

RETHINKING *BIGNESS*.

Carlos L. Marcos

Universidad de Alicante; Departamento de Expresión Gráfica y cartografía; Apartado de Correos 99 - 03080 – Alicante, carlos.marcos@ua.es

The paper tries to take a critical look at the concept of *Bigness* as defined by Koolhaas, its relation to architectural scale and the impact it produces in the cities. Especially in the context of a globalized world, now that cities compete ichnographically to gain a position in this new international urban scene. The present tendency of cities urban design centred in huge representative buildings that impact on the city network do so in a way that could be interpreted as a reference to the *Bigness* theory formally stated by Koolhaas in his *S,M,L,XL* and previously foreseen in his famous *Delirious New York*. Koolhaas based it upon five principles: the consideration of *Bigness* as a quantum of scale in architecture that goes well beyond monumentality, the programmatic complexity implied in *Bigness* cannot reveal to the exterior a single image evoking interior uniformity, the new technologies of the machine age introduced in architecture have made *Bigness* scale functionally and tectonically possible, and finally the last two: the impact in the city, just because of its enormous scale, is independent of the quality of the design; consequently, such buildings are “no longer part of any urban tissue”; therefore, in the best scenery they just cope with context, at worst they simply ignore it.

Bigness, Scale, Impact, Context, Globalization

In his manifesto¹ –that is what the text really is- “*Bigness or the problem of the large*” (Koolhaas, 1994, a)ⁱ, the Dutch architect superstar, Rem Koolhaas, made some witty reflections on this subject which have influenced, as most of his texts and his work, architectural production ever since. The main interest for us is the problem of scale in relation to architecture and urbanism, that is: what is the threshold size when architecture becomes urbanism if any?

The five theorems explicitly stated in the manifesto can be divided into those that refer to strictly architectural issues or those regarding urban ones. The problem addressed here is basically a problem of scale which is common to both disciplines and the consequences that may be drawn from it. Koolhaas states on the first of them the following assertion (Koolhaas, 1994, a)ⁱⁱ ,:

1. Beyond a certain critical mass, a building becomes a Big Building. Such a mass can no longer be controlled by a single architectural gesture, or even by any combination of architectural gestures.

¹ “John Rajchman: In what way is your “theory of Bigness” then a manifesto?...Rem Koolhaas: In *Delirious New York* I asked myself how to write a manifesto in an age disgusted with them...The age is still disgusted with manifestos. I guess this book [S,M,L,XL] is a second “post-Modernism,” an attempt to do a manifesto this time by imagining how specific can be reclaimed –seemingly a contradiction in terms in the case of a manifesto that talks, almost by definition, about the general” (Rajchman interview to Koolhaas, 1994)

This impossibility triggers the autonomy of its parts, but that is not the same as fragmentation: the parts remain committed to the whole.

The consideration of *Bigness* as a *quantum* of scale in architecture goes well beyond monumentality: it is the answer of architecture to the metropolitan city. However, the concept of Bigness is about a *tour de force* between architecture and urbanism, the confrontation of town planning as a method of organizing the city and buildings of such a size, whose impact and autonomy makes of them cities in themselves. Koolhaas suggests that the equation could be stated in the following terms: “Bigness=urbanism vs. architecture,” because the mere grouping of such buildings –such as it happens in Manhattan- is a denial of the urban as a collective space. In his own words (Koolhaas, 1994, a)ⁱⁱⁱ:

The exterior of the city is no longer a collective theater where "it" happens; there's no collective "it" left. The street has become residue, organizational device, mere segment of the continuous metropolitan plane where the remnants of the past face the equipments of the new in an uneasy standoff. Bigness can exist anywhere on that plane.

Originally produced in Manhattan, architecture's ultimate scale, at first skyscrapers played a major role in defining the expectations and qualities of a building that is a city within; a building that has transcended the scale of the cathedrals or great palaces of the past. But in the mid eighties, also in Europe, politic and economical interests gave the chance to planners that foresaw the opportunity to redefine the role of architecture in the city core introducing the concept of *Bigness* as a possibility to revitalize old cities. May be the *Beaubourg*, “the Platonic Loft,” was the first constructed building to attempt this threshold of *Bigness* in a European historical urban context.

