# The European Skyscraper, Between Taming and Emancipation

**JULIE GIMBAL**
Paris-Sorbonne University

The history of skyscrapers is marked with paradoxes: first perceived as a brutal illustration of the economic land exploitation, it was quickly raised to the rank of monument. Having become the target of the Modern Movement, it acts in the 1980s as a support for a postmodern nostalgia. And finally erected into a symbol of the American economy, it is involved since the 1990s in the transmutation of Asian megalopolises. So with its giant's status, the skyscraper is often the hostage of schools and thinkers and we observe, since the 2000s, many attempts of local translations which invite vernacular vocabularies or are based on settlement strategies that are common to lower typologies, whatever their functional mission. Space is not an innovation. As Michel Foucault wrote in *Les espaces autres*. *Hétéropies*: "The space has itself a history and it is not possible to underestimate this fatal intertwining of time with space."[1] The paradoxical nature of the skyscraper leads today to a heterogeneous high-rise construction on a global scale but also and finally reveals the malleability of this typology. This is why the capture and translation of high-rise architecture by European cities has taken an interesting twist in recent years: it is, again, the occasion to think about the relations between horizontal and vertical dimensions and the symbolisms of forms. So, architectural traditions are questioned again as well as what is correlated with them, i.e. the risk of a normative architecture. Hence this question: is there a "European skyscraper" and if so, what does it mean? Does it escape from the double standardization stemmed from the functionalist efficiency and the cultural history? Our goal is not to address these issues in absolute terms but to uncover the search for a balance between the strengths of tradition and the power of innovation, between individual initiative and community consensus.

## SMALL PLAN SYNDROME (URBAN HISTORY, IDENTITY, AND BREAKING SCALE IN EUROPEAN CITIES)

In November 2012 in *The Financial Times,* John Hitchcock affirmed that "Europe uses history as far too much of an excuse for turning down visionary ideas." According Emporis.com statistics on tall buildings, the two first European cities rank 42th (London, 44 skyscrapers) and 62th (Frankfurt am Main, 31 skyscrapers), whereas Hong Kong gets the first position with 1250 buildings, followed by New York (582). Such figures reveal a singular architectural culture in Europe as well as a land exploitation that gives priority to the horizontal dimension even though the "Vertical City" exerted a fascination on architects and politicians from the beginning of the last century. Besides, Emporis statistics do not report the urban densification process that begun from the 1950s in Europe and logically stimulated debates on high-rise architecture in heritage cities. Forty years later, urban planning on a slab (La Défense, Paris), hermetic clusters (Barbican, London) and large scale tabula rasa (World Trade Center, Bruxelles) have been stigmatized as counter-examples of what should be high-rise architecture and, on a broader level, architecture in a European city. The charge for rupture is behind this ostracism; an esthetic, morphological, urban, identity and semeiological rupture. Indeed, the Modern Movement legacy leads to a "dialectic of the absurd" between the tower and the city and the Italian historian Manfredo Tafuri acknowledges in 1978 that there is no sympathy possible between an urban organization subject to city common rules and the laisser-faire attitude based on artefacts of individualism.[2] By saying this, Tafuri opposes directly the theory formulated by the American historian and sociologist Richard Sennett in his book *The Fall of the Public Man* (1977):

> On the most physical level, the environment prompts people to think of the public domain as meaningless. This is in the organization of space in cities. Architects who design skyscrapers and other large-scale, high-density buildings are among the few professionals who are forced to work with present-day ideas of public life, such as they are, and indeed are among the few professionals who of necessity express and make the codes manifest to others.[3]

So, in their European version, skyscrapers are confronted with three fundamental concerns: scale, public space and heritage. Scale means the skyscraper significance in relation to the street, surrounding buildings and the city. By deduction, if scale means an orderly arrangement of various dimensions, breaking scale evokes the idea of excessiveness more than that of size. Thus, within the "Retour des tours" movement which began in the 1990s and amplified during the next decade, the question of urban context has become central, whereas it remains marginal in the United States as in Asia where a skyscraper is first and foremost a tool that is attached to a parcel before being tied to a city. Second unique European condition: the tower is not involved in the worldwide height contest which fuels media sensations but must take part, most of the time, in the construction of a townscape, of an urban legibility. The architecture is one elements of a package in which an isolated building may only make sense in relation to others.

