

Graduation Plan: Urbanism

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Studio	
Theme	Complex Cities Studio
Teachers	Diego Sepúlveda (first mentor)
Argumentation of choice of the studio	Complex Cities Studio allows me to undertake multiscalar approaches to problems that attack cities in the developing world. Also, the continuous strive to come up with innovative tools to foresee sustainability is a great asset of this studio. Also the body of professors is a great example to the role planners should assume as articulators between various stakeholders that producing the city.
Theme	Cultural History and Design (Landscape Architecture)
Teachers	Prof. Eric Luiten (second mentor)
Title	
Title of the graduation project	The informal spatiality of Managua within the potential framework of regional development. <i>Assessing cultural landscape potentials of the historical centre of Managua</i>
Product	
Problem Statement	
<p>Land use planning in Managua has considered for too long the city as a circumscribed entity. The accumulative process towards its dominant position within the country resulted in a city that suffered from rapid urbanization in a context of national unequal development and vulnerability to natural disasters. Today it's evident that urban growth surpasses the capacity of the city to provide adequate services for all its citizens, increasing consistently the numbers of urban poor. Hence, the level of informality and social inequality are increasing, revealing urban fragmentation in the spatial state of the city and scattered regional urban components.</p> <p>At the present time, there is a wise and growing tendency to plan for the development of the city and its surrounding matrix as a unified region. However, this region is again confined in jurisdictional boundaries without grounded understanding of human needs and the landscape, allowing the continuous</p>	

degradation of the natural ecological system that supports the population. Furthermore, due to the interest of the current government there has been a shift towards accelerating the upgrade and improvement of quality of life of the urban poor. Nonetheless, these intentions are implemented as literal responses of the problematic clustered mainly in the historic centre of the city, lacking a supporting base for the highest and best use in relation to the land and its resources. Consequently, the integration of these social groups and their spatial context ends up behaving as short-term solutions that cause disintegration of functions, socio-spatial fragmentation and drives to the loss of the remaining historical identity.

Research Questions

The research process of this project is narrowed down in three main research questions, with their specific sub-research questions, to obtain efficient results that are useful in relation to accomplish the aims of the project.

1. What are the challenges of Spatial Planning within the battle of the formal vs. the informal city?

- i. What theoretical concepts and/or strategies take into account current conditions and the assets of the informal sector?
- ii. What types of spatial planning theories support the preservation of landscape features within city-regional development?
- iii. What are the existing plans, policies or projects to alleviate vulnerability of the informal are being executed in Managua, specifically in its historic centre?

2. What variables highlight the main characteristics and potentials of the historic centre of Managua towards improving its articulation and socio-spatial fragmentation?

- i. What is the intangible cultural heritage and the landscape characteristics of the historic city centre of Managua?
- ii. What is the importance of the historic city centre of Managua within the physical infrastructure network of the city?
- iii. What is the relation of the fragments found in the historic city centre of Managua and its users, translated into potentials and real needs?

3. How to activate a new urban spatial structure that improves the coherence of Managua and encourages reviewing its network as a part of assessing regional opportunities?

- i. What are the advantages of regional assessment of potentials?
- ii. What is the regional unit of analysis of the city of Managua taking into account variables that are grounded in the assessment of the current condition?
- iii. What type of strategic proposal can embrace the framework to give the highest and best use in relation to the land and its resources, to the historic city centre of Managua?

Goal (Aims of the project)

In order to tackle the planning process of Managua presented in the problem statement, the main aim of this project is to define through a multi-scalar approach, appropriate variables to recognize the role of the historical city centre, in order to recover its lost functions (or functional importance at urban level) and

improve its integration within the city. These variables should recognize the current socio-spatial reality and generate a cohesive urban structure that responds better to the local processes of regeneration and the regional processes of development. In addition, embrace that rational land use planning should be framed in a regional setting that is more in keeping with the preservation of landscape features and functions. The goal of this regional setting is to provide the background of the reorganization of the city's context to integrate, in a conscious direction, the use of land and resources.