Nevertheless, in the first theorem an important thought is forwarded, the difference between autonomous and fragmented. Certainly the change of scale as is traditionally considered in architecture and the major role of the human body as a dimensional reference, has been doomed in buildings that exceed the monumental to acquire the largeness inferred in bigness. Yet, the fragmentation that could result of such a growth and the programmatic complexity implicit in this scale is questioned as part of an architectural tradition that ought not to be understated. Alberti refers to the scale and the relation of the parts to the whole as follows: *Re Aedificatoria*^{iv}:

Este precepto lo respetaron los antiguos, de tal forma que en los edificios públicos y en los muy espaciosos empleaban, sobre todo, ladrillos más grandes que en los edificios privados, y lo mismo hacían con el resto de los componentes. Así pues, cada miembro tendrá un lugar apropiado, un emplazamiento adecuado, y no se le asignará en el conjunto una dimensión mayor de lo que requiera el uso que se le dé, ni menor de la que pida el decoro, no será colocado en un lugar que no sea el suyo e inadecuado, sino el que le corresponda y sea tan apropiado que en ningún caso sea posible que haya en ninguna parte un lugar más idóneo.

The notion of order and its relation to the scale of the parts of the building as members of a living organism are maintained despite the controversial and radicalism in Koolhaas points of view. Therefore the idea of fragmentation is avoided by an architectural premise. Although the concept of Bigness entails urban implications, in this confrontation between architecture and urbanism the first of the two prevails.

The scale of the urban mesh and its traditional relationship with buildings, at most, monumental, is no longer possible in the metropolitan city. *Bigness* is therefore a condition of

some buildings that have grown to an extraordinary size, a scale that produces meta-architecture.



Rem Koolhaas y OMA. *Lille Grand Palais*, Lille, 1994

The problem with Bigness is that we cannot help living without it; it seems there is a natural tendency in the development of modernity that leads to an irreversible increase in the size of the buildings in large urban cities –metropolitan cities-; particularly as technology and political or economic power have contributed at the same time to produce this trend. Davey has referred to this fact as a constant ever since Industrial Revolution took place (Peter Davey, 2002)^v :

Bigness is inescapable. Since the beginning of the Industrial Revolution, civilization has been inexorably set on a course to increasing size. Cities become ever larger and more land-hungry; transport systems become more capacious; corporations have to become bigger and bigger so that they can compete with a hope of success in the global market.

These lines point out something remarkable about Bigness, it could only happen thanks to technological improvement. The introduction of the *mechanical* in architecture has overcome the traditional limitations of architectural design; stairs are replaced by more efficient vertical mechanical connections by means of the elevator, air conditioning systems can produce alternatives to natural ventilation when the mass of the building is such that all of its inner spaces may not be conveniently ventilated as the depth of the building, the distance from the façade to the interior, enlarges. The same can be said about structural engineering and the continuous increase in the height, the span between columns or the increase in cantilevered structures: new materials, more precise calculus and computer aided structural design. All of these are causes –or to be more accurate-, conditions necessary for the development of Bigness. Koolhaas affirms in his second theorem (Koolhaas, 1994, a)^{vi}:

2. The elevator--with its potential to establish mechanical rather than architectural connections--and its family of related inventions render null and void the classical repertoire of architecture. Issues of composition, scale, proportion, detail are now moot. The "art" of architecture is useless in Bigness.

Surprisingly he includes scale amongst the architectural repertoire that has been superseded by the concept of Bigness which is, in fact, based on the principle of scale. Of course, it is not the so called human scale understood as a dimensional basic unit of architecture any longer. The construction of a building of dimensions large enough to be included within the Bigness category could not be undertaken without this necessary technological development. Yet,

some further considerations must be taken. It is undoubtedly true that skyscrapers would not exist without the mechanical improvement of the elevator; the history of modern towers is well linked to this invention. Frampton refers to the words of a Chicago's School critic at the time, Montgomery Schuyler (Frampton, 1981)^{vii}:

El ascensor dobló la altura del edificio de oficinas y la estructura de acero volvió a doblarla.

Most especially the elevators are an indispensable need in skyscrapers but there are plenty more. However the staircases cannot be eliminated, in fact they are the only fire escapes really efficient as we sadly know too well after September 11th in New York. In fact, most of the mechanical devices introduced in architecture may fail at any time –it is part of their mechanical limitations-, whereas architectural devices, in their stasis, are almost permanent and thus, although limited, *always* work.

Bigness has produced two main types of buildings: towers and sheds. The latter were developed first for obvious reasons; the building technologies were less sophisticated. However most of these kinds of buildings may be classified into one of those groups; formally speaking Bigness has not produced a significant development typologically speaking. Davey has written regarding this consideration (Peter Davey, 2002)^{viii} :

In architectural terms, if bigness is inevitable, how do we deal with it? We have not done well so far. Models for big buildings have scarcely changed for nearly a century and a half. Tall, we have the tower. Low, there is the potentially endless shed. The theory of design of towers has not altered from the moment when Sullivan decreed that they should have a bottom and a top with an infinitely extensible shaft between. The endless shed is not even lucky enough to have such a primitive proposition.

