FROM METAPHYSICS
TO METADATA:
AESTHETICS AND POLITICS
OF INTERFACE

MA New Media
Universiteit van Amsterdam
Thesis Supervisor: Dr. Jan A. A. Simons
Second Reader: Dr. Edward A. Shanken
Dreaming is work, you know...

There I am in a comfortable bed, the next thing you know

I have to build a go-kart with my ex-landlord.

I want a dream of me watching myself sleep.

- Mitch Hedberg

I want to be stereotyped,

I want to be classified.

- The Descendents, Suburban Home
# Table of Contents

Abstract  
Introduction  
Infrastructure, Interface, Metadata  
Geography and Figures  
I. Infrastructure and Flow: the Channels of Metadata  
1. Urban Simulacra  
2. Structure and Infrastructure  
3. Node and Metadata  
4. Containers and Heterotopias  
5. Living by Metadata  
6. What is Really Metadata?  
Dynamics, Format, and Parasitical Infrastructure  
II. Interface and Choice: Types Implications of Metadata  
1. Metadata and Agency  
1.1. Structural Metadata: The Nerd  
1.2. Textural Metadata: The Hipster  
2. Expandable Selves: Metadata Beyond Choice  
2.1. Body Metadata: The Comedian  
2.2. Metadata of Scale: The Gangster  
Conclusion  
References  
Bibliography  
Filmography
ABSTRACT

This work aims to point out how the circulation of metadata, stereotypical images extracted from a globalized imagery, affects the imagination of identities, which are led to adhere to certain pre-formatted formulas, and the perception of space, as it is constructed both physically and culturally.

Imagination, as a daily work practice, constitutes a creative and bottom-up process of identity-building, but nevertheless the principles behind the circulation of metadata are asymmetrical and subject to global factors. Such factors are, for example, politics of urban spacing, market fads, economic restructuring, mass-media. The formats of metadata are shaped by the infrastructure that channels it and by the interface through which it is selected and combined, imposing significant constraints on identity. I define infrastructure as the sum of the publicly-funded and established technologies and regulations that enable the global flow of people and information. Interface consists instead of the privately-designed filtering system (the media, the market), mediating the organization of metadata by giving an illusion of choice to the actors that interact with it. While infrastructure is more rigid and can be altered only by complex and large scale political action, interface can be subject to emotional perturbations.

Part of this work will focus on the recursive process connecting infrastructure and interface. The former is virtual and actualizes into the latter, in order to get into contact with metadata and filter it. I will take the example of XML as an ideological informational protocol, highlighting an isomorphism with the relational structures around the shipping container, an emerging element in contemporary architecture.
In discussing the properties of infrastructure and interface I will also expose the myth of the creative industries and the way they ignite processes of urban polarization and social segregation.

Through my analysis of the relationships between the three layers involved in metadata circulation (infrastructure, interface, and metadata itself) and the main types of metadata (structural, textural, body, and scale), I will discuss four main emerging figures and relative issues concerning urban spacing, community, and identity. These figures are: the Nerd, connected to the rhetorics of the Californian ideology; the Hipster, involved in the urban phenomenon of gentrification; the Comedian, dealing with stereotypization and racial profiling; and the Gangster, caught between urban fractalization and the global imagery. After examining these figures, I will highlight examples of strategic uses of metadata, taking advantage of an alliance with the parasitical infrastructure to create new configuration in interface. In the conclusion, I will propose a mapping of such uses, in order to design future tactics to tweak interface.
INTRODUCTION

Infrastructure, Interface, Metadata

In the last decades, debates about globalization and postmodernism have often converged. Drawing from Marxian and Lacanian concepts, updated and transplanted to different contexts, intellectuals like Jean Baudrillard and Slavoj Žižek have theorized the downfall of the symbolic order in favor of simulacra, as well as that of dialectical politics in favor of emerging New Age and capitalist ideologies. While the semiotic fascination for the disappearance of the referent and the evolution of the sign into a simulacrum have absorbed the aesthetic debate, globalization and the emergence of networks have been the focus of the political discourse. From Manuel Castells' space of flows (1989) to Alexander Galloway's protocol (2004), economic and information exchanges have been investigated and their intrinsic implications conceptualized, ultimately denouncing the infrastructural specificity of the new networks and their deterministic nature, inseparable from their empowering potential.

