dark and the lighting symbol, silence is gently enforced and at that *“intersection of light and silence we become aware of ‘nothingness’, a void at the heart of things.”* <sup>[46]</sup> Two other elements come together in the Church of the Light, East and West are ‘unified’ in the architectural implementation of a symbol, *“two countervailing ideas are juxtaposed in the crucifix and the empty silence of the void as a sign of ‘nothingness’- the sign of the West against the non-sign of the East.”* <sup>[47]</sup> Furthermore as with the Pantheon the void of the cross-shaped *oculus* in the Church of Light refers to something ‘out there’. But it differs in its view on the relation of man and god as it is *“drawing God inside its Emptiness”* <sup>[48]</sup> and *“the opening at one end becomes the door to the world above, through which the gods can descend to earth and man can symbolically ascend to heaven. Allied with light, which symbolizes the divine, the austere expression of the cross as an opening in the wall makes it a kind of communion with heaven, an opening through which a symbolic passage is possible.”* <sup>[49]</sup> Here god becomes both *humilis et sublimis* and in that way a virtual route is established. Unlike the intention of the Pantheon’s design as it never allows this passage. And although we know from the Greek and Roman myths that gods more often than not act lowly, there is, as it seems from the Pantheon’s design, only one direction, that of reverence towards the gods: *“Prayers would rise like smoke toward that void where we place the gods”.* <sup>[50]</sup>

<sup>41</sup> Eardley, A., *Le Corbusier’s Firminy Church* (1981) Rizzoli, New York, p. 12 (EG FIR 5758 is the reference number of the drawing where the ‘cruciform incision’ is not yet replaced.)

<sup>42</sup> Drew, P., *Church on the water, church of the light Tadao Ando* (1996) Phaidon Press Ltd, London, p. 19

<sup>43</sup> Drew, P., *Church on the water, church of the light Tadao Ando* (1996) Phaidon Press Ltd, London, p. 8

<sup>44</sup> *‘I have been inspired by a single preoccupation, imperatively so: to introduce the sense of the sacred into the home; to make home the temple of the family. From that moment on, everything was altered. A cubic centimeter of dwelling was worth gold, representing possible happiness. With such a notion of dimension and purpose, you can fashion a present day temple on the scale of the family, apart from cathedrals themselves, which were built... in bygone times...’* Eardley, A., *Le Corbusier’s Firminy Church* (1981) Rizzoli, New York, p. 8

<sup>45</sup> Drew, P., *Church on the water, church of the light Tadao Ando* (1996) Phaidon Press Ltd, London, p. 9 [author]

<sup>46</sup> Drew, P., *Church on the water, church of the light Tadao Ando* (1996) Phaidon Press Ltd, London, p. 8

<sup>47</sup> Drew, P., *Church on the water, church of the light Tadao Ando* (1996) Phaidon Press Ltd, London, p. 23

<sup>48</sup> Drew, P., *Church on the water, church of the light Tadao Ando* (1996) Phaidon Press Ltd, London, p. 23

<sup>49</sup> Drew, P., *Church on the water, church of the light Tadao Ando* (1996) Phaidon Press Ltd, London, p. 11

<sup>50</sup> MacDonald, W. L., *The Pantheon: Design, Meaning, and Progeny* (1976) Harvard University Press, p.92

(Prayers would rise like smoke toward that void where we place the gods (Marguerite Yourcenar) p. 92 original p. 164-5

## Place and Light

Light, as Ando uses it, heightens our awareness of place and transcendent place. It gives a paradoxical experience of being detached from and at the same time part of the universe. The *utopian* and the *'topian'* at the same time; a heterotopic (dis)-placement.

The light bolted in the void relates this 'place' to the 'space outside'. Hence the churches Ando designed are *"detached representations of that cosmicized world rather than part of it"*.<sup>[51]</sup> This definition confirms that these churches are heterotopic by nature; for they are part of the world, but detached from it *"they are outside continu space"* and at the same time representations of that world *"they reflect"*.