The root of the problem is, therefore, to define the scope of the expression "to make sense." Indeed in 2003, Mayor of Paris Bertrand Delanoë declared: "Height is not the problem. The aesthetic of buildings is."[4] Such an involvement in debates of the aesthetic criterion refer to the Manichean attitude amplified in the 19th century, which put in conflicts engineers exploits with architects art. In such a meaning, aesthetic, emancipated from the building structure, is what produces


Paris Ile-de-France

Projets de tours à Paris : l'Unesco dit non !

1

Figure 1: France 3 Paris Ile-de-France, 10/4/2013, *Projets de tours à Paris: l'Unesco dit non!*

meanings (nota bene: Greek words “aisthetikos” and “technè” mean respectively sensitive perception and art). In the field of skyscrapers, there is nevertheless an aesthetic of the structure which is the legacy of industrial constructions. Contrary to the postmodern trend, the high-tech architecture offers a proofreading of the relationships between architecture and technique as well as between form and function (Commerzbank Tower, Norman Foster, Frankfurt am Man, 1997). But from the spectator point of view, in spite of all the rationalist tradition in the European architecture, we succeed only rarely in being moved by a technical solution. To conclude, aesthetic, although it is a difficult concept to theorize and handle, is most of the time inseparable of the projects judgment, validation and evaluation criteria. Paris offers eloquent examples of this state of affairs, where any new high-rise hypothesis is indissociable from a general outcry. We have to understand that Delanoë’s remarks implicitly indicate the Parisian aesthetic canon – i.e. Haussmann building – against which any new building is judged. The Haussmann block, which escaped unscathed from the two World Wars, seems to have acquired the status of a “classical work of art,” in the meaning given by Gianni Vattimo in his book on the end of modernity: according to him, a “classical work of art” is characterized by an aesthetic quality that is recognised as historically significant due to its effect on tastes and, in the end, on the frameworks of existence of future generations.[5] Consequently, it is easy to imagine the impact of Francesco Bandarin’s recent concerns about the Tour Triangle in Paris. According to the Unesco Assistant Director-General for Culture,

> “If Paris wants to be considered as a city with historical values and a heritage setting, it shouldn’t do that.”[6]

This anecdote takes an ironic turn considering Haussmann’s motivations to subject urban space to the imperatives of industrial capitalism: at that time, it meant tearing up the old city fabric and encouraging real estate speculation text goes here.

All this hypothesizes a constitutional incompatibility between a heritage city and the modern skyscraper. We can conclude that intervening in such a city demands a very precise speech which doesn’t confuse difference with negation, modernity with avant-garde and distinguishes between tradition and academicism.

## NEW EUROPEAN REGULATIONS, BETWEEN STANDARDIZATION AND CATALYSIS OF HIGH-RISE ARCHITECTURE. LONDON AND VIENNA EXAMPLES

In 2003, Rem Koolhaas presented in Brussels a vast panorama showing the architectural evolution of the Union countries: *The Conquest of Europe*. Sponsored by the European Commission, this incomplete study wasn’t able to define unitary vision expected, but revealed the fragmented world of Europe and its “lack of image,” looking for its identity and for its expressions of authority/power. Therefore, the dilemma was: how to not conceive the city as a reproducible object while creating “common images”? In the same year, the book directed by Arnaud Mercier, *Vers un espace public européen? Recherches sur l’Europe en construction,* identifies three specific elements of the European States: the nation, which disseminates a common culture, the State that regulates social life and, finally, the democracy, in other words a political legitimacy stemming from the people and built on the rule of law.[7] According to Mercier, the way these three dimensions interact together is the public space, where “the definition and the identity of a society are at stake .”[8] By deduction, the existence and preservation of the public space may be one of the conditions for inserting high-rise

2

buildings in Europe's cities. Moreover, urban research has always maintained more or less intense relationships with authority when there was background an economic logic. The history of the European city points out that a text, even a bill was automatically drafted to justify decisions and supervise the city embellishment. Today, in front of the demand of new residential and offices spaces, many cities are equipped with statutory instruments which are constantly perfected to answer a majority of concerns: zoning, esthetic design, environmental requirements and protection of townscapes determine the new face of the most important European cities. There is thus an informal consensus "to shape" the hypothesis of skyskrapers.

