City of Museums:
Museum Cluster as a Manifesto of the Paradigm Shift

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Abstract
No other institution has experienced such a boom and similarly marked the end of the twentieth century as the museum, establishing itself as a tourist magnet, an architectural manifesto, and a symbol of the postmodern city and the culture in which we live. In this culture, the museum occupies a privileged place also physically, in the city. And not only it occupies it, but it creates it, defines it, changes it and gives it meaning. I argue that that place is in the museum cluster.

And in the cluster, the museum is changing; the meaning and the importance of its basic aspects are changing. My hypothesis is that in the museum project the (to)urbanistic aspect - its place and relationship with the city and the citizens, permanent or temporary - takes precedence over its museographic and architectonic aspect. The content - collection and display - and the architecture of the museum merge into the cultural density (or offer) of the cluster, highlighting the place and urbanism of the museum in the foreground.

This place - the cluster - becomes a manifesto and an instrument of changes in the city and the society. It acquires new dimensions and roles, and provides the key to a new reading - not only of the museum, but also of the city - showing a profound shift in their relationship and in their conception. It reflects the intimate interaction of architecture, urbanism and tourism on different levels. New models of the museum-cluster, the museum cluster and the "city of museums" represent different scales of a (to)urbanism of densities and flows that maximizes the use and impact of museums and public spaces between them - or more broadly, of the complete cultural infrastructure - in the mobilization and dissemination of culture and cultural information.

Drawing on the theory of the locus genii, I confirm the fundamental role of the museum cluster as a force that organizes, generates and transforms the museum system and the urban system. In the best tradition of the Grand Tour, this (to)urbanism, this "city of museums", integrates tourism and didactic intentions, creating a new understanding and presentation of the cultural heritage – spatial (including the very urban structure), object and symbolic – and making possible a transformation of the cities of past into the cities of future. It places new challenges also to the public space, as a three dimensional relational, educational and cultural space, demanding to be the mediator in this transformation.

Although the study includes a wider historical and geographic space to demonstrate the extension of this still little investigated and insufficiently well-known phenomenon, the accent is on the transformations of the museums and their clusters and systems during last three decades, in the principal European cities, including also the remarkable cases from other continents that suggest the possible directions of a future development.

Keywords: museum, cluster, contemporary city, public space
Museum Cluster in the Contemporary City

No cultural institution has experienced such a boom and similarly marked the end of the twentieth century as the museum, establishing itself as an extraordinary symbol of the connection between the architecture, urbanism and tourism: as an architectonic manifesto, icon of the postmodern city, tourist magnet. In our culture the museum occupies a privileged place also physically, in the city. And not only it occupies it, but it creates it, defines it, changes it and gives it meaning. My doctoral research demonstrates that that place is in the museum cluster. It discovers that 95% of the most visited art museums in the world already form some kind of museum agglomeration and indicates that in the cluster lie the future and great and multiple potentials of the museum.

According to the basic definition, the museum cluster is the physical concentration of museums in one place. The museums have been discussed in the literature from many aspects; here the emphasis is finally put on their place, a point of view so far neglected in the expert analysis, which offers completely new insights and knowledge. With the enormous growth of the number, size and importance of the museums in recent decades has increased also the number, size and, above all, the visibility and the impact of the clusters they form. And in the cluster, out of which it becomes almost impossible to contemplate the museum, the museum is changing; the meaning and the importance of its basic aspects are changing.

My hypothesis is that in the museum project the (to)urbanistic aspect - its place and relationship with the city and the citizens, permanent or temporary - takes precedence over its museographic and architectonic aspect. The content - collection and display - and the architecture of the museum merge into the cultural density (or offer) of the cluster, highlighting the place and urbanism of the museum in the foreground.

The place - the cluster - thus becomes the key to a new reading of the museum and of the city. It demonstrates a profound shift in their relationship and in their conception, and reflects the intimate interaction of architecture, urbanism and tourism on different levels. As a counterweight to the “Bilbao effect”, I examined and defined the “museum cluster effect”, through which the hypothesis is further verified and extended. The urbanistic analysis of this effect is enriched and innovated by other disciplinary approaches and semic fields and reveals in parallel its educational and museographic potentials. The analogies and terms from the physics - density, gravity, critical mass, cohesion and explosion - emphasize and explain the physical character of the effect, while the new parameters from the economy, from Porter’s cluster theory and its deconstruction (Porter, 1998, Martin and Sunley, 2002), contribute to a more comprehensive understanding of its mechanisms and impacts on static and dynamic structure of the museum cluster, the museum and the city.

