

THE ECOLOGY OF LEGIBLE URBAN SPACE

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“Today’s planner has an arsenal of technological tools, from lighting and heating to structural support to materials for buildings and public spaces, which urbanists even a hundred years ago could not begin to imagine. We have many more tools than in the past, but these resources we don’t use very creatively”.

RICHARD SENNETT, “THE PUBLIC REALM”

The documentary *Pruitt Igoe Myth* describes the story of the Pruitt Igoe council estate in St. Louis, Missouri, through a series of interviews of former residents. The complex was blown up in 1970 because of its state of social and physical decay. For such violent action the American architectural historian Charles Jencks describes Pruitt Igoe’s demolition as the day when Modern architecture died (Jencks, 1977). In light of these events, the documentary explores the economical, political and social causes and effects that lead to that final day. The stories told by residents unfold an interwoven pattern where architecture is one of the fragments of a complex urban plan of investments and social housing policies the government undertook to regenerate the city of Saint Louis. If on one hand Pruitt Igoe represented the government’s attempt to give slum dwellers a better place to live, on the other it also supported and triggered “white flight”; once the government sold land at a cheap price, white Americans left downtown to pursue the American dream in the suburbs. In addition to the social segregation created by such politics, Pruitt Igoe’s residents had to agree to a series of policies before moving into the brand new apartments (Freidrichs, 2011). Policies didn’t take into account the social substratum existing in the communities; they established rules decontextualized from the people they were defined for. As a result, the policies became the trigger of social decay, because of the division they created between communities and government.

How can policies speak the language of communities? How can the government design a set of rules that help run the organic complex machine of the city and reflect citizens’ social and cultural background? This essay would like to address possible strategies that contribute to the legibility of governmental policies under the roof of citizens’ everyday experience of the city. It will look at the social syntax that shapes policies and at the value they have in creating ways for citizens and government to interface.

THE ZEITGEIST POLICY

The area of Pruitt Igoe is comparable to the scale of a city; indeed the social housing complex was part of urban strategy aiming for the regeneration of Saint Louis. Nevertheless, as the events show, the city is a complex organism. Cities run under entropic laws, with factors coming from different contexts. Socio-cultural relations-

hips and people's engagement with urban space is one of them. The zeitgeist of the city—which includes aspects like places to meet and how people move—is a pivotal factor that any government needs to take into account to understand which policies can trigger socio-economical innovation. Understanding the urban context through themes that work throughout the city (mobility, environment, technology, etc) outlines diversities, complexity, causes and effects of “behaviours” and “phenomena”. Themes can help to identify the DNA of the city and tackle problems via a form of communication that understands (and comes from) the people. On the other hand, the experience of governmental strategies, largely represented by policies, is a medium that facilitates communication between parties. Indeed, engaging communities in the government's vision of the city via the experience of it, enabled by tangible media, can improve legibility; policies can be an active urban agent enabled by people's experience.

THE ETYMOLOGY OF POLICIES

Policies are a form of language applied to the urban fabric, in which syntax articulates governmental strategies and intentions that relate to the vision of the city. In any language, words have cultural substrata. Words take meaning from past events, of which they guarantee continuity across time. Similarly policies, as urban language, refer to the past to take the city forward. Policies are guidelines that change with the city by interfacing different agents that act in the urban everyday.

Nonetheless, the challenge that policies need to tackle is quality, i.e., the cultural resiliency and texture that any language has. Etymology is the medium that enables and transfers quality. By comparative methods etymology analyzes how words change meaning through time. It also adds cultural context to sentences, by helping the reader to look beyond the direct meaning of a word. Words are like vessels that embody the value of the past, which is taken forward to the future. The evolution of any language is comparable to a membrane, which absorbs and repulses different factors. The selection of such factors doesn't follow a specific linear path, but understands and reflects the social context and its faceted structure. Society, culture and habits are indeed the main filters through which the memory of the past passes toward the future. Policies can play the role words have in language, which is to retain cultural quality and to move urban communities forward. The common perception of policies as restrictive boundaries can shift to a dynamic system that challenges the present and future of communities.