The Pompidou Centre in Paris or Lille's Grand Palais are somehow examples of the "shed" typology, whereas the skyscrapers clearly belong to the first type. Although recently, this typological question has been addressed; buildings such as Eisenman's Ciudad de la Cultura in Santaigo de Compostela does not properly fit in such category as the shed nor does the Koolhaas' Headquarters building for the Chinese Television enter in the category of the skyscraper.



Peter Eisenman. *Ciudad de la cultura de Santiago*, 1999-under construction

Thirdly we find an architectural consequence implied in Bigness, the interior and the exterior space are no longer related by means of the façade. The programmatic complexity implied in *Bigness* cannot reveal to the exterior a single image evoking interior uniformity. This has both, architectural and urban implications. For it is the interior that projects itself outwards and produces an image of architecture within the city; however, it is this iconic image that produces -in the context of an urban mesh- a collective image of the city itself. Koolhaas refers to this other principle (his third point) implied in *Bigness* (Koolhaas, 1994, a)^{ix} :

3. In *Bigness*, the distance between core and envelope increases to the point where the facade can no longer reveal what happens inside. The humanist expectation of "honesty" is doomed: interior and exterior architectures become separate projects, one dealing with the instability of programmatic and iconographic needs, the other--agent of disinformation--offering the city the apparent stability of an object. Where architecture reveals, *Bigness* perplexes; *Bigness* transforms the city from a summation of certainties into an accumulation of mysteries. What you see is no longer what you get.

Finally the last two, basically a theorem and its corollary, Koolhaas that puts forward are truly urbanistic. The impact in the city, just because of its enormous scale, is independent of the quality of the design. This assertion is simply disturbing, and certainly denotes an unethical approach to architecture and urbanism, even though it may well be true. As much of Koolhaas' theoretical points of view, they are midway between radical and controversial: the position of the architect should be to fight against the imposition of such unsustainable impacts in the urban tissue, or within the city as a whole. These buildings stand as landmarks of power in the global world, trying to gain a position in the international supraregional context. They are true icons of the XXI century that try to compete with each other. But their scale, which is more than metropolitan planetarian, just breaks with any possible integration within their urban context. Because of it, such buildings are "no longer part of any urban tissue"; therefore, in the best scenery they just cope with context, at worst they simply ignore it.



Rem Koolhaas –OMA, CCTV China's Television Headquarters, 2007

If the context is to be questioned or discarded as a broken toy half of architecture's reason to exist will be doomed. But Bigness, according to Koolhaas, implies this indifference towards the contextual. In Koolhaas own words (Koolhaas, 1994, a)^x:

5. Together, all these breaks--with scale, with architectural composition, with tradition, with transparency, with ethics--imply the final, most radical break: Bigness is no longer part of any urban tissue.

It exists; at most, it coexists.

Its subtext is fuck context.

These are the most polemical statements of Koolhaas' Bigness theory. All the architectural subtleness implied in the first three is gone here. What sense can it make to consider architecture apart from its context? There is a great difference between integration and transformation. Architecture does not emerge from a site as it was thought of in Wrightian terms, organically as a part of nature; any construction modifies its context. But then, where is the ethics of ignoring or "fucking" context? Is there a right to proceed in such a way? Is the city not a public realm, that belongs to collectivity? Davey has strongly criticised this attitude in the following terms (Peter Davey, 2002)^{xi}:

The notion of a new liberated architecture, responding to a new understanding of humanity is backed up in Koolhaas's book with examples like Singapore and Lille. The south-east Asian city state is certainly a great success economically but it is one of the most rigidly organized societies in the world, and has some of the most soulless mass-produced housing. The huge housing programme has certainly provided conditions for decent living in quantifiable terms, but to outside eyes it appears to be only marginally better than the most dismal productions of the former USSR and its satellites. Like the CBD in Singapore, the business centre of Lille, invigorated by the French government's policy of regionalization, and by the Channel Tunnel rail link, has become a disparate collection of architectural gestures, each dumbly shrieking to attract attention to its developers or owners. Scarcely a recipe for endless shortcuts and redistributions.

The worst part of Koolhaas discourse is the fact that he is a very talented architect and he knows perfectly well that the attitude of ignoring context cannot be an excuse for economic speculation. The architects greediness is also in direct relation to their own fees, not only to urban concerns. Koolhaas^{xii} was recently asked about the polemical interventions of such kind of buildings that go well beyond the scale of the traditional city and the monumental scale, such as his building for the Chinese Television Headquarters and the political and economical power behind it:

Koolhaas: Today's architecture is subservient to the market and its terms. The market has supplanted ideology. Architecture has turned into a spectacle. It has to package itself and no longer has significance as anything but a landmark.

SPIEGEL: You also criticize yourself with statements like those. Your television center in Beijing, the CCTV Tower for the Central Chinese Television network, will change the city and give it a new face.