In London, the skyscraper typology is one of the planning instruments of the British capital. The statutory thick pile brings in various decision-making authorities (the Secretary of State, the London Mayor, the districts mayors, the English Heritage are some of them) and enables private interests and pursuits to fall in line with the city's overarching urban strategy. The city of London does not decide upon a zoning map – even if densification of the City and Canary Wharf quarters is wished – and the analysis of projects is on a case by case basis. A tower validation depends on a multitude of criteria: the existence of public transport, the impact on the environment (drop shadow, energy consumption), the creation of an economic activity, mixed uses and fire security standards. Moreover, the esthetic argument is expressed by the locution "first-class designed tower" (English Heritage and Commission for Architecture and the Built Environment, *Guidance on Tall Buildings*, 2003 and 2007). This means a "dynamic elevation," blue colors when the building is closed to the Thames, private and public free spaces settlement and a monumental value. Thus, there are no requirements concerning the building internal organization, put aside a demand of flexibility so that the tower get used to the ever changing market, the insertion of green spaces when possible and public accesses to specific floors. Despite a restrictive profile, these regulations restore the creative role of architects which is otherwise neutralized by the "Culture of congestion."

In the City district, towers built by Norman Foster (30 Mary Axe, 2004) and Richard Rogers (Leadenhall Building, 2014) together with the London Bridge Shard on the other bank (Renzo Piano, 2012) personify the London urban planning regulation. These solitaire skyscrapers are in complete resonance with their context, aside from arranging a porosity between the hall and the public space around (the architecture opens up widely on the outside, shrinks at the ground floor level to reduce the impact or is connected with public transports); they are landmarks in the city for their design values and their direction towards a sustainable future.

Vienna is the perfect example of a city with a dense historic heritage which finds itself confronted with the need to reassess its approach to tall buildings and to

Figure 2: *London panorama,* 2013.

3

Figure 3: *DC towers,* Dominique Perrault, Donaucity, Vienna, under construction.

update its regulations accordingly. As part of this process, fundamental questions have been raised on the necessity and conditions for implementation of skyscrapers. The Austria capital acts in a certain sense therefore as a research laboratory on regulations which constrain, but allow scope for innovation combining syncretism of legislation (good ideas are picked up in cities across the globe) and innovations. In this way, Vienna is able to shed light on crucial differences which exist in planning methods for tall buildings: either based on regulations resulting from an empirical initiative, in reaction to the "ungraceful" first towers, or perceived as an inflexible prerequisite. The municipal authority studies and put in practice the tall building development plan (*Wien Hochhauskonzept Plan*) which aims in part to constrain property speculation and control the city image. Concretely, the city defines zones compatible with height (4 zones at the moment) according to their situation towards protected buildings and sites, public transports and urban panoramas to be protected. Each of these zones gets a legally binding master plan that is the working basis for architects and developers, whose project has yet to respect ten criteria of conception: the formation of a multidisciplinary team bringing together diverse experts (architecture, sustainable development, civil engineering), the tower compatibility within the urban context (nature and intensity of the planned activities, impact on the surroundings neighborhoods, particularly in terms of traffic), the aesthetic of the skyscraper submitted to a competition procedure, shadow and wind impacts, compliance with technical and social infrastructure standards, the creation of public spaces, ecological performances, a public communication of the construction phase schedule and finally the public presentation of the project (3D documents, exhibits, conferences).

Situated in the 1st district (Donaucity), the Vienna DC Towers of Dominique Perrault build linkages with a bank of the river Danube thanks to the continuation of the pedestrian slab over the highway (Donauufer Autobahn) and the slope of this one up to the river. Like a glass totem, the first tower achieved in 2013 is a model of mixed uses and present a sculptural elevation the vibrations of which are in tune with the river.

As a consequence, these two examples reveal how much the construction of skyscrapers in Europe arises from a teamwork combining empirical knowledge and architectural favors. Certainly, there is no "regulatory twinship" between cities but we can agree that the formal arrangements converge to a common purpose: to transform the skyscraper in an endogenous phenomenon that is multi-connected to its environment (mixed uses, ramifications to the transport systems, aesthetic synergy with the context, energy performance). The age-old dialectic between private and public spaces takes a new aspect. But how does this project evolve in practice?

## DEFINING THE EUROPEAN SKYSCRAPER?

In the light of the above, there is no canonical skyscraper in the European Union. But there are common denominators between each construction: the height, even if the city doesn't put an upper limit to buildings (around 85% of the towers build in EU don't exceed 200 meters),[9] the adaptability of the typology to an urban matrix and, in that sense, the innovative design. To this should be added the decision to renovate and update old towers (Tour First, La Défense, paris, 1974 then 2011) and, in a similar vein, to revitalize slabs thanks to intermediate buildings that connect the high-rise architecture to the natural ground (dalle Beaugrenelle, Paris). The 21th century is characterized in EU by an architecture of