Just like words, policies are not strictly tangible. They might be visible, as with street signs, or they might not be, as with council or district borders. Nonetheless, visible or invisible, the policy framework feeds and regulates the machine that makes the city alive.

Mexico City and London are the capitals of two different nations, with different cultural and political backgrounds. Their infrastructures, from public transportation to sustainability, run under different laws and policies that are shaped around local conditions. The ecology of the two cities follows rules that are linked to the local territory. For instance, in Mexico City public transportation signage speaks largely through symbols. The language of symbols is not new for Mexicans, as the pre Columbian alphabet was composed of pictograms. Keeping this in mind, in 1967 American graphic designer Lance Wyman designed a public transportation language to link the underground to the surface—in this case, “surface” his understood as physical territory and Mexican cultural heritage). Wyman's language removes the sense of alien abstraction for a shared and generally recognized familiarity. The pictographic underground signage would reach both people who can and can't read (Mogilevich M., Campkin B., Ross R., 2014). In London, the public transportation map (TFL) legibility is delivered via the river Thames. Harry Becks' 1931 map incorporates the possibility to scale the content over time (to account for extension of the system) and clearly illustrates its sense of direction with the least amount of information. The TFL tube and

railway map stations are represented as knots connected by lines of different colours, and the only reference to the geography of the city is the Thames. The simple graphic representation of the river makes London TFL map one of the best examples of legible maps. The pivotal importance of the river was made evident in 2009, when the river was removed in a new edition of the map. After a general outcry from the public, the river returned its legible navigation to the map (Glancey, 2015). The map illustrates physical territory by showing the relationship of stations to the river.

In the essay “The Open City” (2006), Richard Sennett describes how continuity is the factor capable of triggering sustainable living. The concept of continuity can be applied to different scales, from urban growth to people. By referring to Jane Jacobs, Sennett describes how the adjacency between elements underlines contrast, similarities and hybrids. Thresholds have resiliency, a quality with an important urban value, as thresholds are interfaces and gateways to futures that embrace the memory and value of the past. Thresholds enable a kind of future that remembers the past in order to move one step forward.

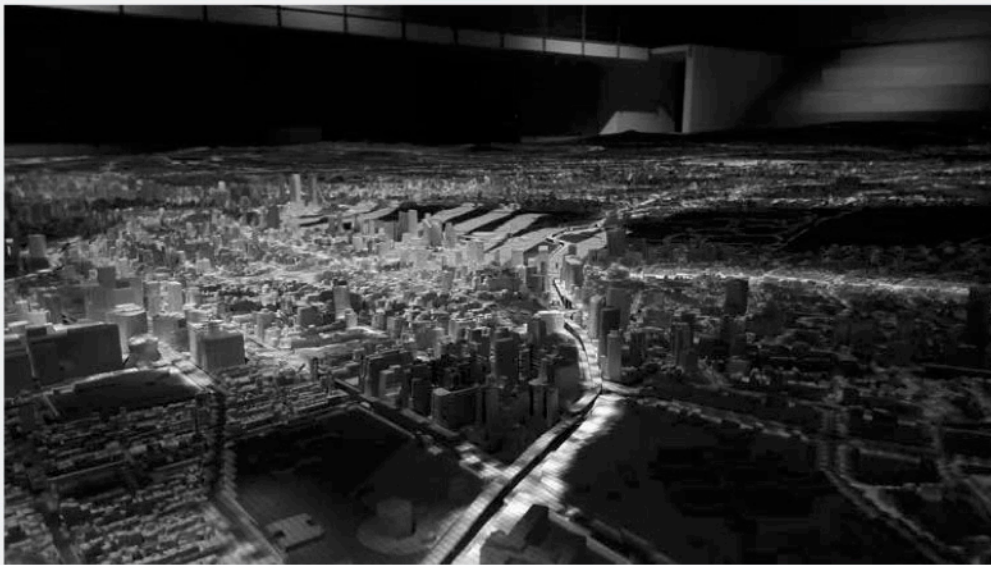
The concept of continuity among parts can apply to different aspects of the city. Continuity, and its opposites, can filter policy analysis between London and Mexico City as strategy to increase legibility. During the workshop at the Laboratorio para la Ciudad we proposed low-res probes and hacks around selected topics, from “How do people make decisions?” and “Tangibility of Information,” to “Government Spending and Accountability” that can generate a new system of urban analysis, which takes into account citizen’s engagement from the beginning (p. 125). Citizens embody the resiliency of the city; they enable a system that interweaves policy with its territory. Citizens’ experience of the city make policy legible by turning them into guidelines of the urban territory.

