

Chris Schellhammer  
Kay Edge  
Qualifying Seminar  
Paper #2  
October 16, 2007

Contradiction and Context  
Le Corbusier on Gothic Architecture and Regulating Lines

Introduction:

This paper explores the meaning behind a quotation from Le Corbusier in *Towards a New Architecture* regarding Gothic architecture. The paper will explore contradictions yet will also try to explain through parallel contexts how the statement can be interpreted.

Le Corbusier states,

“The styles of Louis XIV, XV, XVI or Gothic, are to architecture what a feather is on a woman’s head; it is sometimes pretty, though not always, and never anything more.” (Le Corbusier 37)  
*from Towards a New Architecture*

The first task in understanding this statement is to dissect it semantically. What are the meanings of the words and their relationship to each other? There is inherent difficulty in this task given various meanings of words, especially given the fact these words might change context as they are translated from Le Corbusier’s native tongue.

Regarding “styles” Le Corbusier offers help. He states, “Style is a unity of principle animating all the work of an epoch, the result of a state of mind which has its own special character.” Ludwig Mies van der Rohe is referenced with Le Corbusier as having a similar stance on what style means in architecture: “Architecture is the will of an epoch translated into space” (Gutschow 75). Based on the implication of time (epoch) to style, it can be compared to consumer fashion, such as clothing. The ‘feather’ [in hat, on head] reference supports a fashion reference. Because clothing fashions come and go seemingly without cause, and recycle according to fad, style can be interpreted as a state of being without substance. Yet Le Corbusier does not seem to be against style per se, as the section on *Originality* will indicate. In this section, he suggests that the epoch of his

time is yet to be completely revealed. Also in this section, he does express concern that architecture gets stuck in style and this clearly frustrates him.

The feather [in hat, on head] reference also suggests that decorative elements are to be considered. The section on *Decoration* discusses this context.

Finally, ‘pretty’ is used to describe the Gothic style. It is safe to deduct that ‘pretty’ is less significant than ‘beauty’ in this discussion as Le Corbusier uses it to describe a base-line aesthetic: ‘it is sometimes pretty, though not always, and never anything more’. By the use of ‘more’ we can assume that ‘beauty’ would indeed be of greater value, or more, than ‘pretty’. In response to this aesthetic description, we will use Le Corbusier’s words on form and line to contrast with what is known about Gothic architecture. And it is with this section of *Geometric Drivers* we will start.

Yet the discussion does not seem complete without addressing parallel contexts that are not necessarily suggested in the semantics of the criticism, but are related to the topic. These sections will cover *Religion, Technology, Musicality* and *Originality*.

#### *Geometric Drivers:*

Perhaps the most profound contradiction in the quotation is with respect to both Le Corbusier and the Gothic masters’ notions of form and geometry driving beautiful architecture.

Gothic architecture, for both architect and builder, relied on geometry and form. Based on the overwhelming evidence to this fact, it might be more correct to suggest that the reliance on geometry bordered on devotion in which both the aesthetic and technical importance of geometric proportion is not compromised (Simson29-35).

Similarly, “primary forms are beautiful forms because they can be clearly appreciated.” (Le Corbusier 23). He also suggests a biological tendency to appreciate primary form: “Our eyes are constructed to enable us to see forms in light” (Le Corbusier 29) Moreover, he applauds the professional pursuits of engineers: “Working by calculation, engineers employ geometrical forms, satisfying our eyes by their geometry and our understanding by their mathematics; their work is on the direct line of good art” (Le Corbusier 23).

To be clear, in his chapter on Mass, Le Corbusier stresses cubes, cones, spheres, cylinders or pyramids as the great primary forms. He suggests that these forms are immediately distinguishable without ambiguity and it is for this reason these forms are the most beautiful forms (Le Corbusier 29).

