

# Merging Thresholds and New Landscapes of Knowledge



Figure 1. NYIT\_SoAD\_Thesis Studio- Metropolitan Strategic Plan\_ Rio de Janeiro- Spring 2019\_ student: Christian Wade

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It has become extremely important to revisit our teaching methodology along with pedagogical contents and objectives, in consideration of the impressive and sometimes overwhelming progress that the technology available to document, analyze and represent the complexity of our built and natural environments has reached, and also the role that it has been proactively playing in affecting our way of thinking, designing and building. A renewed “theory of formativity” (Pareyson)<sup>1</sup> styles a knowledge that is generated by a constantly transforming process of “making,” in which methodologies, theories and learnings arise within the actions of designing and building, and mostly because of the making. Following the etymology of the Greek world<sup>2</sup>, this making could be understood as poetic way of actively participating to the changes of our environment. If we look carefully, this approach to structure the knowledge has been deeply rooted in the history and legacy of the most relevant architects and designers, as ontological condition imbedded also into the idea of progress. We have been witnessing several experimentations that have been capable of bringing theoretical explorations, such as the ones from the fields of philosophy and literature, into the realm of design and space making. These explorations reach various degrees of quality, but nevertheless they provide openings to further interesting discussions. An example of this sort could be among others, the collaboration between Eisenman and Derrida for the design proposal for Parc de la Villette in Paris of 1987<sup>3</sup>, where the memory of the proposals for Cannaregio in Venice or the project “Romeo and Juliet” in Verona, are considered within the philosophical background of the criticism to the structuralism, and the projection towards a horizon of deconstruction. This concept migrated from the realm of thinking, to the one of designing and form making, in its highest sense, giving strength to role and identity within the field of architecture, of the idea of “fragment” and “text” often interrupted, following Lyotard’s suggestion<sup>4</sup>, as expression of the post-modern dimension.

The several levels of accessibility often simultaneous, to various sets of information have changed drastically through the use of heterogeneous media systems, deeply tailored on the needs of each individual, and yet strongly interconnected in limitless and layered networks. These expanding upon McLuhan’s concept<sup>5</sup> regarding the merging of media- message and the new fragmented collective identity deriving by it, and replacing the modern idea of individualism, will be better represented through the futuristic projections of Negroponte in “Being Digital.”<sup>6</sup>

We are called then to manage a more sophisticated complexity of interactions across fields of knowledge, scales and pace of their continuous evolution, and the emerging of a holistic understanding of the global systems of actions and reactions that characterize our current environments as understood through their mutual connections. The overexposure that characterizes both individuals and collectivities introduces an unprecedented level of ethical issues about the authorities in charge of collecting and managing the data-scapes available, their legacies and propose of their utilization, especially when some of these can alter worldwide social behaviors, political decisions and financial conditions. Moreover, considering that decisions and