The ecologist Steven Gould (Sennett 2006) differentiates a border from a boundary: The first is a dead edge, whereas the second behaves as an interface. In the city there are many borders, which define different jurisdictions with their own policies. On the other hand, boundaries can be experienced as defined perimeter or thresholds, i.e., areas with an embodied exchange and transmigration of information. Borders/thresholds are blurred territories of osmotic interchange—they are the place of the hybrid. Legible policies, like thresholds, are porous and continuous at the same time, bridging the boundaries of the city by acknowledging the complexity of it. They unlock and regulate urban life via the public’s acknowledgement of its rule and participation in everyday politics.

According to what has been described so far, the resiliency of any policy lies in its recognition of the value of urban complexity as strength; the understanding of urban stratigraphy and the ambition to challenge it are, indeed, factors that enable new opportunities. The low-res probes and hacks the UK and Mexico City teams developed can work as triggers to understand solutions. Considering this, I propose an infrastructural system that works through tangible experiences. Citizens can “feel” the value of data through urban physical interventions that engage the human body and its senses. To this extent, legible policies are tangible guidelines that move away from abstraction.

Pruitt Igoe was designed according to core Modernist guidelines; it was considered a Modernist masterpiece, one that applied abstract speculations to the physical territory. The Modernist built environment was thought of as a product of conveyor belt production; it became symbol of society, with people, like objects, aligned to the conveyor belt order. Modernist society was then the reflection of Modernist rules. Nevertheless, as history displays for us, an ordered society establishes constraints and boundaries. People, like buildings, had to follow the rules, which the government outlines as the driver of urban innovation. It then follows that the over-designed city, from forms to people, remains at the level of illegible abstraction. Top-bottom design demonstrated the problems proffered by the tendency to impose new regulations detached from the history of the place and people dwelling it.

Urban analysis is a medium to understand the intricacy of a territory. The complex dynamic of the urban fabric, from the socio-cultural point of view, is among the most relevant information to be extracted from any investigative processes for the proposal of scalable solutions. In their (dis)symmetry, London and Mexico City can learn from each other. Diversity and multiplicity are, indeed, the key values for the development of possible strategies to address urban sustainable infrastructure. By employing the concept of etymology as urban methodology, which employs data as tangible experience, and by using the hacks and probes proposed in the workshop, policies can draw a path that understands contemporary urban territories. On such a path, policies can adapt and change in relation to real time information, which understand public engagement. Tangible policies express the government's intention through the experience of value, so that words and numbers become tangible. The platform I envision looks at legibility as an interactive set of information that travels in a loop among urban agents and is displayed via tangible experiences. The city becomes a body that performs in relation to the environmental conditions.