Koolhaas: One cannot completely avoid this landmark character with large buildings such as these. But the city itself is also gigantic. Working on this project at this location and for these

people gives the building a powerful sense of content and, as a result, a great deal of seriousness.

In the recent years such buildings designed by architectural celebrities such as Eisenmann, Zaha or Gehry have impacted the cities all around the world becoming true global icons in the world of globalization; not all of them are equally interesting. The increasing sculptureness of the architectural form and a rising indifference towards the urban context may be a consequence of the *Bigness* theory but are nonetheless moot. Such architectural and urban design strangely resembles modernist urban approaches as radical as Le Corbusier's Plan Obus which was certainly more than controversial. The question remains unresolved Can this kind of architecture produce urban tissue and public space realm for the global XXI century world? If we pay heed to Koolhaas concerns we might end up being confused. If one looks at his building in Beijing and reads the following words it will certainly be disturbed (Koolhaas, 1994, b)^{xiii}:

If there is to be a "new urbanism" it will not be based on the twin fantasies of order and omnipotence; it will be the staging of uncertainty; it will no longer be concerned with the arrangement of more or less permanent objects but with the irrigation of territories with potential; it will no longer aim for stable configurations but for the creation of enabling fields that accommodate processes that refuse to be crystallized into definitive form; it will no longer be about meticulous definition, the imposition of limits, but about expanding notions, denying boundaries, not about separating and identifying entities, but about discovering unnameable hybrids; it will no longer be obsessed with the city but with the manipulation of infrastructure for endless intensifications and diversifications, shortcuts and redistributions – the reinvention of psychological space. Since the urban is now pervasive, urbanism will never again be about the new only about the "more" and the "modified." It will not be about the civilized, but about underdevelopment.

Urbanism as any field must reinvent itself just as much as architecture, but the impersonality of a metropolitan city as proposed by Koolhaas denying public space must certainly be questioned. The collective is out there, it is all of us. The city belongs to its inhabitants and Koolhaas shockingly forgets the hundreds or thousands of people that get together and meet every day in the Sheep Meadow in Central Park –the ultimate metropolitan city-. When people are given the chance to gang they will do so. Even the interstitial tissue around the skyscrapers in the Rockefeller Centre is packed with clerks having their burger every time there is the chance to do so. Gathering is a human need, collectiveness is the result of that need. If architecture and urbanism obviate the necessity of public open spaces in the cities it is because the main reason of the city's existence is being undermined. A building in the category of *Bigness* would be better if it should produce a better relation with its context. The Escorial, near Madrid, could have belonged in its epoch to this category; despite the immense power it represented it cannot be said that it disregards the context; much on the contrary, it establishes a sensible dialogue with the housing around and the near landscape.

There is no sense in *Bigness* just for the sake of it, even if there is the technology to build it or if there are funds to raise it; certainly it should not be extrapolated everywhere. The culture of congestion is giving birth to some urban monstrosities in Southern Asia and the Middle East which should make us reconsider its viability in the long term or its justification in terms of sustainability; what is the point in building a city with the tallest skyscrapers in the middle of the desert?

-
- ⁱ Rajchman, John (1994) "Thinking Big" Interview to Rem Koolhaas, Artforum, December 1994
- ⁱⁱ Koolhas, Rem, Mau, Bruce, "Bigness or the problem of Large" (1994, a), in *S,M,L,XL*, OMA, (with Bruce Mau), The Monicelli Press, New York, 1995, pp..
- ⁱⁱⁱ Koolhas, Rem, *Op. cit. (Ibidem)*
- ^{iv} Alberti, Leon Battista, *De Re Aedificatoria* (1485), Ed. Akal, 1991, Madrid, L. I, Cap. IX, p. 81
- ^v Davey, Peter, "Bigness", *The Architectural Review*, August 2002
- ^{vi} Koolhas, Rem, *Op. cit. (Ibidem)*
- ^{vii} Frampton, Kenneth (1981), *Modern Architecture:A Critical History*, (Historia crítica de la arquitectura moderna, Ed. G. Gili, Barcelona, 1989, p. 52)
- ^{viii} Davey, Peter, "Bigness", *Op. cit. (Ibidem)*
- ^{ix} Koolhas, Rem, *Op. cit. (Ibidem)*
- ^x Koolhas, Rem, *Op. cit. (Ibidem)*
- ^{xi} Davey, Peter, "Bigness", *Op. cit. (Ibidem)*
- ^{xii} Koolhaas, Rem, "Evil Can also Be Beautiful" interview Spiegel , 2006/03/27
- ^{xiii} Koolhaas, Rem "What Ever Happened to Urbanism?" (1994, b), in *S,M,L,XL*, OMA, (with Bruce Mau), The Monicelli Press, New York, 1995, pp. 959/971.