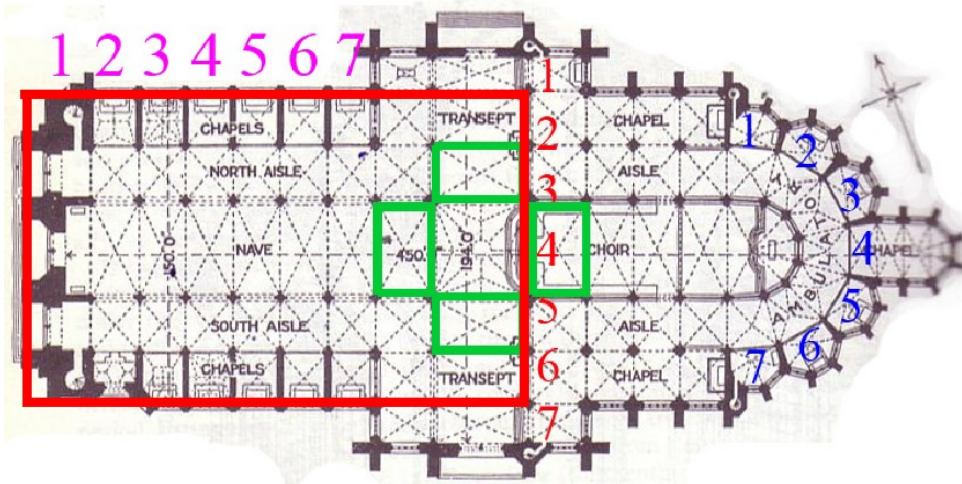


One of the best examples of gothic architecture is The Cathedral of Our Lady at Amiens. It is pure gothic, I contest, because it was started after the gothic movement swept through France and was finished before it was over. Based on my research, its foundations were not set on an earlier Romanesque church and its towers were not foofooed up by renaissance builders ashamed by its medieval nature. Robert de Luzarches started the nave in 1220; father and son architects Thomas and Regnault de Cormont did the choir and transepts; and the western façade was completed by 1420.

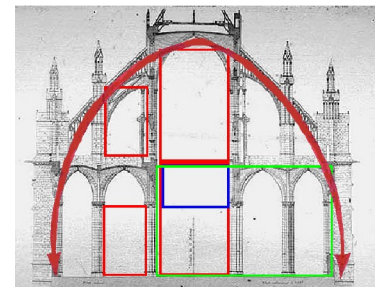
The development from spirit to science can be found in the medieval church – what we call the gothic church (or what Giorgio Vasari derides as “that German style.”) It has the symbolic numerology of Christianity but began to develop structural technologies unseen since Roman times.

As seen from heaven, Amiens is a cruciform that represents the cross on which Jesus conquered death. In plan, Amiens had seven bays including the portal to the transept, seven bays from end of the transept to the other, and seven chapels in the ambulatory. There are a few golden sections on the plan for the spacing of the columns and the bulk of the nave. Golden sections also appear in cross section for the central nave and column heights. Remember Greek philosophy and Semitic Revelation created Medieval Christianity.

Decoration on the floor includes the international sign of peace of the day – the swastika (later hijacked by the Nazis)– and a labyrinth, which was used as a moving metaphor for a faith journey. Many of these are established within another golden mean rectangle. The rose window on the west façade is divisible by 12 and sub divisible by 3 after that.



Illustrations based on drawings in Bannister Fletchers.

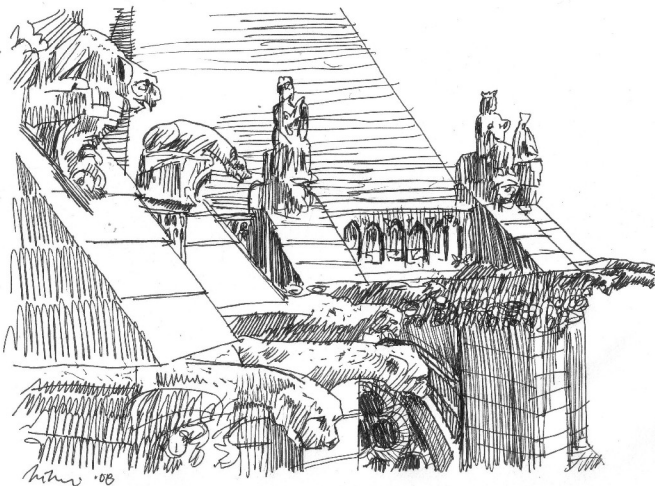


In section we see the Roman basilica raised higher, the flying buttresses being structurally expressive (medieval form follows function) to get the naves higher than anything built since the great pyramids. It mimics a parabola, a structural form more pure than the Roman arch. (The parabola arch was purified by Antonin Gaudi at Sagrada Familia, the most personal gothic church in the world.)