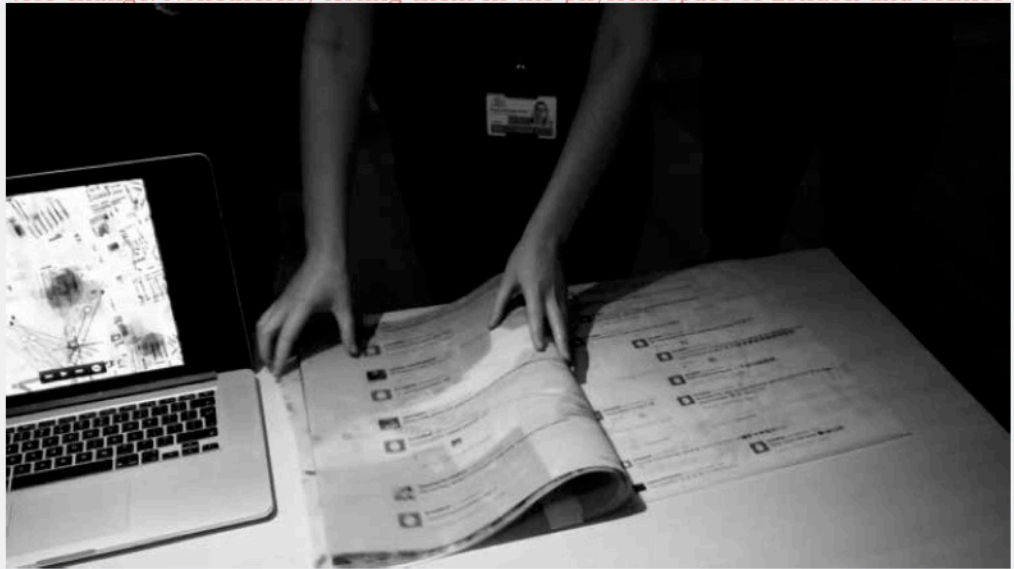
MEXICO CITY AND LONDON: URBAN SPACE IN CITIZENS' EXPERIENCE

The Futura CDMX model is an interactive space that looks to interface the public and the government around the strategies and policies of Mexico City. The space wraps around the scaled map of the Mexican capital: Two sets of seats allow people to gather and discuss, as if in a theatrical performance. At the top floor, Mexico City is dissected in different topics that display data on the map of the city. One of them illustrates the EcoBici area, i.e., Mexico City's public shared bike project supported by the government under the politics of better mobility. Bikes are used within an area defined by a boundary, which encompasses the districts of Polanco, Condesa, Cuauhtémoc, Juárez and Roma. In other words, EcoBici users are a small section of Mexico City citizens. Of course, there are specific reasons for this. Nonetheless, bikes are one of the most flexible transportation systems. How can the EcoBici boundary blur and become a threshold? How can it "leak" beyond the current area?

One of the tasks of the collaborative workshop was to observe Mexico City citizens using the lens of mobility. From the Centro Histórico to Polanco, Roma, Reforma and Condesa, I noticed that, even more than cars, trolleys are often used to transport merchandise (by street food vendors in particular), whereas bikes are more of a leisure transportation. How can people switch their understanding of bikes from leisure to business? One of the proposals that Superflux founder and co-director Anab Jain addressed looked at designing accessories that enable bikes of different functionality for different usages. At the beginning of the 20th century, bikes were the

vehicles that convinced Americans to drive. According to Frank Geels, the weekend leisure journey to the countryside triggered urban Americans' imagination to move and explore suburban territories (2005), and the resulting sense of curiosity and freedom triggered car culture in the landscape of American cities. Can a similar sense of curiosity, imagination and aspiration get Mexico City inhabitants on two wheels? Can inspirational and experiential policies facilitate citizens' engagement and enable new forms of behaviours or behaviour change? Another relevant example is the *Mapatón*, the public campaign and Android app developed by Laboratorio para la Ciudad, which involved public transport users in a game to map the routes and location of minibuses, using the incentive of rewards (2016).

Is there a specific culture and habit about dwelling in the urban space that triggers and drives behavior change? The hacks and probes we developed in the workshop are systems that can analyse and articulate contemporary city patterns for drawing behavior change. Nonetheless, testing them in the physical space of London and Mexico



City would be a point of departure to understand new pathways for designing the city of the future via legible and tangible policies. The physical experience of the urban space offers a good spectrum of the city.