Related to geometry, Le Corbusier offers a more analytical view of Gothic to help explain the introductory quotation. “Gothic architecture is not, fundamentally, based on spheres, cones and cylinders. Only the nave is an expression of a simple form, but of a complex geometry of the second order (intersecting arches). It is for that reason that a cathedral is not very beautiful and that we search in it for compensations of a subjective kind outside plastic art. A cathedral interests us as the ingenious solution of a difficult problem, but a problem of which the postulates have been badly stated because they do not proceed from the great primary forms. The cathedral is not a plastic work; it is a drama; a fight against the force of gravity, which is a sensation of a sentimental nature” (Le Corbusier 30)

Simson would agree with the idea of a gravitational drama: “and yet, we cannot enter a Gothic church without feeling that every visible member of the great system has a job to do. There are no walls but only supports; the bulk and weight of the vault seem to have contracted into the sinewy web of the ribs. There is no inert matter, only active energy” (Simson 7)

Yet, Le Corbusier’s examples of regulating lines would appear to have been influenced by Gothic plan and elevation geometries (see Appendix A). Unless one were to quantify the generalizations posed by Le Corbusier using Gothic examples to reach a different conclusion, Le Corbusier seems to be in direct conflict with his own advice and architectural prescription. Following such a similar comparison, it is difficult to reconcile the comment on Gothic architecture when Le Corbusier has this to say about regulating lines. “The regulating line is a satisfaction of a spiritual order which leads to the pursuit of ingenious and harmonious relations. It conveys on the work the quality of rhythm. The regulating line brings in this tangible form of mathematics which gives the reassuring perception of order. The choice of a regulating line fixes the fundamental geometry of the work; it fixes therefore one of the “fundamental characters.” The choice of the regulating line is one of the decisive moments of inspiration; it is one of the vital operations of architecture (Le Corbusier 75).

Therefore, it would seem that regulating line is just as subjective as art itself, or there is some proper formula of which Le Corbusier could systematically criticize regulating line. While no text could be found to offer an answer, the former is probably the most probable explanation.

Lastly, it is worthwhile to point out geometric deviations. Indeed, while both Gothic architecture and Le Corbusier would adhere strongly to measurement, there are examples of deviations for both as well. Villa Savoye is a good Le Corbusier example where a grid is used in plan to generate the primary forms of the structure. Yet internal divisions would not necessarily conform to the grid.

In a Gothic example, the construction of the Milan Cathedral suffered from a generally haphazard approach to Cathedral growth, which in turn impacted the height of nave, aisles, piers and vaults. The difficulty was solved by a mathematician, Gabriele Stronalo, where he adjusted the total height of the Cathedral by 3.5 meters but introduced a geometrical solution for the rest of the church in the process. (Ackerman 90)

Where this similarity is differentiated for both parties, Le Corbusier's changes to geometry were intuitively artistic in nature, whereas the example of Gothic deviation above was based more on making a change to a single geometric value to create corresponding geometric symmetries where there were none and construction problems dominated.

*Religion:*

It is generally understood that Le Corbusier was an atheist. Given that the architecture leads to a notion of meaning, perhaps the representation of heaven in Gothic architecture disagreed with Le Corbusier. One might conclude that Le Corbusier would refrain from projects with religious contexts. However, some of Le Corbusier's most accomplished works are religious structures.

It was because of his proclaimed non-religious affiliation that his commission for Ronchamp was passionately contested within the Catholic Church. Le Corbusier resisted the commission as well, anticipating a lack of architectural and artistic license for the project. Eventually, he was convinced to take on the project and we have what is widely considered a "brilliant sculptural achievement" (Blake 136). Another project with religious contexts is the Sainte-Marie-de-la-Tourette Monastery in Evieux, France. One of the more successful moves in La Tourette, according to Blake, is how the chapels receive their light, and consequently generates color. Three cone shaped skylights fill the space with light and the brightly painted walls "create an ambiance of spirituality" (Blake 157).

The use of light in Gothic architecture is considered the second characteristic behind measure and geometry; and the combination of appropriate measure and luminosity created beauty (Simson 50).

It is clear that light is important to both Gothic architecture and Le Corbusier's work; and particularly to religious structures. What is the difference then? Both seem to maximize light according to their own 'style'. For Le Corbusier, light is a generator of form and light that promotes primary forms would be considered beautiful. Therefore, Gothic light according to Le Corbusier must not generate primary or beautiful form. This is understandable, where the stained glass creates a kaleidoscope affect where form is indiscernible.

Additionally, it should also be noted that the overwhelming example of Gothic architecture is the cathedral whereas Le Corbusier's works span a variety of private and public institutions. In addition, individuals and society were discouraged from change based on religious doctrine despite an increasing dedication to Scholasticism (Panofsky 5). Thus, Le Corbusier could be dissatisfied with a style of architecture that appears static in society and/or dissatisfied with an architectural style that was an environment for thought control. This would not sit well with an atheist or a change-advocate. Le Corbusier was both and the next section discusses Le Corbusier's affinity for change as a force for progress.