Light is an important part of the process –or toolbox, to refer to the use of light as architectural instrument– to achieve this bordered condition. As it is actively working to allow the opening and closing to the (world) outside; that transcendental Cosmos. As for Ando's architecture, Drew goes so far as to admit that Ando's dogma to bring a sense of the sacred [for the sake of argument: the heterotopic] lived up not only to the churches but also to the houses he designed: *"Ando's houses found the world by their geometry, by being centred, and by the use of light"*.<sup>[52]</sup>

The definition of 'place' as something light can produce, gives de presupposed notion that that place is linked with (all) other places through the associative properties of light. This place doesn't necessarily need to be a 'real' place, it can be a more profound place; the heart:

*"In my travels as a young man I strolled through the mazelike expanses within the cavernous medieval Christian monasteries belonging to the Cistercian order. Through a myriad apertures, light pierced the darkness, leaving an impression burned in my mind that I remember clearly to this day. Pervading those solemn and dignified spaces, the light penetrated directly to my soul – a harsh*

*light but at the same time a gentle, mesmerising light"*.<sup>[53]</sup>

## Heterotopias illuminated

So heterotopias are literally placed in a different light. But if a heterotopia uses light, does this light ought to have a special character? Professor of anthropology James Faubion in his discussion of Foucault's heterotopias points out that *"they [heterotopias] are darker or brighter or more complex or perhaps more striking in their literal and figurative play of darkness and light"*.<sup>[54]</sup> Perhaps the light present, in itself, is not what makes it different per se, but the meaning that is *given* to that light does. Ando's quest for the appropriate light in his Church of the light points to that: *"light that, hollowing out darkness and piercing our bodies, blows life into 'place'. It was space constructed of such light as this that I sought"*.<sup>[55]</sup> Then assuming it is not the light that makes the heterotopia –although as a heterotopia is deviant by definition there are probably exceptions e.g. a darkroom– and it is the confining 'threshold' that gives meaning to this 'other place', it still is in need of the proper light to (re)assure its status as a heterotopia. Contrast is the keyword. Either between the places at both sides of the threshold and the contrast that results from the transition of lightscapes. The light in the cases discussed above is causing that these heterotopic architectural instances *"highlight an 'unspoken' dynamic of 'sacralization' still operative in even the most secularized and godless of modern societies"*.<sup>[56]</sup>

The heterotopia that uses light to define itself, an other place connected by light to places real or presumed, I shall by propinquity name it a *fōstopos*. The *fōstopos* of course has the basic characteristics

<sup>51</sup> Drew, P., *Church on the water, church of the light Tadao Ando* (1996) Phaidon Press Ltd, London, p. 14

<sup>52</sup> Drew, P., *Church on the water, church of the light Tadao Ando* (1996) Phaidon Press Ltd, London, p. 10 [author]

<sup>53</sup> Ando, T., 'To Luis Barragán' in: (ed) Zanco, F., *Luis Barragán: The Quiet Revolution* (2001) Skira, Milan, p. 12

<sup>54</sup> Faubion, J. D., *Heterotopia: An Ecology* (2008) in: *Heterotopia and the city: public space in a postcivil society* (eds) Dehaene, M., de Cauter, L. (2008) Routledge, p. II (of article) [author]

<sup>55</sup> Ando, T., 'The Eternal Within the Moment' in: (ed) Dal Co, F., *Tadao Ando: Complete Works* (1995) Phaidon, p. 471

<sup>56</sup> Faubion, J. D., *Heterotopia: An Ecology* (2008) in: *Heterotopia and the city: public space in a postcivil society* (eds) Dehaene, M., de Cauter, L. (2008) Routledge, p. I (of article)



of the heterotopia discussed in the first article: it takes a contraposition towards the normal, the profane. That position is undoubtedly non-standard, as the *fōstopos*<sup>[57]</sup> like the heterotopia is sublime and therefore extreme; both are extreme “in their exaggerations of scale, but also in their reductions, their miniaturizations and diminutions, their fussily disciplinary attention to every last detail”.<sup>[58]</sup> This attention to detail and the way it treats light has characterized the architecture of the Cistercian order when they built their *fōstopoi*. The monasteries and churches carved from light that have “entered architectural history as the architecture of light [...] striking because of the special incidence of light: they had a fine sense of light proportions. With stone and light they created ‘miracles of beauty’.”<sup>[59]</sup> That miraculous achievement of designing the sublime through light inspired architects all over the world in the centuries thereafter to convey meaning in their ‘sacred’ work.

A space that is simply lit does not suffice, light without meaning does not qualify to the reflective *modus operandi* that is required for ‘an other place’. The architecture left without the meaning –that is part of the twofold of carrier and concept– is empty. But because its emptiness it is therefore paradoxically left open to fill. Reminding of his fellow Frenchmen Foucault and Derrida, Georges Perec in his erudite essayistic: ‘*Species of spaces and other pieces*’, expresses his generated thought on a space without function. A nothingness that has to be filled, if not with inherent meaning then with everything plausible.