As part of the aims, this project will carry out a research based on the following hypothesis: if spatial planning strategies do not address the uncontrolled expansion of urban perimeters, indiscriminate use of resources, the lack of regard to ecological damage, the disarticulation of spaces and segregation of the informal, the city of Managua will lose its potential recovery towards a cohesive urban structure and polarization will continue to escalate.

Hereby, the development of a diagrammatic framework of land uses and traffic ways of the historical centre of Managua will provide evolving performance standards required to ensure environmental integrity and encourage development that incites cohabitation of all its users. However, it will be through the relationship of the historic centre and its specific region that the processes of integration of informalities and identity will be activated. That is why the proposal of a new regional pattern determined by the character of the landscape will provide the backbone to the process of integration of the urban components within its context. Thus integrating collectively its geographical and topographical features, its natural resources, the use of land and human activities, to preserve unique landscape qualities of the region within and around which development will take place to link the trend of regional cooperation.

Within this approach the systematic relationship within scales will be tested considering concepts and values that are predominantly grounded in realities. The proposal will provide the outline by which orderly regional growth and development will fit compatibly into the natural and built environment ensuring the correct management of regional and urban potentials.

Process

Method description

The research project is divided in three phases of methodology (see Image 6): the first being the one that begun the process of research and definition of the subject (the deductive method or reasoning), and the second one which will be the guide to answer the research questions to accomplish the aims of the project (a threefold framework of research) and the third phase is the one that completes the thesis by proving the end product.

Phase 1 - The deductive method or reasoning

The method to start defining the subject of the thesis project was the deductive method or reasoning. As shown in the graphic (see Image 5), the deductive

reasoning works from the more general to the more specific. At first there was the thought of a theory about my topic of interest, to then narrow that down into more specific hypotheses that can be tested. As following, the observations defined in the context section and the relevance of the project support the hypotheses. This ultimately led to the specification of research questions that will allow me to test the hypotheses with the specific data recollected from the answers.

Phase 2 - The threefold framework of research

The threefold framework is divided into these segments: the Theoretical Framework, the Empirical Framework and the Site Analysis. Research actions that use specific methods, subdivide each one of the segments. The support of the research will be given by methods such as the official data research, literature research, mapping, and site observations and in the specific case of the site analysis the successive approximations method.

Theoretical framework

This segment establishes the definition of the main concepts and theories that will function as the academic and scientific backbone of the thesis. In the scope of this research, some literature reviews will be necessary to give better understanding about the concepts and theories used.

In this thesis there will be two literature reviews; the first one will research for the role and meaning of urbanization of poverty and its informal spatial consequences, with an approach going from Latin American cities until the reality of Managua. The second literature review will explore policies and regeneration guidelines that aim to lessen the spatial consequences of socio – spatial fragmentation, adding the review of the existing policies and plans implemented in Managua.

Furthermore, the main characterization of the concepts that will guide the final proposal will be undertaken in this segment, such as the definition of Landscape Features, Cultural Landscape, Heritage and Identity values, and regional and urban structures, all associated as much as possible to the context of Managua.

Empirical Framework

Within this segment case studies will be reviewed to see in practice the theoretical background researched around the concepts that will guide the final proposal. The research will be done on hand picked cities that have regional patterns determined by the character of the landscape, to help develop an understanding of the determinants of city-regional development and how the scales interact, and identify opportunities to reduce vulnerability and enhance adaptive capacity to current and future environmental risks.

This segment will conclude with a set of instruments and list of actions based on the verifiable with the case studies to ground the proposal in realities and no only