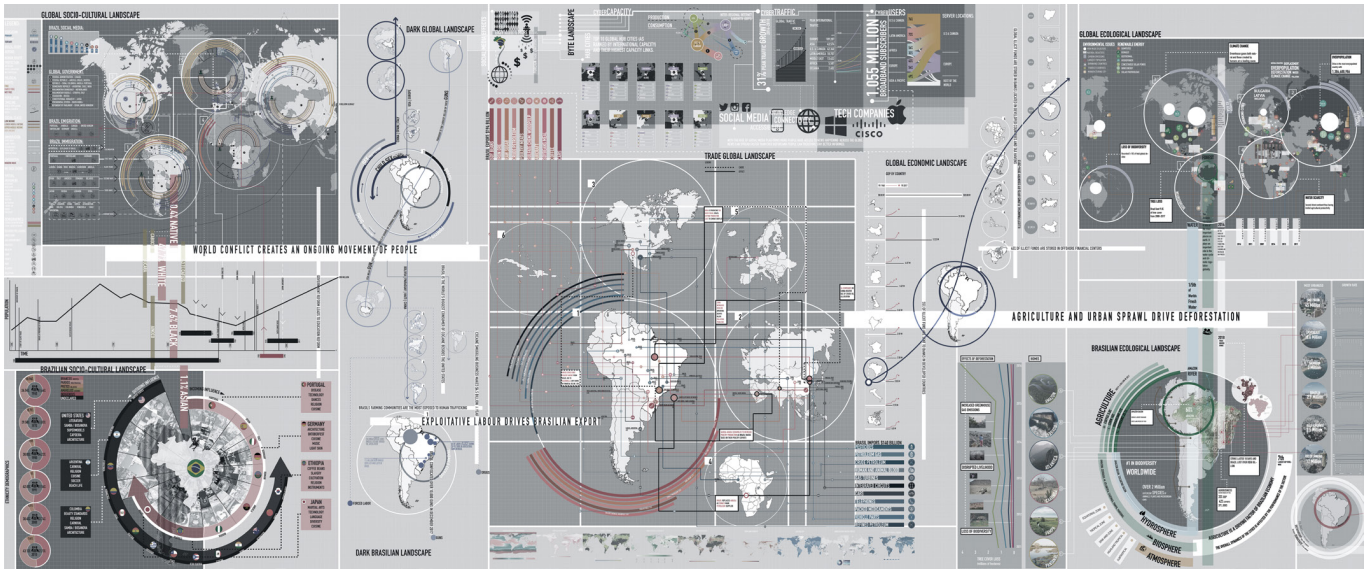


Figure 2. NYIT\_SoAD\_Thesis Studio- Site analysis\_ Rio de Janeiro- Fall 2018 - Decoding Global Dynamics \_ students: T. Ferreira- C. Wade- S. Delgado- Y. Prior

strategies adopted at political and economic levels end up affecting people/societies and places/territories far from the source, the issue of their selection and dissemination becomes absolutely relevant. These factors characterize our daily life and the spaces within which subjects—physically and/or virtually—move or better know, formally and informally. Before us is a diverse and often rhizomatous horizon of information, which must be sifted to find the essential. It is critical then to develop tools and strategies to filter and critically select the data which are most effective for the understanding of phenomena both physical (climate change, ecological footprint, etc.) and ephemeral (social behaviors, informal use of space, etc.) characterizing our current environments and the possible directions for their evolution.

We have developed advanced and interconnected tools to record, decode, describe and represent these evolving info-scapes that we are part of, leading to a renewed semiology that is often difficult to translate into syntax, being in a sort of self-celebratory aesthetic limbo, in which the originality of the representation of data can be disorienting. This seems to become more relevant than its translation into effective strategies or design applications, and of the reality of spatial structures and experiences that it can create. The translation in proactive strategies to operate into a context should be anyhow one of the main purposes of such availability of information, towards a better understanding of needs and potentialities of that context, of the characteristics of the variety of elements defining it and their interconnections. In this way, the transformation processes can become more sustainable at multiple levels. Therefore it is necessary to be aware of the possible ways that a context will react to the changes introduced by a new action—in short and long term and at a local and large scale—in terms of both space and life quality, and towards the definition of more resilient hybrid narratives which constitute the life of a design project. These are the ways through which the same data with their several levels of abstraction, can become real and effective,

connecting individual and collective biography to the ones belonging to local places and territories.

Accessibility to information about demographics, physical characteristics of spaces and habits of inhabitants has become today certainly more available, detailed, and predictable through sophisticated devices, which are capable of realistically envisioning several possible scenarios. A crucial point is then how to filter and critically select among these data the ones that can be useful and proactively influential for the articulation of more balanced, sensitive, and site-specific design proposals which can work as operating catalysts. It's important to filter and cross relate the available information to deductively direct outputs towards a better and more integrated understanding of their contexts and of issues and potentials that can become opportunities for sustainable design strategies. Starting from a deep understanding of present conditions, framed accordingly to the historical awareness of their evolving paths, these can then be oriented to coherent and imaginative visions for the future.