The Gothics were reusing the earlier Christian form borrowed from the Roman basilica. It was used because it was the cheapest way to get a lot of space under one roof. The Romans used it for offices and shopping malls. The Christians needed it because their

religion proscribed gathering together as one large group instead of appearing before an altar in small family groups to sacrifice animals in a temple as was done in Indo European and Semitic religions.

Medieval Europe was essentially illiterate even though it had a greater percentage of the population who could read than any civilization prior. The cathedrals were living books which told the bible stories. In the book **Notre Dame du Paris** (also known as **The Hunchback of Notre Dame**), Victor Hugo has his archdeacon destroy a printing press noting that the book would destroy the church. Prior to the printing press buildings were books that told the stories and since it was expensive, only the powerful got to tell their stories. But the printing press would change the balance of power giving expression to ideas not sanctioned by the powerful. It is akin to the battles between the Internet and newspapers today.



The statues looked to the soul of the people they depicted. The artists were not interested in duplicating nature; they wanted to duplicate heaven. The sculptures were slender, tall and poised thoughtfully. The angels were mixed with saints. On top, demons and gargoyles, depictions of the other afterlife, peered down on the sinful people below. The medieval builders were so convinced that they built for God that the tops and backs of these sculptures were finished. No one the ground would see them but the builders knew God would see them.

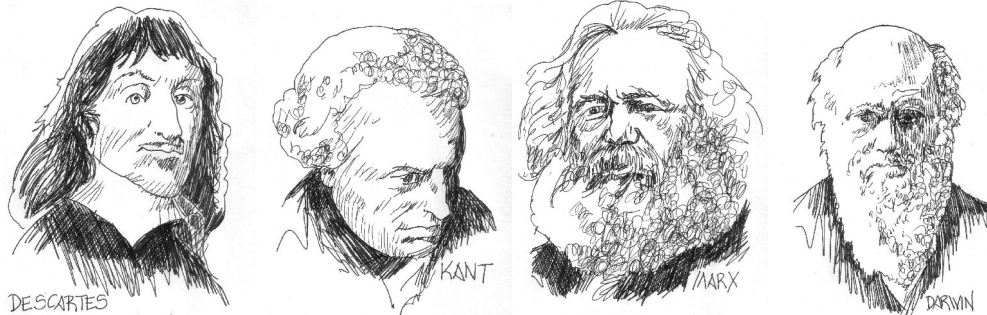
Stained glass was also instructive to a non-literary community but we often take for granted the impact it had on a culture that existed before the electric light. Remember the significance of light. God's first act of creation was "Let there be light"; the rainbow was God's sign to Noah that he would not destroy the earth by water again; God led the Jews out of Egypt as a column of fire and smoke; and Jesus proclaimed that he was "The light of the world." All that stone was merely to build walls of glass to capture light in colors that European farmers had only seen in rainbows.

Why build like this? Because mankind wanted to atone for his sins by emulating God's kingdom on earth. Because worship and sacrifice and other good works would lead to salvation.

The spiritual world of Medieval Architecture was soon replaced by The Renaissance, meaning the rebirth. (Vasari did not call it the Renaissance; he simply called it "modern architecture.") It unapologetically copied Roman architecture and unapologetically placed man's body as the pinnacle of God's creation. We will skip this only for the sake of space. While they innovated and expanded the vocabulary of classicism, they still copied.

THE MODERNS

Instead lets skip to the next original philosophy and architectural movement that we call “modernism” but will get another name in two hundred years. I vote for “industrial reductionism.” So who are our “industrial reductionists” philosophers?



Gaarder says the 17th century's, Rene DesCartes was the first modern philosopher so lets start with him. DesCartes witnessed the scientific world rewrite the rules and thought it was time to do the same with philosophy. He shed history and took it down to certain undeniable truths – “I think therefore I am.” But he also re-established a dualism between mind and matter. (SW page 234) This dualism found proponents of mind or matter fighting it out until Immanuel Kant came along in the 18th century and re-joined them. But Kant said one influences the other. Matter influences what the mind perceives but the mind orders it in time and space. Ultimately a lot is unknowable because the mind can only perceive those parts of nature that it can observe and comprehend. Because of the limits of our reason therefore we can only know God through faith. But Kant believed that out there was God and a “law of morals” that needed to be perceived and understood by reason. (SW page 325) I doubt if DesCartes or Kant, who were Christian, would have liked what happened next.

