The topic of agency in cities brings up a fundamental question that urban thinkers have been dealing with for a long time: to what extent does the physical form of the city influence the way people behave? How exactly, in other words, do urban forms act in themselves as agents of urbanity? We know that the relationship between people and their physical environments is not purely mechanical and could never be reduced to a simple functionalist explanation. A change in a city square’s furniture, for example, will not deeply affect the way its users experience it. On the other hand, space is never neutral, and the discussion on “agents” as systems that are active, distinguished from their environment, and acting according to a predefined set of goals (Barandiaran, Di Paolo, & Rohde, 2009) opens up the very possibility that urban forms might be considered agents themselves. Barandiaran & al. raised this issue when they asked if a niche could be regarded as an agent (Ibid, p.10). Although it is not a living system per se, it is the product of living agents (a colony of beavers, for example), and its capacity to provide its inhabitants the comfort and protection required to sustain the existence of the system (the colony itself) is the measure of its success. Urban forms act in a similar way in regards to urbanity. Created by numerous groups of agents following different sets of goals, visions and ideologies, they suggest a certain use that, even when faced with the possibility of normative rejection, makes them agents.
of change in the way people use and understand the city. The form of public spaces, in that sense, does impose certain barriers and openings that, for better or worse, affects the “life between buildings” as Jan Gehl (1987) would have put it.

But knowing how a city is built is not enough from a sociological standpoint; the next question that must be addressed is why it was built that way. One way to address this issue is to look at urban forms as reflectors of the deep tendencies that mark the evolution of society. One of these deep factors is technological change. Today’s digital revolution, the topic of this essay, is arguably the most important paradigmatic change for cities since the rise of the individual car in the mid-twentieth century. While it would be a mistake to suggest here that technological innovations are the definitive drivers in the progress of society – a stance described by Raymond Williams (1974) as “technological determinism” – or to stipulate that society creates inevitable conditions for technological advancement (social determinism), a more nuanced approach (technological enablement) would nevertheless suggest that technology enables both intended and unexpected applications to appear and to change the course of social history. In that regard, the progressive rise of “digital culture” in the late stages of the twentieth century might not only lead, as it did already, to certain unexpected usages in different fields such as urban design; it could also influence, at its very core, the way we conceive cities and public space today.

The digital revolution is not to be understood as a mere technical advancement, a simple rewiring that is taking place under the hood without our noticing the difference; it is also a cultural revolution. It was defined as the advent of a new paradigm where individuals and communities, using digital tools, have become connected in an unprecedented fashion, thus becoming, simultaneously, spectators and producers of culture (Doueihi, 2008). According to Lev Manovich, the digital media revolution had unprecedented consequences far exceeding the invention of printing or photography because it “[…] affects all stages of communication (acquisition, storage, manipulation, distribution) and it effects all types of media – texts, images, moving images, sound, and spatial construction” (Manovich, 2001, p. 19). This technical revolution was of such importance that Manuel Castells described the rise, in the second half of the twentieth century, of a digital age society defined by “[…] new forms of spatial arrangements” (Castells, 1989, p. 24). With so much accent placed on redefining ‘space’, it is rather unsurprising that the effects of digital media on urban forms were quickly addressed in the fields of architecture, urban planning and urban design. The novel idea of “interactivity” with the environment, for example, quickly led urban thinkers, as early as in the mid-nineties in the case of William Mitchell’s City of Bits (1995), to the conclusion that a technological transfer from the digital world to urbanism was inevitable. And they were right. Now that electronic devices are capable of interacting with users, it is possible for city dwellers to define – or redefine – their environment only by circulating within it. In the long run, it is believed that this interactivity will make cities more efficient and “smarter”, for the lack of a less worn-out term. But interactivity is perhaps the most superficial layer of digital culture’s impact on urban environments. The major event that characterized the digital revolution thus far has been the displacement of a big part of our existence into the virtual realm. This shift, in turn, led to the doubling of the city’s physical space with a new kind of dematerialized ‘space’ where much of our social lives now takes place. It is this coexistence and coevolution of cyberspace and urban space that has the potential to deeply affect the way we build and experience cities. But in what way?