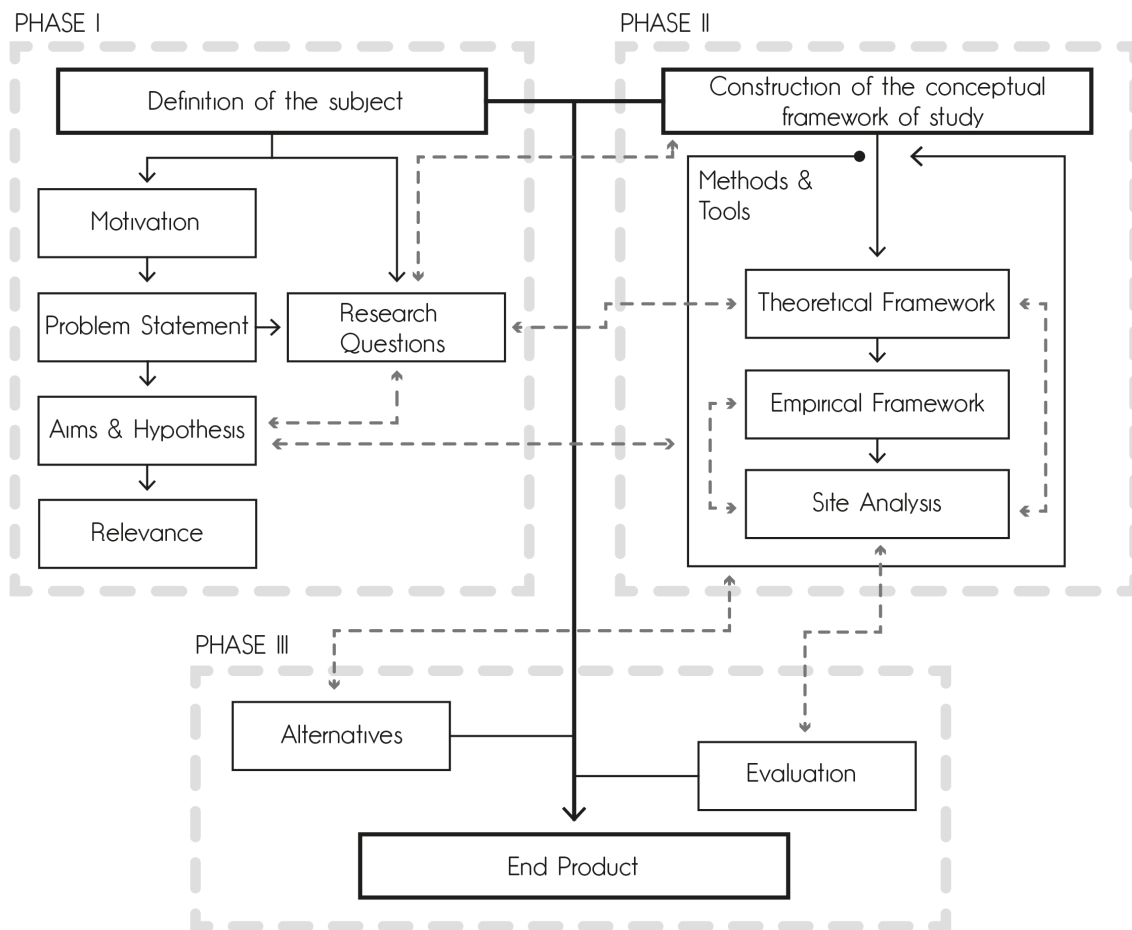
on theory.

Site Analysis

The site analysis is the most extensive methodological phase of the elaboration of this thesis. This segment will include two main phases determined by research actions and methods.

The first phase of analysis in this segment will include the context and site diagnosis through morphological and typological analysis, described thoroughly in the introduction of this thesis plan, adding to that, the normative review of the region and the city of Managua. The second phase will include the determination of the gaps and needs of the context and project area through the levels of environmental vulnerability, climate change, public safety, accessibility, intangible values and land uses.

It is noteworthy to add, that all phases of this segment will be correlated with a layer defining the historic center of Managua, as a study area defined and precise for evaluation and analysis with respect to the rest of the urban structure of the city.



Scheme of the phases of methodology of the research project of the thesis. Source: the author.