*Technology:*

The notion of change-advocate is supported by Le Corbusier's actions in Paris in 1908 "he was looking for a new kind of 'honesty' in the geometry of the machine forms that seemed to typify his time" (Blake 9). In his own words, "There is one profession and one only, namely architecture, in which progress is not considered necessary, where laziness is enthroned, and in which the reference is always to yesterday" (Le Corbusier 109). Regardless if this statement is actually true, the author certainly believes it and this can serve as a basis for explaining his stance on Gothic Architecture – what he believes to be a very programmed style.

However, as we have discussed, Gothic architecture is very formal, and its adherence to geometry and form proven. Upon reading this aim of architecture, one might deduce that Le Corbusier appreciated Gothic architecture for reaching the same end. "Architecture is the art above all others which achieves a state of platonic grandeur, mathematical order, speculation, the perception of the harmony which lies in emotional relationships.

In his sections related to "eyes that cannot see", Le Corbusier discusses the promise of standardization and its ability to solve problems (Le Corbusier 133). The context of this comparison is questionable, but because Gothic architecture adhered to a strict geometry and light function, standardization was important throughout the medieval era. This facet regarding technology is a paradox considering the fact that standardization would ultimately create stagnation – something that clearly frustrated Le Corbusier.

*Decoration:*

Perhaps Le Corbusier's thoughts on Gothic Architecture stem from his differentiation between art and decoration. "We are in a diseased state because we mix up art with a respectful attitude towards mere decoration" (Le Corbusier 95). If the repetitious architectural elements, (such as stained glass, mosaic, etc...) of Gothic architecture, which are meant to help humble the

faithful before God, are reasonably suggested as decorative, it is no wonder Le Corbusier denounces the medieval style.

Indeed, “the medieval mind was preoccupied with the symbolic nature of the world of appearances” (Simson xxi). Le Corbusier may feel that this ornamentation erodes the architectural mass he would embrace. His second architectural reminder regarding Surface is cautionary: “the task of the architect is to vitalize the surfaces which clothe these masses, but in such a way that these surfaces do not become parasitical, eating up the mass and absorbing it to their own advantage” (Le Corbusier 37).

Another angle of comparison exists with one of Modernism’s most persistent doctrines. Termed by Le Corbusier, “The outside is the result of the inside” (Schumacher 23). Gothic architecture, it could be argued, reveals much of its internal nature externally. From the stained glass to the flying buttresses, one cannot but anticipate the spatial cavity within.

*Musicality:*

Regarding Ronchamp, Le Corbusier conveys an appreciation for counterpoint and fugue with respect to his architecture (Winer). Similarly, many sources express that Gothic architecture is based on the order and harmony of musical consonance (Simson 28). This context also seems to contradict Le Corbusier.

*Originality:*

“Our own epoch is determining, day by day, its own style. Our eyes, unhappily, are unable yet to discern it.” Le Corbusier seems frustrated with the architecture of his time. He accuses past architecture of holding back the architecture of his day. “Architecture is stifled by custom” (Le Corbusier 92). While using the past is ultimately the responsibility of the architect, it is reasonable to suggest that because Le Corbusier was clearly trying to break free of style and discover a new truth, that he would distance himself from Gothic architecture. Perhaps it represented things he did not personally care for. Perhaps the most palatable, was its entrenched tradition.

*Conclusion:*

Despite Le Corbusier’s thoughts on Gothic architectural style as defined by the medieval period, I believe he would have an appreciation for any architecture’s ability to move people unconsciously. Gothic appears to have this affect as well: “in admiration of its architectural perfection religious emotions overshadowed the observer’s aesthetic reaction” (Simson xviii).

There is no obvious evidence of Gothic architecture transcending its period and appearing in Le Corbusier's work. Yet Blake describes La Tourette as curiously medieval (Blake 157). Regardless, Gothic architecture was clearly not an architectural reference. Indeed, he was too busy creating a new epoch and style. Because of the weight of references that both support and refute Le Corbusier's words on Gothic architecture, it is difficult to know if the architecture, or what it stood for (or not) was at issue for the master of form.