Building on a Foucauldian and Deleuzian heritage, control and surveillance have also been at the center core of contemporary debate, placing the individual/subject/user – himself caught between media and language – as an emerging political actor, stripping off his postmodern apathy to embrace a new media-powered agency in the diasporic global agora. Electronic media, dispersed communities, and mobile identities have for example been the object of Arjun Appadurai's studies, while the urban implications of our fractalized,
globalized, yet controlled cities have been discussed by diverse scholars such as Saskia Sassen (1991), Mike Davis (2006), and Eyal Weizman (2007).

In opposition to Baudrillard’s and Žižek’s popular language and code-based theories, another fringe of philosophers and writers presents an alternative reading of Marx and an energy-based, biomorphic conceptualization of the contemporary globalized world, also inspired by schizo-philosophers Deleuze and Guattari. In particular, digitalism and Baudrillard’s fatalist position have been sharply criticized by Italian activist and scholar Matteo Pasquinelli, who has interestingly gathered politics, networks, and urban gentrification in his bestiary of the commons (2008).

In the theoretical landscape outlined above, the present work aims at tracing a broad conceptualization concerning symbolic exchange, urban spacing, and - most importantly - identity building, by pointing out how the circulation of a globalized imagery affects the imagination of identities, which are led to adhere to certain pre-formatted formulas.

It has become clearer that despite the infrastructural pervasiveness of information technologies and the homogenization of global cities, there is still a longing for identity (both individual and communal), a local reflex co-existing with a global imaginary channeled through mass media.

As the flow of people and goods is not yet as fast as that of information, there are reasons to notice certain isomorphisms between these streams, and more importantly their connections and intertwining. These relationships suggest that, because of both the impersonal quality of flow itself and the increasingly active role a person has to play in the definition of his or her own identity, people themselves are progressively dealt with and read as data. This process of “dividuation” (as it has been called by Gilles Deleuze\(^1\)) is controversial and complex indeed, and it implies deep transformations both in citizens and space.

In the last decades, and in different fields, the term “imagination” has been widely used in scholarly literature, most likely because it connects the “intensive” plain of desire, famously theorized by French philosophers Deleuze and Guattari since the *Anti-Oedipus*\(^2\), with the

---

more semiotic one of the mass-mediated images shared by the globalized world. According to Italian philosopher and activist Franco “Bifo” Berardi, “imagination is the dynamic space where the countless images which reach the collective consciousness are disposed in narrative formations.” Berardi’s connection of imagination as a space with a collective consciousness makes the act of imagining a shared and social practice, which explains why debates on immigration narratives and immaterial labor have converged around it.

For example, Arjun Appadurai’s considerations on the work of imagination in modern societies are some of the most compelling concepts in his book *Modernity at Large: Cultural Dimensions of Globalization*. According to the anthropologist, “imagination has broken out of the special expressive space of art, myth, and ritual and has now become a part of the quotidian mental work of ordinary people in many societies.” Appadurai focuses in particular on collective imagination, as a tool to create diasporic public spheres through which globalized and often deterritorialized citizens share the same social imaginary.

The collective, massive dimension of imagination-induced agency is what truly distinguishes migration nowadays from more ancient times: “the images, scripts, models and narratives that come through mass-mediation [...] make the difference between migration today and in the past.”

Apart from immigration, another issue tightly connected with imagination and relevant in today’s debate is immaterial labor, which itself concerns two other discussed topics: the precarious working conditions of the cognitariat and the myth of “creative cities”. Both themes are inextricably intertwined with the economic restructuring induced by post-Fordism and undertaken almost everywhere in the Western world.