Literature and general practical preference

- BALBO, M., 1993. Urban planning and the fragmented city of developing countries. *Third World Planning Review*, 15, 23-35.
- Borsdorf, A. & Hidalgo, R., 2010. From Polarization to Fragmentation. Recent Changes in Latin American Urbanization. In P. van Lindert and O. Verkoren (eds.), *Decentralized Development in Latin America: Experiences in Local Governance and Local Development*, *GeoJournal Library*, 97, chapter 2, pp. 23-34.
- Burgess, R., 2005. *Technological Determinism and Urban Fragmentation: A Critical Analysis*. In: *9th International Conference of the ALFA-IBIS Network on Urban Peripheries*. Pontificia Universidad Católica de Chile, Santiago de Chile, July 11th–13th 2005, pp. 21.
- Cerruti and Bertonecelli, 2003. Urbanization and Internal Migration Patterns in Latin America. In: *African Migration in Comparative Perspective Conference*, Johannesburg, South Africa, June 4-7, 2003.
- Lélé, 1991. Sustainable development: A critical review. *World Development*, 19 (6), pp. 607-621.
- Lynch, K. & Rodwin, L., 1958. The urban place and the Non Place Urban Realm. In Webber, *Explorations into Urban Structure*, Philadelphia: University of Pennsylvania Press.
- Lynch, K., 1960. *The Image of the City*. Cambridge: Harvard University and Technology Presses.
- Mollenkopf, J. and Castells M., 1992. *Dual City: Restructuring New York*. New York, Russel Sage Foundation.
- Moser, C., 1978. Informal sector or petty commodity production: Dualism or dependence in urban development. *World Development*.
- Valladares L. & Coelho M., (n.d.). *La Investigación Urbana en América Latina: Tendencias Actuales y Recomendaciones*. Gestión de las Transformaciones Sociales – MOST. Documentos de debate - N° 4. Available from: <http://www.unesco.org/most/vallspa.htm#Introduc> [Accessed 17/10/2012]

Reflection

Relevance

Social Relevance

The growth of population and GDP in Nicaragua to the year 2020 will be largely contingent on Managua's behaviour because of its position as the core urban area within the national urban system. Managua is also, undoubtedly, the city that has the best competitive advantage in attracting new investment. Therefore, demographic and economic growth and concentration around this metropolitan area will continue, and in a second instance, to municipalities contiguous to it and to urban localities that make up its metropolitan region.

In this regard, the strategic framework of developing the region of Managua is a challenge that seeks to overcome the current dualism between the capital as the national centre and other municipalities as dependent or marginal areas. Hence, relating the context of region to another variable that is not restricted to jurisdictional boundaries will help ground strategies to real needs and values that do not oppose to development. The regional landscape unit of Managua, as the

regional context, will help promote equal growth for higher development potentials and lessen its consequences of increase of segregation and socio-spatial fragmentation. The target is to provide the inhabitants that all regions host have an equal chance of participating in urban dynamics.

Academic Relevance

The Latin American city is experiencing a time of social fragmentation with urban expansion trends that integrate cities into the core of metropolitan origin through network connectivity and daily mobility (Janoshcka, 2005 cited by Arriagada and Villa, 2008). Metropolitan areas are constantly evolving, so the regulatory framework and management instances can not be left behind, a significant imbalance results in limitations to its competitive potential to meet the social needs of the resident population and to ensure sustainable development.

This thesis has its academic relevance in addressing with the concerns mentioned above, social fragmentation, un-integrated metropolitan areas, correct management of metropolitan regions, and also in urban development strategies. These strategies attend to the quality of the environment, the efficiency of infrastructure network, the growth of employment, and to urban services of all the inhabitants of the city.

The task undertaken is to identify the type of spatial organization that is compatible with the municipal and regional strategy within the regulatory tools and infrastructure investments that will allow a city to evolve from its current spatial organization to the one implied by the strategy. All this will be achieved by the correlation of variables and theories will make of this the scientific thesis that it should be.

Time planning

The phasing and time schedule thesis is consistent with the methodological phasing. The aim of arranging the phasing for the implementation of the acquired knowledge is to ensure the completion of its outputs and aims.

The time schedule is presented based on presentation moments (P1, P2, P3, P4 and P5) and the other is based on the actions, which should be developed during the research process (see Image 7). These actions are defined as follows: Defining the subject, Theoretical Framework, Empirical Framework, Site Analysis, Defining Alternative Instruments and Implementation Means, Testing Instruments, Diagrammatic Framework Proposal, Regional Context Proposal and Conclusions and Recommendations. In addition, the products that need to be handed in are also defined as activities, these are: Motivation Poster, Preliminary Thesis Plan; Final Thesis Plan; Review Paper [Conference]; Preliminary Thesis 1; Preliminary Thesis 2; and Final Thesis.