Namely, although it is highly topical as one of the key elements of the “intelligent city”, the cluster is not only a term in fashion. Of all the expressions that can designate a group of museums, this one was chosen because of its emphasis on the environment and on the processes, relations and dynamics promoted today by the economies of agglomeration and knowledge. According to the new definitions, the physical concentration of museums reaches the “cluster effect” only if in the common space the museums participate in joint actions and if the grouping gives them added value (Porter, 1998; Mairesse, 2000; Sudjic, 2003).

In order to understand this interaction of the museums in the cluster and their impact on the city as completely as possible, contrary to the usual focus on art museums as the most symbolic, or recently on science museums, as a type with the biggest growth of popularity, the museums here are observed in the broadest sense, according to the ICOM’s definition. Thereby the urban confines of the museum clusters and the perception of their logic, impacts, and potentials move. Stressing the need for breadth of approach, as well as for multi-functionality, openness and collaboration in the museum clusters,
dissertation are treated equally complexes containing similar cultural, educational and scientific institutions, as long as the dominant component is museistic or they otherwise contribute to the discourse of this work.

The cluster as the place of the museum thus acquires new dimensions. They are determined in the dissertation by a superposition of different spatial and cultural aspects of the museum cluster, of the elements of critical mass in the physics and of Canter’s psychological Metaphor for place (Canter, 1977). Establishing new and clear criteria for urban analysis of the museum cluster and supporting the idea of “multi-place” with multiple functions, meanings and audiences, the museum cluster is broken down. It is considered as the physical location in the city, the urban form the museum cluster takes, the dynamics and relationships it establishes in the city and the public space it creates in that interaction with the city.

Through a historical, comparative and critical analysis of these four dimensions of the place of museums, in the four chapters of the second volume, the dissertation proves the hypothesis about the primacy of urbanism in the museum project, as well as the theory of the locus genii, showing the fundamental role of the museum cluster as a force that organizes, generates and transforms the museum system and the city system.

Location

The physical location of the museum clusters throughout history shows changes in the relationship between the museum and the city and the role that the museum cluster has in urban development and structure. The examples of the crucial urban operations of the 19th, 20th and 21st century highlight the strategic importance of the grouping of museums as a factor of connection and changes in the structure of the city.

Thus this analysis changes completely the understanding of the museum project. It shows that the choice of the location is no longer just selection of the most representative and most appropriate place for the museum, but the choice of the place from which the museum will have the widest and strongest influence on the city. This place is in the museum cluster, where the impact of the museum grows and expands.

Its location and urban impact change over time, always emphasizing the museum cluster as an important structuring element of the city. From the symbol of traditional and new centres of power (the Capitoline and Vatican museums, St. Marc’s Square, Kremlin, National Mall, Museumsinsel, Kulturforum, Saadiyat Island) it is transformed into the centre of their revitalization (Grand Louvre, Museumsufer, Eastern Harbour of Alexandria); the functional and symbolic link with the new parts of the city which directs urban growth (Kunstareal, Museumplein, Paseo del Prado, Jardín del Turia) is transformed into an instrument of regeneration and return to the city of the less prestigious areas, of abandoned industries and infrastructures (Plateau Beaubourg, La Villette, Abandoibarra, WKCD); from the icon of the outward expansion it becomes the focus of the “expansion inwards”, to multiple uses and meanings.

The dissertation thus reveals that the museum cluster is a global phenomenon which, in a gradual and continuous process, by the force of the place and the concentration of the spirit of the city, the time and the knowledge introduces the meaning and order in the museum presentation and in the city as a whole. It extends the theory of the locus genii to the contemporary city and gives it a new meaning in the context of the knowledge-based society and of the unprecedented urbanization and urban tourism.

Urban Form

The museums conquered whole urban morphology, grouping themselves in blocks, streets, squares, neighborhoods, parks, hills, islands, and banks of museums. Through this typology - and topology - close
to all, the museum clusters get the legibility and qualities of urban place and get integrated into the life and structure of the city. The urban form becomes a key component of the identity and the educational program of the museum cluster - which I especially support and stress, and even its brand, promoting such famous cultural and urban references as the Villa Borghese and the Paseo del Prado in the Parco dei Musei and the Paseo del Arte.