3 Berardi, Franco, *The Image Dispositif*, p. 2 (originally part of a text published on rekombinant.org, now unretrievable on the site)

4 As I will better discuss later, both of these issues (emerging in different areas of the intellectual debate) also converge around the themes of globalization and urban planning.


6 Ibid. p. 5


8 A term coined by right-wing futurist Alvin Toffler (1983) and more recently recuperated by Italian philosophers like Franco “Bifo” Berardi (2001) and Antonio Negri (2007).
Paolo Virno, quoted by Michael Hardt and Antonio Negri\(^9\), connects the new immaterial working dynamics with the need for adaptation and “linguistic skills, producing various sorts of enunciations.” While the theorists of the multitude associate such creative process to a common production, though, Matteo Pasquinelli warns that, even if value creation is always collective, the political space of cognitive production is competitive. By defusing the false conviction that “information is non-rival\(^{10}\), typical of free culture movements, the author of *Animal Spirits* outlines the “immaterial civil war” as “the internal border of a broader immaterial class conflict.”\(^{11}\) But around which lines does this conflict happen? I will argue that, both on the level of value accumulation and on that of identity imagination, metadata is the weapon of this war.

I define *metadata* as the imaginary symbolic units shaping the globalized collective imagery, distributed through mass-media and used by individuals or groups to attach them to people or space. Metadata is iconic and discursive; it is stereotype, meme, clichè, pre-formatted expectation, identity template, a compromise. Metadata can be a commercial product, a name, a musical preference, a profession, an appeal, exclusivity. As opposed to the numerical data attached to consumers and citizens in capitalist society (bank accounts, passport numbers, etc), metadata is recognized by people, which is the reason it is both empowering in its creative potential and dangerous in its vulnerability to fads.

As seen in the thesis title, metadata is opposed to metaphysics, but not exactly like postmodernism is opposed to modernism. Metadata does not represent a direct correspondence between a significant and a signifier, but depending on use it can be a simulacrum\(^{12}\) or a dispositif\(^{13}\).
Metadata is channeled (transported, directed, targeted) through global flows of information and people, legitimated by patents and regulations, national and international funding, laws, and conventions. I define infrastructure as the sum of all the technological supports, legal codes, and state funding that enable the production, distribution, and sharing of metadata. Infrastructure is the sustaining principle allowing flow, including both the informational protocols described by Alexander Galloway in his book *Protocol* and the set of laws, regulations, and institutional backing required to enable global flows of finance and people, most famously theorized by Manuel Castells in *The Informational City*\(^\text{14}\).

Infrastructure can be national or international, but it is usually and significantly publicly-funded and institutionally-run. It manages labor dynamics and outlines urban planning, designing structures and patterns to be filled by actors (individuals, companies, or organizations) with metadata. It is not only highways and transportation channels, but also university networks, which shape knowledge around pre-defined grids dictated by public funding.

Infrastructure's most important feature is the enabling of flow, which is its priority. One of its main functions is to provide standards, because flow - and flow control - are important to it. It recognizes metadata, and thrives on it. For this reason parcellization of content is crucial, and metadata is as effective as it is discrete and spread. Clean-cut metadata can spread faster, and spread out metadata becomes an accepted standard.

As studied by Saskia Sassen, infrastructure includes new strategic geographies for minorities to build a ground up agency through metadata. The scholar writes: “Groups who still face various exclusions from full participation in public life have multiplied their self-definitions – by race, ethnicity, religion, sex, sexual orientation, and other ‘identities’. This is especially so at the level of practices and high-visibility claim-making.”\(^\text{15}\) But while minorities and immigrants are allowed unprecedented desires and imagined lives through infrastructure, this, according to Pasquinelli, extracts such libidinal surplus to channel it and invest it in the infrastructure itself\(^\text{16}\).


For what concerns urban spacing, the infrastructure works as an urban growth machine which, as described by David Harvey, is all about “the orchestration of investment process dynamics and the provision of key public investments at the right place and time to promote success in inter-urban and inter-regional competition.” This happens by “constructing patterns of local investments not only in physical infrastructures but also in social (hospitals, education, culture, living quality, etc) – aim is to create sufficient synergy within the urbanization process for monopoly rents to be created and realized by both private interests and state powers.” It is through this public-private synergy that infrastructure actualizes into interface.