Let's skip Georg Hegel and the German Romanticists whose different branches gave us a couple of movements of architecture. I could take time to argue that *national romanticism* is responsible for English Tudor houses all along the east coast of the United State and that *universal romanticism* gave us the art nouveau and the arts and crafts architecture. (SW page 351) But I won't.

What happened next? By the 19th century great thinkers pushed aside the possibility of revelation and declared all that was worth knowing is that which can be perceived and reasoned. In a critique on Hegel, Marx, who reduced history to economic struggles, said “The abolition of religion as the illusory happiness of the people is the demand for their real happiness.” For some, Darwin's **The Origin of the Species** took away the necessity of God to create the world. Freud's division of the self into ego, id and superego appeared to replace human free-will with uncontrollable subconscious motivations. And of course Friedrich Nietzsche declared “God is dead” insinuating that religious ritual is a vapid response made out of ignorance. (SW pages 385 – 446) Meanwhile Soren Kierkegaard's troubled Christianity found that objective truths (such as $2 + 2 = 4$) were irrelevant and each person needs to find their truths. Truths might be found in their faith as a relationship with other humans and with God. But they must create the context of their existence.(SW page 381) His existentialism defined human existence as having three stages: the aesthetic stage when you live for pleasure; the ethical stage is the first step to the religious stage where you live within the pain of your

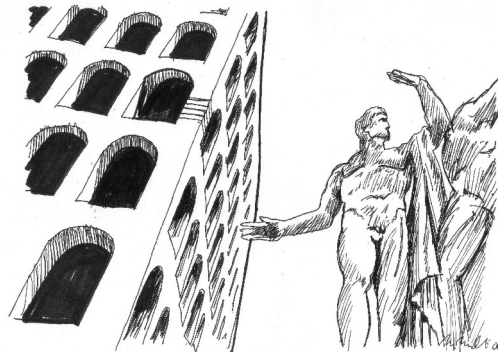
subjectivity and personal truths. By the 20th century Jean-Paul Sartre was postulating an atheistic existentialism where since nothing is innate, man must create himself and his own nature. (SW page 457)



So if the Moderns declared there was no objective truth to be understood than you can make your own. Modernism is about control. If I run a country, I can decide what rights people have, what the news is, and how they shall live. If I build a building, I eliminate craftsmanship from the process, as I cannot control what an individual talented person might do.

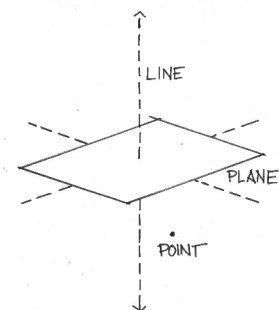
As the pinnacle Greek Temple was being built at the pinnacle of Greek Philosophy. The apex Gothic Cathedral was being built at the apex of Medieval Philosophy. So it was that modernist philosophy was peaking while the modernist architects were getting their work built.

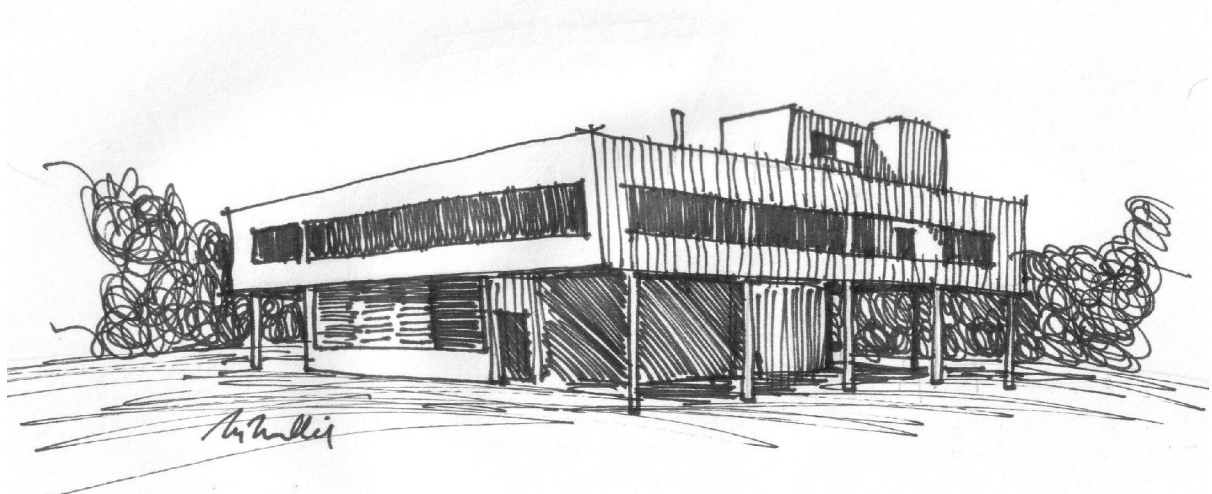
Two branches of modernism formed in the 20th century. In the total state, people fill a minimal role of perpetuating the species and perpetuating order. Specie and order are more important than the individual's relationship to God. The individual subordinated their uniqueness to the species, to order, to the collective, to the state. So too it was with art and architecture.