As educators, we aim to help students develop tools and knowledge to proactively participate to the construction of our environments, upon and because of the understanding of complexity and correlations among the various dynamics—political, economic, social, ecological, anthropological—which are the primary causes that shape and reshape our global geographies, as well as each locality that is part of it. These dynamics take then the forms of choices made by decision makers and investors, administrations and private agencies, becoming possibilities to improve our cities and the quality of our lives. Operating towards understanding and prioritizing the issues that generate the problem in the first place, by more than just curating the effects deriving from these, and being aware of the systemic connections among phenomena, will eventually nourish a different generation of thinkers, more sensitive and creatively engaged



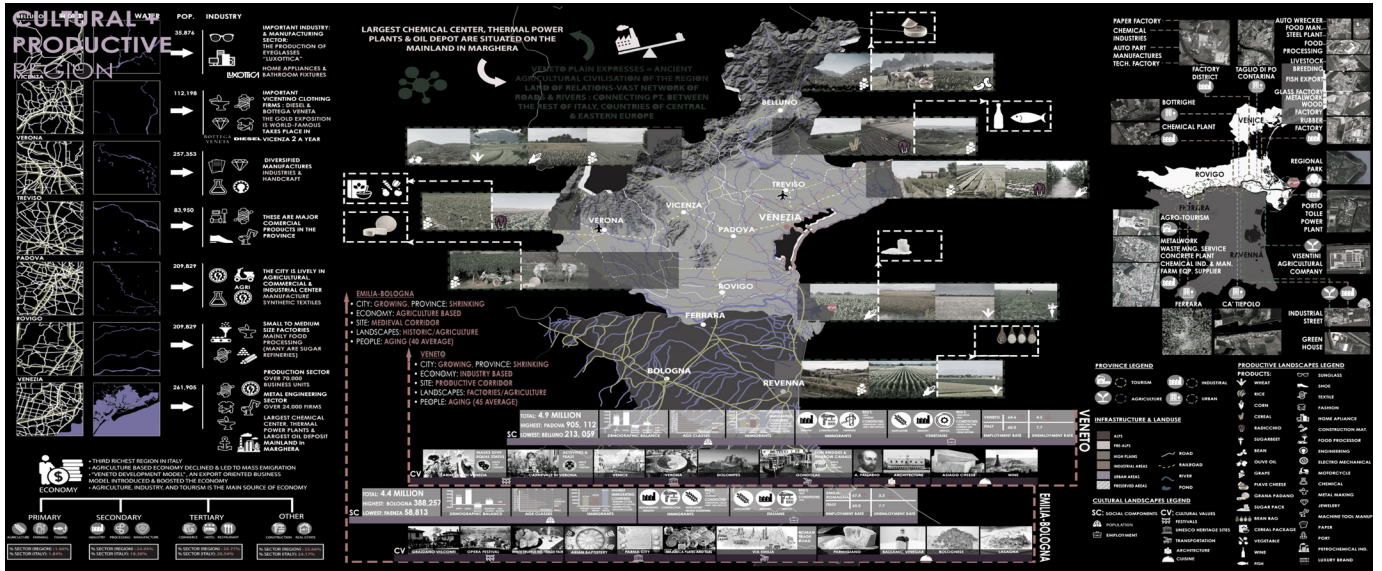


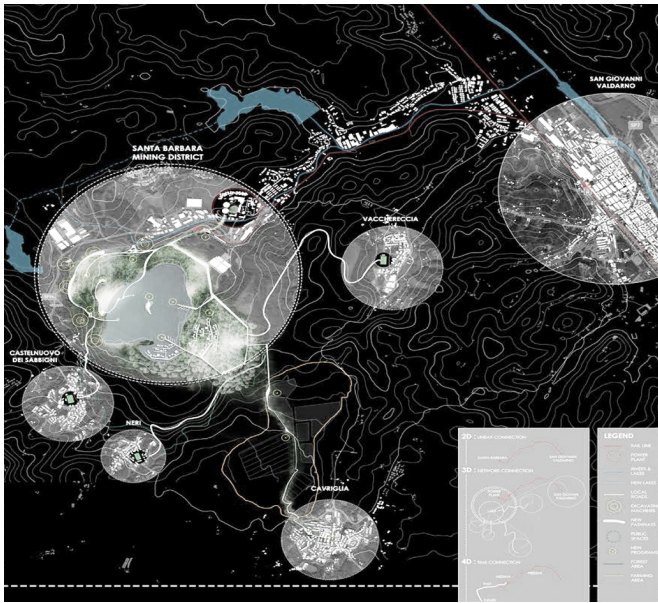
Figure 3. NYIT\_SoAD – Thesis Studio- Site analysis\_Italy- ENEL\_Spring 2019- Decoding Regional Systems\_ students: S. Nwe- Z. Kurt- J. Gutenberg- Y. Guaman