This change of priority not only increases the importance of the museum clusters and their urban qualities, but also their number, magnitude and complexity. Through the morphological analysis the dissertation proves that from the perspective of the city the greatest legacy of the museum boom is the creation of a museum infrastructure of entirely new proportions and potentials. Many cities, from Rome, Amsterdam, Moscow and Stockholm to Los Angeles, Tokyo, and Melbourne, have developed more museum clusters. Connecting themselves in the networks, in Barcelona, Florence and Berlin, and growing into the spectacular urban gestures, in Paris, Frankfurt and Valencia, the museum clusters create the "city of museums" as a cultural and educational landscape in the new scale of the city.

That “city of museums” orders the museums of the city in an urban museum system and integrates in the routes and educational program of museums the most representative urban spaces. Hence it accentuates, reactivates and connects in a whole the basic urban elements - urban tissue, greenery and water - confirming itself once again as a generator of identity, structure and coherence of the city and giving to the (to)urban aspect of the museum a new dimension.

**Relations and Dynamics**

The museum cluster extends and innovates the concept of the museum and of the place. The museums create the urban place also through dynamic relations and interactions, among themselves and with the city, as important components of the urbanistic aspect of the museum and its connective role.

The diversity of users and uses creates in the museum cluster the cultural, social and economic dynamics and contributes to its integration into the urban environment. It clearly shows the change of the idea about the city: it re-interprets the qualities of traditional urban mix, overlapping, simultaneity and porosity, to which the contemporary city is returning seeking the “urban sustainability” through a new intensity of space.

That relation field extends the museographic and urbanistic influence from the cluster to other spaces, flows, audiences and functions of the city and opens opportunities for continuous changes. It unites the museum clusters in the “city of museums”, linking various urban concepts, ideas and utopias, from the Cluster City to the Network City and Knowledge City.

The circuits and networks, symbiosis and interweaving of the museum cluster with the institutions of power, culture, education, sports, entertainment, leisure, business, commerce and tourism reflect the relations between the museums and the society and show all the complexity and delicacy of the urbanism of the museums. Through the dynamic “project” of the museum cluster are anticipated the changes in the “project” of the city and is created a flexible framework for new ideas, situations, uses and appropriations which brings life to the museums and the culture, contemporary condition and cohesion to the city.

**Public Space**

In this interaction between the museums and the city the museum cluster is built as a public space. It redefines the concept of public sphere and clearly illustrates its transfer from the public institutions into the public space. In this social change, the urbanistic dimension of the museum in the museum cluster acquires the primary importance and manifests itself as the very process of grouping, as the coming-out of
the museum into the city and as the coming-in of the city into the museum. These three manifestations of the urbanistic aspect of the museum, which will be further analyzed as its macro, meso and micro level or scale, converge in the public space that brings together museums in the cluster and the cluster with its urban environment, changing its roles and meanings too.

The public space becomes a vital element in the mobilization and visibilization of the museum cluster; it becomes a crucial mediator between the museums and the city, between different audiences and functions, spaces and flows, between the slow and the fast, the dérive and the shortcut, the old and the new, the fun and the educational, the commercial and the immaterial, the order and the unexpected, between the utopian city and the city in which we live. It emphasizes the extreme importance of the connections between the components of the museum system, the importance of accessibility, circulation, relations, flows and networks they establish. The dissertation thus shows new demands and expectations of the public space in the new century. In the museum cluster, it itself becomes a three-dimensional exhibition, relational and educational space, a space of interaction with the cultural heritage and with the city.

Revolution: New Models

The dissertation shows that the museum boom, by creating, changing, and emphasizing museum clusters, represents a revolution in the relationship and conception of the museum and of the city. From the museum cluster is observed a whole range of radical changes and innovations in the museum, in the very museum cluster and in the city, through which is demonstrated the hypothesis about the primacy of the place and the relationship with the city, i.e. of the urbanistic aspect, in the project of the museum, and the theory is extended to the importance of the museum aspect in the project of the city. The cluster of museums is raised in rank of the urban manifesto, demonstrating that new models of the museum, the museum cluster and the "city of museums", as different manifestations of the dominance of urbanism in the museum project, are an expression of changes in the society and the culture.