4

the interstices: the skyscraper typology is no exception, whether it finds windows of opportunity in dense places or acts as a pacemaker in zones being renovated (tour CMA-CGM, Marseille, Zaha Hadid, 2009). Thus, the numerous morphologies that adopts the European skyscraper respond most of the time to complex urban situations shaped by contemporary necessities (infrastructures, housing, and offices), urban renovation and heritage concerns. Whatever the tower is like an almond, a pyramid, is facetted, monolithic/media-centred or with kinetic lines, it implicitly or intensely criticizes the modern functionalism.[10] A tower set in a block is the highest achievement of the typology's ability to adapt to the city. As a conclusion, it appears that a skyscraper in EU is a work on the plan, the surface, the section and the volume. The urban plan is the favored instrument of urban morphology against and with which the tower has to deal; the surface is envelop, skin, system of representation; the section, trenchant, splits the complexity of urban networks that it federates within it; the volume imprints a new monumentality on the street or the city and allows to gather varied programmatic units. Reflection on public and semi-public spaces is reflected in the various linkages of the horizontal and vertical. For example in London, the great hall of the Leadenhall tower opens onto the outside while the Pinnacle's curtain wall expands to form a covered public square.

As explained in the Vienna and London case studies, townscape and view corridors authorize the skyscraper to take place and to support complex urban linkages while preserving its own autonomy: this kind of urban scenography could be read as a reminiscent of European secular principles of town planning. So, high-rise construction renews the relation between architecture and visual culture and illustrates the research for an interconnection between space, community and identity. In this way, evocations or allusions to heritage history are the tracks of this approach (Agbar Tower, Jean Nouvel, Barcelona, 2004 / Sagrada Familia, Gaudi, 1882). This kind of "quote" remains not as much literal as vernacular vocabularies (Abraj Al Bait Towers, Dar Al-Handasah, Mecca, 2012). However, this townscape system combined with the banning of the aesthetics of repetition generates a work on shape and material that may bring the European skyscraper to aporia. Indeed, even if there is a fundamental difference between the exuberant forms seen throughout the world and the European approach, the potential for confusing them is real and could cruelly prejudice the skyscraper in EU. Moreover, multiplying urban signs may finally blur the city legibility. For the moment, the urban situation is mostly favorable to architects and developers (no matter what anybody says!) but, is not any formula generally dedicated to the wear? So, many European regulations miss a considerable datum: the necessity of banal architecture, in counterpoint of extraordinary construction, to sew, unstitch or sew again the texture of an urban context.

Figure 4: some examples of European towers (from the left to the right) : *tower 185,* Christoph Mäckler, Frankfurt, 2012 */ Norddeutsche Landesbank,* Behnish Architekte, Hanover, 2002 / *Malietoren,* Benthem Crouwel, The Hagues, 1996 / *GSW-Hauptverwaltung tower*, Sauerbruch Hutton Architekten, Berlin, 1999 / *Alto Vetro tower*, Shay Cleary Architects Dublin, 2008.

5

## CONCLUSION

Building skyscrapers in European heritage cities means intervening in a space which is not only desecrated but undergoes the misdeeds of an over-exploited horizontal urbanization. The fundamental conditions to create an urban environment are still the same: air, light, public space, accessibilities and services. And the skyscraper, from its regulation to its conception and implementation must guarantee these requirements. From the town planning point of view, the debate on towers leads to stop considering the city as addition of a historic center and a chaotic periphery. It is not a matter of defining the shape of the ideal city anymore, but the way every place, with its uniqueness, could encourage a dynamic and diversified urban life, would give it new meanings.

Figure 5: *CMA CGM Tower*, Zaha Hadid, Marseille, 2009.

## ENDNOTES

1. Michel Foucault, *Des espaces autres* (conférence au Cercle d'études architecturales, 14 mars 1967), in *Architecture, Mouvement, Continuité,* 5, october 1984, 46-49.
2. « Vie et mort des gratte-ciel, la dialectique de l'absurde », in *Architecture d'aujourd'hui,* 178, 1978, 1-16.
3. New York, Alfred A. Knopf, 1977, 15.
4. Isabelle Rey-Lefebvre, « La Mairie de Paris s'interroge sur l'édification de nouvelles tours », in *Le Monde*, 7 novembre 2003.
5. Gianni Vattimo,*The End of Modernity: Nihilism and Hermeneutics in Postmodern Culture*, Johns Hopkins University Press, 1991.
6. Agence France Presse, October 5th, 2013.
7. Paris, L'Harmattan, 2003.
8. *Ibid.,* 11.
9. *The Shard* of Renzo Piano is the highest with 309 meters (1013 feet).
10. Eric Höweler, *Skyscraper: Vertical Now*, Rizzoli/Universe Publishers, New York, 2003.