in their personal and global cultural landscapes. They will be also qualified to envision and participate in creating the new institutions, structures, entities and sets of rules needed. Being aware of the consequences of their actions and of reactions and dynamics that certain choices will initiate, at the same time they will perhaps have a better understanding of the real reasons at the base of those choices and the intricate network of correlated causalities, so they will operate to modify malfunctioning processes and doing so, potentially break unproductive cycles.

A generation capable of constantly integrating and proactively moving between thinking, researching, and creating, will critically react to the changes and direct them, envisioning and producing new knowledge and renewed professional contexts and tools, which can holistically take care of our environments. In this perspective the construction of a building, a portion of city or of a metropolitan area, becomes an opportunity to experiment and verify theoretical, methodological, morphological, typological and technological possibilities. This will lead to more sustainable and integrated infrastructure, services, living, working and leisure spaces considered as integrated systems of both natural and manmade materials and tectonics, which is the way to guarantee a more balanced future for our societies. Evolved and more integrated processes are already present in the way the new generation of professionals works. As they move between participation to International symposia and design competitions, between collaboration with public institutions and private local investors, coordinating theoretical and applied research at several scales, young professionals are aware of the synergies among expertise necessary to deal with the project of a space or with the design of a strategy that will affect our use of space. Academic environments can therefore become the places where these collaborative experiences can start nesting, where the gap between thinking and doing is bridged through investments in our human capital, the students and

their entrepreneurship, the creativity of their ideas and their innovative approaches to problems, or their original vision in recognizing and strengthening potentials. As teachers we have to be active part of these processes and generously offer our guidance, knowledge and expertise, so that these can be improved and challenged through an open understanding of their legacy, free from preconception. We are asked to be the believers in the first place, capable to feel and teach passion, curiosity and motivation, to support values and responsibilities of a profession that will also define our world and the way people will live in it tomorrow. In this perspective information metabolized into knowledge become fundamental media to reach awareness and expertise. This same expertise should result in an inspiration to push further, envisioning and experimenting with what is new, conquering challenges and learning from defeats all while engaging in productive alliances and shared intuitions across disciplinary boundaries and beyond consolidated and predetermined schemes and forms.

This scenario delineates a renewed synergy between academic work, theoretical research, design experimentation and professional applications, which defines at the same time a new humanistic approach that positively integrates scientific and pragmatic knowledge, classic theories and the most advanced applications of science and technology. Here we find the need for a truly collaborative and interdisciplinary coordination among backgrounds and areas of expertise that are involved in the expression of our mutating landscapes. Creative management and planning, a renewed way of thinking about the role of the existing public administrations, private entities and investors listed above, will be necessary. Along with these, new procedures and legal structures will be needed as professionals seek to design processes that ask to be understood at the scale of complex territorial systems but simultaneously come from and characterize the one-to-one dimension of the locality. These have



**Figure 4.** NYIT\_SoAD – Thesis Studio- Metropolitan Strategic Plan\_Italy- ENEL Santa Barbara Spring 2019\_ student: Jeanbaptiste Gutenberg

to be recognized within the ecological, economic, social and cultural complexity of our dispersed urbanizations in a more resilient way, referring to larger and layered space and time dimensions, including a variety of systems that are at the same time inputs and ways of verifying the efficacy of a project.

The need for design choices and strategies that operate across both local and large contexts—often coinciding with vulnerable post-industrial landscapes—is dramatically manifesting its relevance almost every day. Therefore there is an equally serious need for more consistent and coordinated actions across territories. We must stay aware of the systemic connections among phenomena globally, for decisions that must go beyond specific political and ideological positions and their time frame, to guarantee a common and accessible well-being for all. There should be then a consolidated understanding that even though ideological differences and contrasting positions are vital in a democracy to keep the dialogue alive and push constantly to do and be better, a common ground of values and shared priorities has to be established to protect the survival of our planet, which means also our future. This understanding points to a working together towards rights and sustainability for all, not only for a select group.