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<sup>57</sup> A *fōschronos* is also conceivable, a place that through light reflects or gathers time. A special case would be a space observatory, that connects us to both past and ‘parallel future?’ through the observation of light that ‘travelled’ from distant constellations.

<sup>58</sup> Faubion, J. D., *Heterotopia: An Ecology* (2008) in: *Heterotopia and the city: public space in a postcivil society* (eds) Dehaene, M., de Cauter, L. (2008) Routledge, p. 11 (of article)

<sup>59</sup> Santen, van C., and Hansen, A.J., *Licht in de architectuur, een beschouwing over dag- en kunstlicht* (1985) J.H. De Bussy BV, Amsterdam [author]

Translation of ‘*is de geschiedenis ingegaan als lichtarchitectuur [...] opvallend door de bijzondere lichtinval: ze hadden een fijn gevoel voor lichtverhoudingen. Met stenen en licht maakten ze ‘wonderen van schoonheid’.*

*“I haven’t succeeded in thinking of nothing. How does one think of nothing? How to think of nothing without automatically putting something round that nothing, so turning it into a hole, into which one will hasten to put something, an activity, a function, a destiny, a gaze, a need, a lack, a surplus...?”*<sup>[60]</sup>

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<sup>60</sup> Perec, G., translated from French by Sturrock, J., *Species of spaces and other pieces* (1998) Penguin Classics







There is a crack, a crack in everything  
That's how the light gets in  
That's how the light gets in  
That's how the light gets in



## Credits

- **Front**  
*The Weather project*  
Turbine Hall, Tate Modern, London, UK, (2003)  
Olafur Eliasson
- **Figure 01**  
*Lichtdom*, NSDAP Party Rally  
Zeppelinfeld, Nuremberg, Germany (1938)  
Stadtarchiv Nuremberg
- **Figure 02**  
*Dante and Beatrice gaze upon the Empyrean*  
*In circles verging from the central bow'r,*  
*Like the fair foliage of a snow-white flow'r,*  
*Orb within Orb, the cohorts of the Blest*  
*Delighted sate; while round the point of Noon,*  
*Wide hov'ring warblers, with favonian tune,*  
*O'er the fair scene a purple umbrage cast.*  
Canto XXXI 1st verse  
Paradiso Divine Comedy (1867)  
Gustave Doré
- **Figure 03**  
*Muse performing Starlight*  
Live at MTV Europe Music Awards,  
Copenhagen, Denmark (2006)  
photographer unknown
- **Figure 04**  
*Sin City, episode IV, title page*  
Dark Horse Presents #53 (august 1991)  
Frank Miller
- **Figure 05**  
*The Pantheon from above*  
edited photograph (2009)  
Google + author
- **Figure 06**  
*Pantheon Oculus no. 2*  
Pantheon, Rome, Italy (2009)  
Ross Pollack
- **Figure 07**  
*Longitudinal section of the Pantheon*  
illustration taken from Sperling:  
*'Early Orchestration: The Pantheon as a*  
*Resonance Element'* (2001)  
original: Antoine Desgodetz (1764)
- **Figure 08**  
*Interior side of the East facade of the Saint-*  
*Pierre de Firminy*  
Saint-Pierre de Firminy, France (2007)  
photographer unknown
- **Figure 09**  
*Engraving of the constellation of Orion*  
in: *Uranometria*, Bayer, J., Germany (1661)  
original: Alexander Mair (1559)
- **Figure 10**  
*Untitled # 2*, Gelatin silver print on paper  
Saint-Pierre de Firminy, France (2007)  
Hélène Binet
- **Figure 11**  
*Beams of sunlight streaming through the*  
*windows at Grand Central Station*  
New York City (1930)  
Hal Morey
- **Figure 12**  
*Church of the Light, interior*  
photo taken from Drew: *'Church on the Water,*  
*Church of the Light, Tadao Ando'* (1996)  
Shinkenchiku-sha
- **End**  
*Rays of light after the storm*  
location unknown (year unknown)  
photographer unknown  
  
accompanying lyrics: chorus of the song  
'Anthem' on the album 'The Future' by  
Leonard Cohen.

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