Underlining the coherence of all levels of this transformation process, the “city of museums” with its relations, impacts and dynamics indicates not only that a much larger museum project already expands and takes place in the city, but that from the city it returns again to the museum, with its logic, structure and principles. The thesis examines the models of the museum from the urban perspective, showing that this approach allows for significant innovations. It finds the common denominator to the new “museums of the 21st century”: the cluster. The monolithic models of the “museum-continent” and the museum cluster as the “island of culture” give way to the model of “archipelago” (Glissant, 1997), where the fundamental element is the place in all the dimensions attributed to it here. That change happens within and outside the museum, in the organization of the museum and in the organization of the city, in the museum-cluster, in the cluster of museums and in the urban system of museum as the “city of museums”. In this extraordinary leap of scale and importance, in parallel emerges the model of the museum as a system, museum-network or global museum, decentralized in a city, country or around the world. It emphasizes moreover the geographic dimension of the place and its role in geo-cultural politics, reinforcing the sense of a deep correlation between different levels and manifestations of this process.

The thesis from the perspective of cultural planning creates a support for the urbanism of densities and flows, as a dynamic development model which is already practiced in cities like Tokyo and Singapore. It sums up in itself the “urbanism of sites” and the “urbanism of flows” (Shane, Stickels, 2008), it integrates Manuel Castells’ “spaces of places” and “spaces of flows” (Castells, 1996) and connects clusters and networks of the “intelligent city” (Komninos, 2002, 2006). This perspective innovates the very domain of urbanism, requiring that it encompasses all scales of urbanistic activity, from the urbanism of
“architectural field” to the urbanism of the Ecumenopolis, and that it includes other disciplines in this activity, but the same demand it puts also to the curating, transforming it in the urban project.

The thesis indicates the potential of the cultural urbanism to fundamentally change and reprogram the city and the potential of the museum to become through the cluster an instrument of changes. The model of the "city of museums" as a bearer of cohesion, contemporary condition and dynamic mutations in the city as a whole renews the meaning and significance of the locus genii and of the utopian ideas of the Age of mega-structures. It generates and transforms the city and the ideal order in it: it replaces the static order by the dynamic one, and it transforms the city, same as the museum itself, in an open system, in an ever changing process.

**Urban Manifesto**

In the contemporary city, the place of the museum cluster does not reflect any more only the traditional urban and social hierarchies, but its privileges arise from new powers and roles that the museum has acquired in our society. Occupying functionally, and often even literally, the place of industry in the recycled postmodern city and its economy, the museums also adopted its logic of agglomeration as a metaphor for the “industrialization of culture” and the will to turn the museum into a place of production of culture, knowledge and ideas. But the museum cluster is not a phenomenon of the Postmodernity, although it reaches with it the visibility, new meaning and new importance. Almost as old as the museum itself, present in the modern city in a planned manner since the nineteenth century, the museum cluster reflects the changes in the society and in its idea of the public and of the city.

During the two and a half centuries of its existence, the museum has established itself as an architectural manifesto. This dissertation, analyzing its history at the crossing of the history of the city, the history of the museum and the general history, shows that the museum cluster, either as a set of the most representative buildings previously built for other purposes - such as the Uffizi, the Louvre or the Zeche Zollverein, or as a complex of museums created in a planned way - such as the Museumsinsel, the Königsplatz or the Kulturforum, represents an urban manifesto that expresses the highest aspirations in the creation of the city and of the image that the society wants to show about itself.

This historic analysis demonstrates that even the greatest cultural and architectural icons subordinate themselves to the force of cultural gravitation and the imperative of place, showing the multiple meanings of the urbanistic aspect domination in the museum. Beaubourg, the Guggenheim New York, the Guggenheim Bilbao or the Sydney Opera House - to broaden the perspective - contemplated from the urbanistic position, form parts of the museum clusters and even are structured as clusters *per se*, uniting different cultural spaces and institutions. As icons, by the spectacle of architecture, by their image and world fame, they indicate in an extreme way the need of the museum clusters for visibility in order to meet their numerous roles in the contemporary city. As clusters, by the spectacle of urbanism, they create and accentuate the values of the city and connect it, by means of a spatial didactics (Wesemael, 2001) which explains the development of the city, and by means of a process of transformation by which they update the city.

The museum cluster becomes thus a remarkable indicator of changes. Induced also by mass tourism, the changes occur in the structure and flows of the museum, in the organization and visibility of the museum cluster, and in their diffusion, visibility and influence in the city. The key words are choice, clarity and readability. Chosen are the routes, the speed, the levels; provided are the order and the structure.

The content does not lose its significance. It is what differentiates the cultural infrastructure from other institutions and urban services – it can come out in the public space, expand in the city. The term content
is also expanding - the city, urban morphology, architecture, typologies become part of the content and cultural offer, part of the educational program. This is what brings us back to the original idea of Grand Tours about the travel as the essence of learning. It brings us back to the idea of psychogeographic urbanism, which now consciously guides and intrigues the visitor through the museum and urban space, giving him choice among the routes through which he can learn the most. And that is the essence of a responsible tourism, a responsible urban and cultural planning in the knowledge-based society.