The main hypothesis presented here is that a phenomenon of cultural transfer, gone somewhat unnoticed so far, has started to happen between the values implicitly supporting the omniscient “digital culture,” and a conception of urban space driving present-day planners when they design new networking public spaces in cities. What is shared here across disciplinary lines, I will argue, is a common reliance on the concept of “connectivity,” the pre-existing condition of any online activity, and a metaphor used in the offline field of urban planning as the golden rule enabling new public spaces to function as connected vessels. We will begin this essay by briefly defining the main concepts (cyberspace, digital culture and connectivity) used to explore the intricate relations between digital media and urban planning, with a specific focus on urban design. This will be followed by the presentation of the three main scenarios proposed in urban theory as to what might become of urban forms in our digital future. We will then expand on the third scenario by looking at exemplary urban design projects in...
Montreal, Canada, which display certain spatial characteristics denoting the deep influence of digital culture on their conception.

**Cyberspace, digital culture and connectivity**

When considering the effect of digital media on urban space, it is difficult to overlook a concept such as ‘cyberspace’ that seems to offer, at first sight, a turnkey solution to explain how two very different, but nevertheless comparable, types of ‘spaces’ coexist. While the term is used rhetorically to talk about the vast field in which the sum of activity mediated by computers takes place (including the Internet and the World wide web), it appears that the concept is problematic in scientific terms. As demonstrated by Lance Strate (1999), the main difficulty with “cyberspace” lies in the fact that, at the ontological level, it is not a “space” in the classical sense of the word. Rather, it is an imaginary conception imported from science fiction in the 1980s to map out the abstract experience of exchanging numerical data on a large scale through primitive versions of the Internet. But the fact that ‘cyberspace’ has little to do with the three dimensional empty container described by Descartes is, according to Strate, not such an issue because this classical conception of space has been mostly abandoned in the wake of Einstein’s theory of relativity. We know now that space and time are relative to each other, and that space is “[…] made up of objective events which we may subjectively experience” (Ibid, p. 389). “Cyberspace,” in that sense, is consistent with current scientific interpretations of space-time in that it views this communicative environment not as an empty void, but as the product of dynamic interactions over time between humans and machines. If “cyberspace” has many diverse and often conflicting dimensions, we can generally define it as this collective “experience of space” (Ibid, p. 383) that has been otherwise conceptualized using urbanistic metaphors (information superhighway, cyberia, technopolis, etc.).

If cyberspace is not a space in its traditional understanding, do cyberspace and urban space coincide in any way, and could the experience of one inform the other? If urban space remains in part a physical container, it has to be mentioned that its scientific interpretation has also evolved in the twentieth century, as space is now believed to be mainly produced by interactions between people (Lefebvre, 1974). If we conceive both types of space in terms of subjective experiences, it becomes possible to imagine a similar experience where one enters a place with certain expectations, and circulates through it following implicit rules and codes imposed by “[…] an information architecture […] that has cultural implications” (Miller, 2011, p. 21). But while urban forms are clearly designed following a set of values, cyberspace is constituted by interactions between people who negotiate – rather than impose – different codes of civility. Cyberspace is a tool, and like every tool, it can be used in many ways, good or bad. Another way to look at this problem, then, would be to consider, on another lever, how digital culture came to define the proper usages of cyberspace, and how the core values defended by its protagonists could be transferred to city building.

While there is arguably “[…] no definitive model of ‘digital culture’” (Hand, 2008, p. 1) but rather different digital cultures that reproduce the diversity found in society, there seems to be a general consensus among researchers about the fact that a certain, optimistic vision on digital technologies is still present and structuring today, even if a certain disenchantment now prevails about the transformative power of the Internet on society. For Christian Fuchs, the term “cooperative cyberculture” serves to define this original vision which “[…] is based on the idea of unity in diversity – a dialectical interconnection of the One and the Many” (Fuchs, 2008, p. 300). As pointed out by Fred Turner in From Counterculture to Cyberculture (2008), personal computers were first viewed in the 1970s as tools for personal liberation. Later, the advent of the Internet with its non-hierarchical structure was believed to fulfill this original promise formulated within the counterculture movement of the West coast. This culture based on values of openness and sharing was soon opposed to its arch nemesis, “competitive cyberculture”, a vision promoted by the corporate cyberclass that seeks to “[…] erect borders, construct classes, and separate people” (Fuchs, 2008, p. 300). This struggle, in a sense, is all about defining borders and limits on a potentially limitless digital terrain that permits “[…] flexible associations in various networks” (Ibid, p. 306); all of this because digital media, as opposed to analogue media, is alterable, programmable, compressible and transferable (Manovich, 2001).