Learning how to decode and represent the complex and multi-layered systems of cause and effect through a new integrative and dynamic “agency of mapping”<sup>8</sup> (Corner) will become even more relevant for the future generation of students and equally important for the definition of a new professional expertise. This renewed way of mapping focuses not only on statically describing the physical conditions of a territory and the locations of the structural elements that identify it, but also represents and most of all puts in interaction, visible and hidden phenomena referring to cultural behaviors and beliefs

historically layered to a place, to the symbolical and perceptual values that have been defining the socio-anthropological evolution of it, framed in a geopolitical perspective. This, along with a new understanding of the relevant role played by the ecological dynamics within our territories, the complex intricacy of their effects across time and place—mostly as consequences of series of human choices and behaviors—have made it necessary to experiment with mapping as a more dynamic, performable and technically evolved tool. This tool must also be understood as a methodology of complexity, capable not only of describing elevated levels of processing, but also offering the ability to critically synthesize and interrelate data and phenomena to enable a deeper understanding and potentially a better way of anticipating and avoiding problems. A new knowledge and expertise deriving from what is described above can be for the first time equally available and uniformly distributed among professionals from various fields who can then be called upon to operate consistently according to new guidelines and evolve with these. The mapping process becomes particularly relevant as an integrated part of every design proposal, especially the ones operating in vulnerable contexts characterized by transforming processes of shrinking or fast growth of either built or natural environments. These occurrences can be deeply understood and sustainably managed only if considered as parts of larger and more complex systems. The design approach deriving from this processes of mapping becomes then itself not only an indispensable tool to decode the complexity of phenomena and dynamics that are often hidden and ambiguously layered, but it is also a possibility to rethink new systems of production and distribution of items, energy, and information. Processes will certainly be enhanced by sophisticated technological changes and envisioned through advanced digital tools affecting positively new spatial, social and management structures and their way of becoming part of the daily narratives of individuals.

Here the thresholds between teaching, researching and working in the field merge and mutually enrich each other, creating a stronger awareness about the responsibilities of designers and planners at the multidimensional scales of interventions and in various related sectors. This responsibility has to be accepted and proactively embraced within the learning environments of our schools, which will then produce professionals who have a clearer vision and a deeper understanding about how to lead and coordinate, considering the implications of their choices as an integrated part of the design process.

The new generation of professionals coming out of our classrooms has to be prepared to deal with urgent global issues and fragile local conditions. These circumstances have to already be part of their learning experiences during their studies, through topical courses in universities, international multidisciplinary seminars and design workshops, study abroad programs, projects collaborating with communities in need or with nonprofit organizations, and perhaps through competitions for design ideas and strategies merging diverse academic and professional sectors. These experiences can initiate proactive dialogues toward more effective actions on sensitive environmental topics.

Problems of flooding and erosion, pollution and waste production, energy and soil consumption, and unequal access to services and resources must be identified, mapped and resolved through knowledge and the tools of an environmentally oriented urbanism. The latter has been on the rise as a shared urgency and as a counterpart to the lashing production of an oligarchy of star-architects around the world. In this context the creative component of a design proposal not only involves the original expressions of the form making, but also the architecture<sup>9</sup> of the overall strategy, of the methodology involved, and of the originality of the rethinking process of structures and systems.

An environmentally oriented approach has to envision new sustainable and adaptable paradigms for networked metropolitan areas involving multidimensional scales and also consider the uniqueness of each location. This approach begins with an overall understanding of the outcomes of decisions made at various levels and in contexts often different from the ones in which we were originally called to operate. These outcomes must be conceived of and included into the design process, which must lead to the localization of sensitive and strategic locations in which the action can aid in finding the minimal formal and structural solutions that can then have the broader effects in activating a more resilient change and a better environmental quality.