Instead of the Bilbao effect, they tend to the museum cluster effect of – to activating of the urbo-architectural totality, of urban morphology, typology and architecture, of the public sphere. The enormous potential that the museum clusters indicate encompasses the spatial, object and symbolic didactics.

Beaubourg is an excellent example, behind whose success is a still under-utilized didactic potential. Besides the undoubtedly significant confirmation of the contemporary cultural prestige of Paris and the pioneering urban regeneration of Marais quarter, it contributes with its urbanism to a new reading of multiple layers and meanings of the city. It revives the cardo maximus of Lutetia Parisorum and, by inscribing itself in the system of imperial squares of Louis XIV, it returns to the postmodern city the traditional square, transformed in the new spirit into a museum square, a place of knowledge and information, of exchange and experiences, which celebrates the city and urban culture as an urban manifesto of the network city.

This manifesto is not fixed and frozen in time. In their growth, fluctuation and adapting to the requirements of new times, new uses and new users, the museum clusters represent at the same time urban exhibits of the history of architecture and urban planning and the carriers of the changes and the contemporary spirit.

The Grand Louvre project is a striking evidence of this ability of the museum cluster. The Louvre Palace, the first urban gesture that is noted on the map of Paris in the crown of the Historical axis, transformed many times over the centuries of its history, also today finds a way - and courage - to grow and get updated through its museums, in its public spaces, under the roofs, underground, over the river. Below the Cour Napoleon different wings and institutions of the palace are united, the flows between them are reorganized and its cultural and symbolic functions are broadened by those as everyday as a subway station, parking and a shopping center. At the same time the museum function expands to the Jeau de Paume and the Orangerie, and the Jardin des Tuileries becomes a contemporary sculpture and installation garden. This way the integrity of the architectural and landscape complex is preserved, the presence and unity of the museum cluster and its infrastructural character are emphasized and the contemporary life is brought in this stratified manifesto of different epochs. In parallel, the national collections are reorganized between the Louvre, the Centre Pompidou and the museums Orsey, Guimet and Branly, revalorizing the structural axis of Paris - the natural and the urbanistic ones - as the routes of a “city of museums” that connects the two sides of the Seine, and generates changes, vitality and urban culture.

Locus Genii

The ability to be the bearer of the spirit highlights another very special meaning of the museum cluster as a place. In parallel with changes in the culture, in the city and in dominant urban theories that the museum cluster represents and in parallel with changes in the relationship between the museum and the city, through its history flows a theme which today earns a new interpretation and significance: the theme of locus genii.

The primary objective of urbanism is bringing order in the structure of the city. The idea of locus genii, of symbolic urban focus, of the spiritual axis that generates the city and establishes the ideal order in it,
persists in modern urbanism simultaneously with its efforts to organize the city according to the principles of functionality and utility. That symbolic, cultural or historic core defines the urban tissue as a city and its inhabitants as a community of citizens, “capturing and making visible the spirit of the city, the genius loci, in a space for the spirit, a locus genii” (Welter, 2003), which is the essence of the museum cluster effect. The museum cluster catches and condenses the spirit – the spirit of the time, the spirit of the place and the spirit as knowledge and culture, makes it visible and spreads in the city, transforming the urban environment into its integral part, its space of enlargement and amplification.

This dissertation shows that, despite all the changes, this role of the locus genii and the museum in it persists, renews and strengthens in the city and urban thought. From the early ideas of Disraeli and Reclus it passes to the work of Lethaby, Geddes, Taut, and Mumford and to the symbolic didactics of Beaux-Arts and expressionist cultural acropolis, urban crowns and monumental axes. The museum maintains and confirms this privileged place and role as the “social condenser” of the ideal schemes and functional diagrams, as the centre of gravity of Abercrombie’s “natural zoning”, the cultural heart of the sprawling metropolis and the expression of Sert, Giedeon and Kahn’s New monumentality, but also as the nucleus of regeneration of the post-industrial city and one of the most important signals which define the new urban landscape (Sudjic, 1999).

The locus genii - the place of the spirit - is determined as the fifth and crucial dimension of the museum cluster as a place. According to Welter’s theory and definitions of locus genii, it grants the museum cluster the power to order the city, or to give it the “structure, form and identity”, as Sudjic clarifies the role of urban generators in the contemporary megalopolis. As reference places “with identity form and meaning” (Siza, 2005), they organize and hold together parts of the city, counter the infinite and formless dispersion and give dignity and sense of place to impersonal spaces.