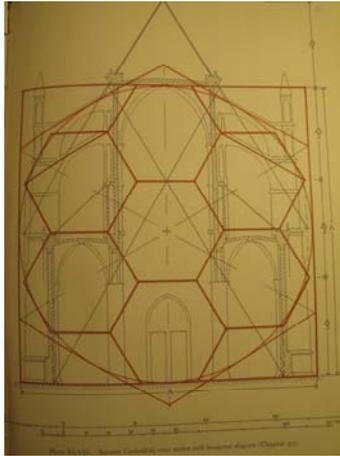
Appendix A:

Regulating Line Comparisons

The following are photographs of pictures taken from two books, both cited. The point of this page is to show the similarity of primary form and geometrical overlay on architectural form between Le Corbusier's book and Gothic Architecture.

Gothic Cathedrals and Sacred Geometry

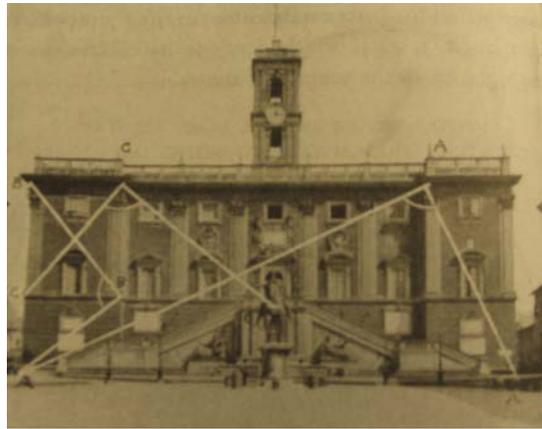
George Lesser



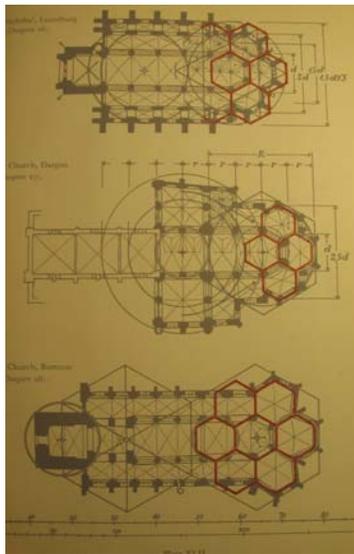
Amiens Cathedral section (Plate XLVII)

From Towards a New Architecture

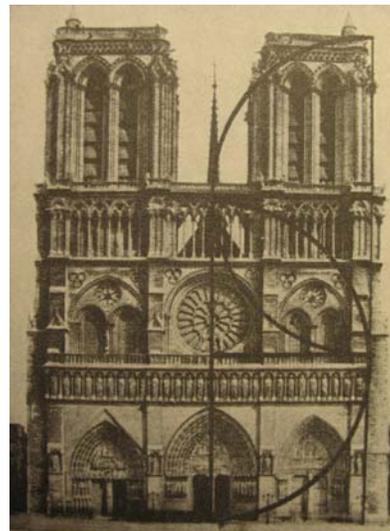
Le Corbusier



The Capital, Rome (Page 78)



Amiens Cathedral section (Plate XLVII)



Notre Dame, Paris (Page 77)

Works Cited

Blake, Peter. The Master Builders, WW Norton & Company, Inc. New York 1976

Le Corbusier. Towards a New Architecture. Trans. Frederick Etchells, Dover Publications, New York, 1965.

Ackerman, James et al. The Garland Library of the History of Art – Medieval Architecture Vol. 4, Garland Publishing, Inc., New York and London 1976.

Lesser, George. Gothic Cathedrals and Sacred Geometry, Alec Tiranti, London 1957

Panofsky, Erwin. Gothic Architecture and Scholasticism, Meridian Books, New York, 1957.

Schumacher, Thomas L. "The Outside is the Result of the Inside" *Journal of Architectural Education*, 2002 pp. 23-33.

Simson, Otto Von. The Gothic Cathedral – Origins of Gothic Architecture & the Medieval Concept of Order. Princeton University Press, Princeton 1988.

Gutschow, Konstanty Kai " Revising the Paradigm: German Modernism as the Search for a National Architecture in the Writings of Walter Curt Behrendt".  
< [www.andrew.cmu.edu/user/gutschow/publishing\\_links/03%20MArch%20Thesis%20All.pdf](http://www.andrew.cmu.edu/user/gutschow/publishing_links/03%20MArch%20Thesis%20All.pdf)>.

Weiner, Frank. MAR3 Class Lecture. Virginia Tech University, Blacksburg, VA. September 2007. Original Text Unknown