But in the free world, architects were free to be existential. They created their own style, defined their own nature by shedding history, preconceptions and old rules. And often they shed the old lessons learned. Architects linked themselves with the machine to produce new materials and new forms. Indeed, they often considered the building a machine and not a sculpture as the classical architects did. The machine could extrude slender straight pieces of steel, produce large sheets of glass, quarry thin veneers of stone – reinforced stone walls with hidden steel making heavy walls appear to float. It was about the technology allowing the forms to be reduced to basic Euclidian geometry – point, line plane become – column, ribbon window and slab. (Euclid? Always back to the Greeks!)

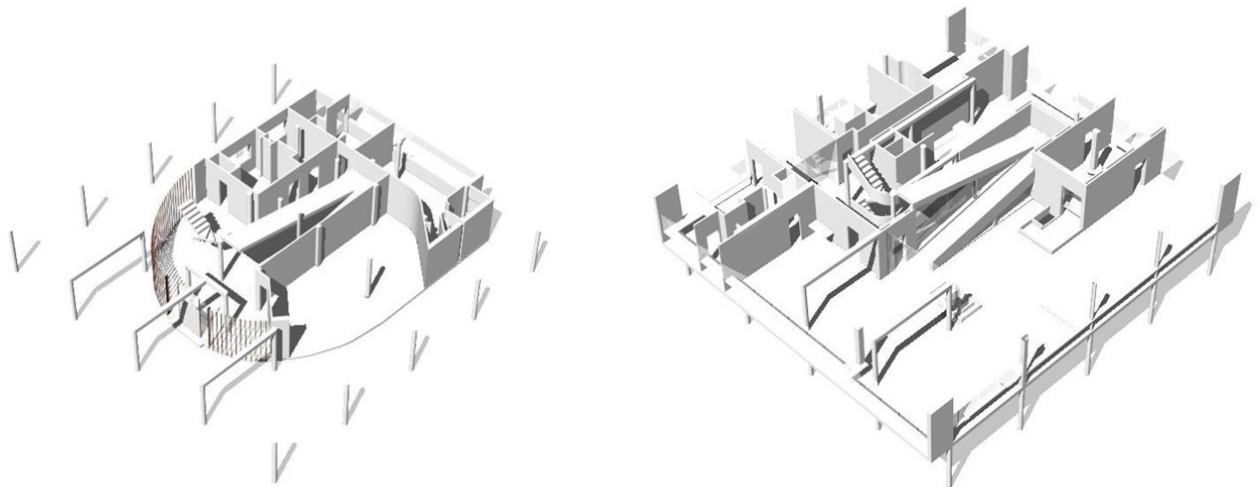
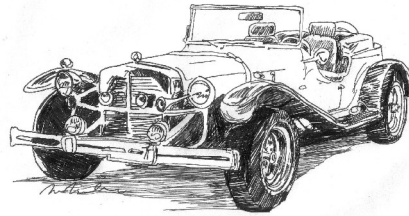
Speaking as an architect who likes rationalist design, I cringe when I hear the criticism that modern architecture is soulless. But on the other hand, philosophically, it probably is. It is the pursuit of design based on reason and not sentiment. If form follows function it does not follow history or tradition or emotion.