In order to adapt to a more versatile conceptual use, I deploy this term as an hybrid between the notion used in computer science (“The point of interaction or communication between a computer and any other entity, such as a printer or human operator”) and the one used in chemistry (“The area where two immiscible phases of a dispersion come into contact”).

Interface can be seen as a middle layer between infrastructure and metadata, an actualization of the former intersecting with the latter. It is the visible part of infrastructure, or the sum of the possible metadata choices actors/individuals can make.

If infrastructure is public, interface is a synergy of public and private. If infrastructure is zoning laws, interface is real-estate. If infrastructure is capitalism, interface is the market. The former is virtual and potential, the manifestation of an environment for possibility, the latter is the aforementioned environment, populated and actualized by metadata. I will conceptually describe such a process better in the next chapter, for now I will briefly clarify the differences between the two concepts.

Just as infrastructure enables flow, interface enables choice. Just like flow, choice is important and mandatory, but different types of metadata can allow different levels of agency, both in relation to infrastructure and to interface itself. By agency I mean the socially


18 Ibidem.


constituted capacity of an agent to act\textsuperscript{21}, that is making independent creative choices inside of a specific environment.

To make the example of a building, infrastructure would be the laws allowing it to be built in the first place, interface the real-estate, market options, and budget limits putting further boundaries on its construction, and metadata would be the shape and appearance of the building itself, as selected out of all the possible options by the actor/architect and perceived with all its stereotypical implications.

In the globalized and post-Fordist world we live in, national and international authorities are increasingly willing to collaborate with private actors to create productive interfaces. Harvey mentions the emerging urban entrepreneurialism as a mix of state powers, organizations, and private interests forming coalitions to promote or manage urban-regional development \textsuperscript{22}, while Bas van Heur points out how states themselves encourage actors to look for resources in other directions to pursue common objectives, and identifies such hybrid forms of economic coordination as one of the very reasons for the fall of Fordism\textsuperscript{23}. As for the media, according to Pasquinelli, corporations have created a vertical system filled with horizontally-generated content provided by their users' animal desires\textsuperscript{24}. It is important to point out that while infrastructure is more rigid and can be altered only by complex and large scale political action, interface can be subject to emotional perturbations.

The politics and the aesthetics of the interfaces I mentioned are crucial in understanding the dynamics of imagining identities in the contemporary world. As global informational citizens, perhaps our most urgent duty is that of a conscious and continuous selection. I will explore the implications of this process, trying to explain how metadata is selected and channeled, by analyzing certain figures in popular culture and their relationship with their categorical attributes.


\textsuperscript{22} Harvey, David, \textit{The Art of Rent: Globalization, Monopoly and the Commodification of Culture} (retrieved at http://www.16beavergroup.org/mtarchive/archives/001966.php)

\textsuperscript{23} Van Heur, Bas, \textit{Creative Networks and the City. Towards a Cultural Political Economy of Aesthetic Production}, Bielefeld: Transcript, 2010. p. 74-75

Geography and Figures

Before proceeding to a deeper conceptualization of the phenomena outlined above and to the development of the examples I have chosen to analyze, I will give a short overview of the reasons behind my choices.

The United States of America have often been an exemplary geographical pivot of many reflections on both globalization and postmodernism: on one hand for their political influence, corporate abundance, and their importance in the creation of information technology, on the other for their prominence as an imaginary landscape of opportunities, an actual territory of projected dreams.

From Robert Venturi (1972) to Manuel Castells (1989), from Mike Davis (2001) to Richard Florida (2002), we can see how the spatial organization of the United States has been capable of creating imaginative needs and stimuli, as well as boundaries. As pointed out by Arjun Appadurai\textsuperscript{25}, the States are a unique example of a territorially defined nation state which has, at the same time, the status of an ideal ground for diasporic diversity.