These specific locations are then rethought and reclaimed through highly sensitive design interventions, becoming local mediators that perform as catalyzers and part of a more complex regional metabolism. At the small scale these work as epicenters of attraction, acting as points of accumulation of territorial forces, and operating like permeable and multiscale clusters of exchanges, open to opportunities to rethink programs, structure, and methods of construction towards a sustainable landscape urbanism.

A renewed methodological teaching approach arises from the arguments above and from the need for a more effective knowledge: open, integrative, adaptable, dynamic and truly experimental, in which re-thinking structures, organizational systems and their multiple interactions can overcome the rigidity of a model-oriented one belonging to modernism, still active today, without erasing the relevant lessons of it. It will integrate and build upon the knowledge and legacy of consolidated tectonic, typology and compositions, liberating them through the deep understanding of their genealogical transforming processes, from the dogma of an aprioristic definition, towards their evolution in "morph-typological" and "trans-typological" deductive schemes of possibilities that can be transformable and proactively adaptable accordingly to the specific contexts and their interactions. An equally open and renewable synergy between academic work, theoretical research, design experimentation and professional applications would reinforce an approach that positively integrates scientific/theoretical and pragmatic/experimental knowledge as integrated parts of a whole, bridging diverse academic, professional and administrative fields, to place still at the center the metahistorical value of a constantly evolving humanistic dimension.

This new methodology reacts to and includes the understanding of the DNA of a context as a territorially extended physical perspective, but also geo-politically and geo-philosophically focused. At the same

time a bottom-up exploration of the local characteristics including materials, techniques, and cultural attributions, allows us to create a more sensitive tectonic, responding to the transforming needs of the users. The professionals we are currently training in our studios, the ones who are still fully immersed in their process of growth, including ourselves, will decide to be designers, planners, managers, sociologists, perhaps all of the above and more. They will creatively and openly re-think their identities and their expertise towards resiliency.

If we have been good teachers, they will positively embrace the challenges and explore new possibilities so they will do better and be better; they will be agents of change<sup>10</sup> responding to the needs of evolving contexts, and often anticipating and redirecting transformations towards a more equal and sustainable future for all.

#### Notes

- 1 Luigi Pareyson, *Estetica. Teoria della Formativita'* (Milano, Bompiani Ed., 1991).
2. The Greek etymology of the word 'poetic' comes from the verb 'ποιεω' which means 'to do,' 'to operate' and so to operate through conscious actions which also have immaterial effects. This also refers to the way M. Heidegger used the same word 'ποιεω' as connected to the word 'poetic,' being that the only way for humans to inhabit a space, transforming it into a place through the introduction of poetic implications.
3. The process of this design proposal is documented in the book by Jeffrey Kipnis & Thomas Leeser, *Chora L Works. Jacques Derrida and Peter Eisenman*, (New York, The Monacelli Press, 1997).
4. Jean Francois Lyotard, *The Postmodern Condition: a Report on Knowledge*, (Manchester University Press, 1984).
5. Marshall McLuhan, *The Medium Is the Message: An Inventory of Effects*, (Cambridge, Touchstone, 1989).
6. Nicholas Negroponte, *Being Digital*, (New York, Vintage Ed., 1996)
7. The notion of "classic" it's here understood as sort of authority which doesn't over-impose itself to a context, but it's spontaneously recognized because of being meaningful despite the time distance, and since ontologically related to the historical nature of the being that confirms its value across the times. This approach is further developed and documented into the book by Hans Georg Gadamer, *Verita' e Metodo*, Italian transl. by Giovanni Vattimo, (Milano, Studi Bompiani Ed., 1983)
8. Relevant for this concept is the essay by James Corner, "The Agency of Mapping," in Dennis Cosgrove, *Mapping*, (Chicago University Press, 1999).
9. Besides the primary definition of this word and its etymology which refer to the 'art and practice of designing and constructing buildings,' the use of the word refers here to its secondary meaning of "the complex and carefully designed structure of something" in terms of its conceptual frame and logical organization and correlation of its parts.
10. This concept is defined and explained in the book by James Corner, *The Landscape Imagination. Collected Essays by James Corner 1990-2010*, (Princeton Architectural Press, 2014).