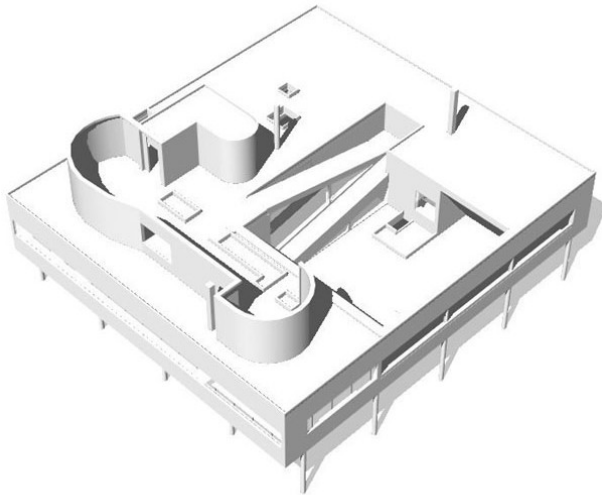




So how do you find a single building to symbolize an era of idiosyncrasies? I chose by the architect and not the building: the Swiss architect, LeCorbusier. But there were certainly others to choose: Frank Lloyd Wright, or Mies Van der Rohn. And I could have chosen another religious building like Notre Dame Du Ron Champs, which for all its modernism is a very emotional piece of work. No instead, I chose a building type we all know: a house, Villa Savoy built in 1929 in France. (Above)

One construct of modernism was minimalist geometry. Break down all forms to simplest forms – the point, the line and the plane. LeCorbusier also looked to the machine for inspiration and called the automobile the Parthenon of the modern world. He believed that the car – engineered to precision and performance oriented – would define the new design paradigms. (TANA p 129) He saw the car as a functional aesthetic. He might be disappointed how much today's cars are styled for demographic groups.





Images from
www.taringa.net/posts/magenes/83343/Arquite
c... Of Villa Savoy in
axonometric with each
layer isolated

On the lowest level of the house, LeCorbusier was one of the first to bring the garage into the house. The car was driven underneath the main part of the house – so the house acted as a port-cochere. Entry would be up a main ramp. LeCorbusier elevated the house on pilotis (piles.) The column was as thin as possible so it was a simple line and its imprint on the ground was a single point.

The next level was living space with bedrooms, kitchen, living, dining and baths. But half of it was outside, still enclosed in the walls yet unroofed. And a third level provided a framed view of the outskirts of the town. The interior was clean of ornament except almost pure geometry. The lines were handrails, the planes were the floors, ceiling and walls. Windows were voids from floor to ceiling or ribbons – negative planes within other planes.

Why build? Because history and its injustices need to be erased. Why build this way? Because sentiment and tradition had enslaved man's mind and soul? The machine was the future; it would free man from superstition.

WHAT'S NEXT?

From where is the next truly new movement of architecture coming?

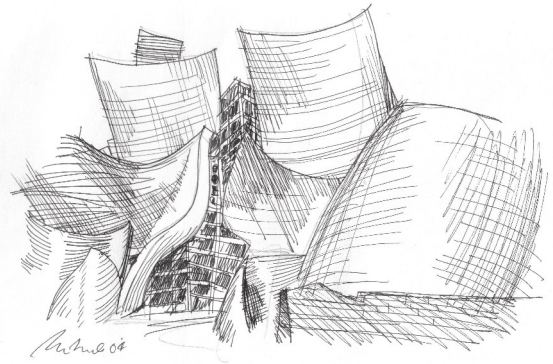
I've summarized western architectural history into 3 dominant styles. There were a thousand years between the Greek, Medieval and Modern movements, so why do we expect to see another one in our lifetime? It is indicative of our time, we are more interested in the next or the past than the now.



Images of Dubai Towers and Walt Disney World from their websites.

History is where we have been. If modernism was our renaissance, then post modernism is our baroque and what we've got now is probably our rococo. I think now, architecturally, we are in Kierkegaard's aesthetic stage. We are able to build nifty things so we build them. Disney World, Las Vegas and Dubai may become the exemplary cities of our time... fabricated experiences without substance or ideal. There is no belief that supports them. The "why" of our era is "because we can."

Today much of architecture is equally empty; it is all about branding. Do one style until history knows what to write about you. Richard Meier's houses better look like white boxes or no one will know you paid Richard Meier to do it. Frank Gehry innovated with undulating forms at Bilbao, but now seems tied to that style. Are wavy titanium walls always the best solution even in sunny, downtown LA? And his pursuit of that form is an expensive eccentricity. On a PBS special profiling him, Gehry commented on a building of his "I can't believe the client let me get away with that."



There you have it: three epochs. To summarize: For the Greeks' beauty was found in nature; for the medieval era beauty was found in heaven; and for the moderns beauty was found in the machine. Too many of today's architects think its all about them.

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