From October 26-30, 2015, I ran an urban experiment with Information Experience Design (IED) PhD candidates Benjamin Kozlowski and Jimmy Tidey at the Royal College of Art. The project *Metalondoners* (Ferrarello L., Kozlowski B., Tidey J., 2015) looked at theater and social networks as a means to unfold intangible social patterns of the city and understand people's behavior between the digital and physical space. The workshop used walking as prop to collect and use data to design the individual form of the city. In London, one's sense of place changes continuously. A combination of factors like people's background, political strategies and infrastructure contribute to create different kinds of spaces. For instance, looking at the Future Cities Catalyst project "WhereaboutsLondon" (2014), Londoners with similar socio-cultural backgrounds do not cluster around the same council; they live in different parts of the greater territory. Nonetheless, contemporary urban space is no longer just physical. We understand space as hybrid, i.e., in-between the physical and the digital.

Urban life takes form through the spaces in which we dwell, which are equally shaped by dynamic places (such as our journey to and from work) or static ones (home, work, places of leisure, etc.). The contemporary experience of the city is mediated by what I define "content maps", which are maps created by means of content. From the restaurant we love to the cinema, gym, pubs, etc., we understand and read the city under themes. Navigating the city through these content maps creates our own urban space, illustrated by the set of metadata we leave along the journey. Booking an

Airbnb, tapping an Oyster card, buying a meal and connecting to Wifi are all acts that generate information that speaks for us and tells our everyday story of the city. Under this framework the “Metalondoners” project employs metadata to entitle citizens of their content. Acknowledging the presence of metadata, which is understood by urban performance, gives a sense of responsibility of being a citizen. Which citizen am I? How can I contribute to the management of the everyday?

“Metalondoners” takes inspiration from James Joyce’s *The Dubliners*, a collection of short stories describing people belonging to different social backgrounds in Dublin. The diversity and complexity of the book renders a “social section” of the city. Similarly this is what happens when we leave data behind; our stories are valuable information we can’t embody. If metadata represent our digital fictional everyday, *The Dubliners* is fiction related to physical space and society. In “Metalondoners” the story of contemporary hybrid space is constructed by Twitter feeds and urban space. The city is a theatre per se—stories happen in real time.

Similarly, Twitter creates social space by clustering information that has physical connotation. The power of social media is the capacity of creating an engaged audience. Fiction belongs to human nature as well as the will to share experience. Through Twitter, stories fluctuate through people who enrich content with their personal experiences. “Metalondoners” participants embodied a theatrical character, envisioned through the crossover of digital and physical information, a character that is an interface between the physical and digital world and transforms students’ perception of physical space. The students’ behaviour was indeed influenced by the city and Twitter feeds. By dwelling in this the hybrid, students experienced the materiality of the information they collected. The character became real, once students experienced its reality—by looking at space through the eye of the character students “saw” the resiliency of urban space. The three selected areas in London (West Hampstead, Bethnal Green and



Brixton) were reshaped through the three characters. Through the workshop, data became tangible through performance: Abstract digital information became matter that shapes the individual and shared understanding of one’s surroundings.

CONCLUSION

In this essay, I described different scales of possible pathways that might generate a culture of legible policies. Human beings generally rely on tangible forms that reify the abstraction of the surrounding. Intangibility is often too abstract for comprehension; abstract content becomes complex and alien. To tackle the concept of familiarity means to look for strategies that increase the individual and collective sense of legibility through individual and shared cultural backgrounds. Within the context of legible policies, familiarity is quite important, as it creates a common ground of discussion for the politics of the city.

During the workshop in Mexico City we looked at tangible means of influencing the government's decision making process in the context of urban strategies. We looked in particular at the topic of mobility to understand which politics can help the territory of Mexico City and London to reduce problems like obesity, air pollution, etc. We identified specific topics like "Visions of the City", and "Government Spending and Accountability" and we developed hacks and probes for each with the purpose of enabling categories in physical space. We then identified the most feasible ideas that could be developed into a prototype stage. A future step of the project would be to enable the shortlist in real space via low-res prototypes and tools performed both in London and Mexico City.

No form of strategy can move beyond the abstract territory if not tested in reality. Citizens are the heart of the city, each one constructing the place of the city by dwelling in it. No form of urban guidelines can take shape if not shaped by people that live in the space the government manages for them. In conclusion, we must prioritise the introduction of new design strategies for urban complexity that work via multi-agent participations and engagement.