The examples considered in this work will focus mainly on North American culture and imaginary, both for the reasons explained above and because of a personal interest in the fields analyzed, which I believe are appropriate in describing some of the crucial dynamics in identity choice and flow.

In the first chapter I will explain the conceptual and spatial implications of infrastructure and interface, highlighting their recursive nature through the analysis of urban simulacra, and I will also give a more detailed definition of metadata. In the second, I will focus on four particular examples of metadata configurations. These configurations will be exemplified as figures, arbitrarily chosen to clarify four aspects of metadata and four relative issues. Each of those figures is not intended as a dogmatic definition of specific actors, but as a trend, a limit-case to which an average individual might tend. For simplicity I will discuss each figure.

independently from the others, even though there could be forms of hybridity between one and another.

The figures can be organized in two groups, depending on agency. The first group consists of the Nerd and the Hipster, who are allowed to interact with the infrastructure and the interface respectively. The former takes advantage of what I call structural metadata, while the second relies more on textural metadata.

The Hipster is a figure that can move through all urban styles with ease, is able to see patterns in commercial, aesthetic, cultural, and social dynamics. His tight relation with the "cool" makes him able to interact with a shared and globalized taste, urban and channeled by the Internet. For this reason his agency is mostly interface-related, even though, as an important agent of gentrification, he can also relate to infrastructure in a less direct manner. I call the metadata he makes use of "textural" because it is quite visible and related to his lifestyle.

If the Hipster wears his metadata in the shape of clothing style, cultural taste, or even professions - but in that case personal orientation and hobbies might be more important than institutional education - the Nerd is a highly-specialized and well-educated professional, whose agency is less aesthetic and effective in more institutional environments - typically, corporations and the academia. His metadata is structural because his attributes are read and evaluated in areas which can virtually affect infrastructure itself, such as technology, public funding or financial flows.

The two remaining figures are very different from each other, but they both lack the level of agency of the previous two: the Comedian and the Gangster, representing body metadata and metadata of scale, respectively. These two types of metadata are connected due to their contingency and site-specificity, which underlines the grounding of metadata in actual social and urban configurations, and also as "metadata beyond choice".

Body metadata consists is all bodily features that can carry a cultural or stereotypical backdrop. In my analysis of its implications, I will consider the ethnic kind in particular, because it is the most vulnerable to cultural bias and is at the center of debates on political correctness and several other social issues. For this reason, I chose to use the figure of the Comedian to exemplify different uses, more or less constructive, of this type of metadata. As an actor in show business, who both spreads and challenges certain ideas and stereotypes,
he is a good example of identity building, since his stage persona is a very explicit projected identity.

Metadata of scale is the most complicated. It is is a metadata of locality, but one that can shift its scope depending on context, from belonging to a broad national identity to stretching it down to a housing block. Scale is constructed from the top down, but it can also be claimed as a turf. The Gangster, whom I associate to this type of metadata, might occasionally claim to belong to the West Coast, the city of Los Angeles, Piru Street, or again a specific set, depending on the type of informal alliance he needs to plug into.

Apart from the elastic nature of metadata of scale, another of its characteristics is its transitivity. An individual is attached to a location, that is in its turn attached to a certain idea fluctuating in the collective imagery. The mark of place can be chosen or imposed, depending on context, but the specific case of the Gangster is particularly interesting for the mythization of certain localities and the combination of a fascination for place with that for symbols, such as colors and lifestyle. This figure is thus essential in showing the way the U.S. gang imagery can be globalized through pop culture and deportations - to Central America and beyond - bringing the same colors, signs, music and ways across borders.

Gangsters are highly detailed with metadata, but even if their attributes might look textural, their grounding in locality creates other dynamics and frictions. Also, the networks they create have a far more structural agency than the Stand-up Comedian, who is in turn more related to identity building and choice.

These four figures are admittedly a partial and arbitrary sample and, as I have explained before, have to be taken as limit examples. Nevertheless, I believe they are good in terms of showing the specificity of metadata types and the way they allow different levels of agency.