The museum clusters also show how the understanding of the place, the needs of the spirit and the idea of order and cohesion in the city are changing. The corbusian idea of traffic as a link between different functional zones in the 1960’s gives way to the concept of the infrastructural network as the place of the new spirit, life and freedom, and of a new monumentality and order connected to the movement and change (Le Corbusier, 1957; Sadler, 1999; Privileggio, 2006; Wigley, 1998). The infrastructure unifies in a functional, visual and symbolic sense the Smithsons’ Cluster City, Yona Friedman’s Ville spatial, the Situationist urban visions and artistic practices, Constant’s New Babylon and Superstudio's Continuous Monument. This thesis demonstrates that through the cultural infrastructure as a locus genii and an urban manifesto today are being realized also the 1960’s vanguard urbanistic ideas; it demonstrates that the locus genii at the same time is the locus mutationis and the locus connectionis. The museum clusters bring order in the museum system and at the same time structure the contemporary city and its life, creating signs, paths and matrices; the “city of museums” changes itself and changes the city as a whole. It links the past and the future also on the theoretical and conceptual plan and unites the ideas of the locus genii, of the order, infrastructure and monumentality with the most actual concepts, problems and requirements of the city and the society, giving to old ideas and spaces a new vigour.

The City of Knowledge

The search for new models for the new century – of the economy, the society, the city, the museum – is related also to other radical ideas of the 1960’s. Then conceived notions of the information age, creative economy and network society merge and crystallize now in the ideal of the knowledge-based society. In a fundamental shift of priorities, as a key condition for participation and competition in global networks and flows of knowledge, wealth and power, the culture becomes the basis of society and its objective. The creation, mobilization, exchange and dissemination of culture and knowledge occupy the priority place in the development policies of the city and, as this thesis argues, the priority place in its physical structure.
In the knowledge economy and the intelligent city the meaning and the place of genius expand. The heart of the city - the culmination of the locus genii in the modern city - is multiplied in the postmodern city in the nuclei of the “Cluster City” and creates networks of the “network-city”, imbuing the “spaces of places” - spaces of everyday life - with the global “spaces of flows”. The “city of museums” is positioning itself as a place of the creative genius, of immaterial production, of learning, leisure and play, as a changeable urban setting which disseminates knowledge and encourages transformation of the social and urban tissue.

The emphasis on the processes and changes extends from the museum cluster on the whole city. Like half a century ago, the city today faces many uncertainties and the need for the possibility of changes and contingencies to be incorporated into the essence of the city as the process of continuous creation and recreation. Such context puts a completely new emphasis on the museum clusters. As urban intensity points, condensers and generators of heritage and identity, knowledge, talent and ideas, they get the opportunity to create a new culture and to essentially innovate and enrich the city. The museum, willing to be the mobilizing institution in the transformation of the society, finds through the cluster its contemporary identity. It itself is also being transformed from the accumulator into the generator and transmitter of knowledge, transforming its enormous potential energy into the kinetic energy that moves and changes the city. The museum cluster in the knowledge city becomes an instrument of innovation, accessibility and amplification, an instrument of transformation and transition to new social and urban paradigms, and a new urban manifesto: dynamic, connectable, porous, flexible and in flux.

**Triple Effect**

As a manifesto of changes in the contemporary city, the museum cluster is expressed in three urbanistic scales: in the scale of the museum-cluster, whose complexity in the old universal museums and in the new “museums of the 21st century” becomes urbanism; in the scale of the museum clusters as a phenomenon of multiple urbanistic meanings, and in the scale of their networks and systems that structure and connect the city.

Many museums, their clusters and the very museum system have reached such complexity and size that in the analysis of cases in this dissertation the need arose to distinguish between the inner and outer museum cluster and between their nodes and routes. From this complexity result the coincidences in their current development. Not only that the museums, their clusters and the city with urban and, potentially, international networks of museums belong to the same coherent system of representation and exhibition, of didactics and marketing, but they represent different scales of the same urban system.

The museum-cluster, the cluster of museums and the city of museums here are seen as the micro, meso and macro level of an (to)urbanism of densities and flows that maximizes the use and impact of museums and the public spaces between them in the dissemination of culture and cultural information. Changes at these three levels, as three dimensions of the urbanistic aspect of the museum, prove this theory and its importance for a future development of the museum, the city and the society.

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