For Martin Hand (2008), three main topics structure the debates on digital culture: access (which leads to questions about open data and numeric competence,
for example), interactivity (the “media’s potentiality to let the user exert an influence on the context or form of the mediated communication” (Jensen cited in Miller, 2011, p. 16), and authenticity (whether the originality of a cultural production has any meaning when it’s widely exchanged and transformed). If there is one value that transcends all of these debates and helps us to define the influence of digital culture on society in general, it is arguably “connectivity.” Defined by Vincent Miller (2011, p. 27) as the reigning principle in the architecture of the Internet, this “quality, state or capability of being connective or connected – the ability to connect or communicate with another computer”, according to the Merriam-Webster, is constantly evoked as this underlying condition that permits digital culture to blossom.

Connectivity is an important anchor in this discussion because the concept is also used in the field of urban planning, and has been even more so in recent times to describe the changing nature of urban space in networked society (Castells, 2010). But “connectivity” can mean many different things in this literature: some will define it as the principal quality of powerful cities in the global context (Allen, 2010), or as the added value digital technology brings to urban life (Stonor, 2014), or as a “sense of connection” that characterize today’s urban experience (Lemos, 2003, p. 125). In regards to urban design more specifically, a consensus seems to have emerged on the idea that connectivity should be regarded as the guiding principle to intervene in public spaces: “The urban record shows that the most vibrant, most culturally rich and economically productive places are also the most connected: continuously interlinked by streets, paths, publics” (Stonor, 2014). If this general principle has been promoted in similar terms by urban thinkers like Jane Jacobs (1961) long before the emergence of cyberspace, we might wonder if its capacity to reinforce digital culture has reinforced it? Is it possible that contemporary urban space is designed to further the possibilities of free circulation, multiple entry points, and interactivity between users in shared spaces? And if so, is this convergence of values between digital culture and urban design just a matter of luck? This question will be discussed shortly, but before, we would like to consider alternative scenarios presented in the literature as to how digital culture might transform urban forms in the future.

From urban space to cyberspace, and vice versa

The first hypothesis on the effect of digital culture on urban forms could be dubbed the “status quo” scenario. It was primarily defended by French architect and urban planner Serge Wachter in a book called La ville interactive (2010). This scenario, although somewhat conservative, is nonetheless very faithful to the current developmental state of cities, a full decade after most inhabitants of the developed world entered the digital paradigm. Wachter’s argument, based on a series of relevant statistics, is that the digital revolution changes the way people live, but not the way they use space. Therefore, the city of the future will look exactly like today, but its inhabitants will be linked ever so strongly together through elusive Wi-Fi networks. In other words, Wachter posits that the physical reality of urban space and the virtual reality of cyberspace haven’t yet started evolving hand in hand like it is sometimes suggested. The proof of this disjunction between urban space and cyberspace lies in the fact that, for instance, the presence and quality of a Wi-Fi network is a factor that comes way behind land costs, labour cost and other hardware factors in explaining current business location (Wachter, 2010, p.18). Furthermore, any type of urban formation that appeared in the last two decades and was quickly bound to the changing nature of the economy in a digital world, like the Silicon Valley for instance, either was years, even decades in the making, or had risen because of other factors like globalization.

The second hypothesis – dubbed here the “generic city” scenario – starts with a similar premise by saying that current and historic cityscapes are adapting without problem to the emergence of digital technology. Today’s urbanites walk in the streets, eat in restaurants and relax in parks, a hand held smartphone being the only added feature. However, when looking more closely at certain areas of activity, some will suggest that the dematerialization of many of our daily tasks might eventually have a major impact on the way cities are built. That tendency expresses itself clearly within work environments. Before the rise of digital technologies, there were specific types of buildings, factories or offices for every occupation: a newspaper, for instance, needed a pressroom, a printing room, and all sorts of equipment to get the paper out on the street every day. With the rise of laptop computers, smart phones and Wi-Fi networks, and the subsequent rise of telecommuting, the spaces where most people
work and play in post-industrial cities don’t need a particular spatial configuration anymore, except maybe being rather quiet and serving “good” coffee. Hence this explains the worldwide success of Starbucks coffee shops in the last decade and a half: they offer a predictable working environment for their cosmopolitan clientele. But what Starbucks and others really responded to was a desire for spaces that were completely devoid of local specificities, blank canvases on which to paint our virtual lives. Since 2012, a mobile application called Breather allows anyone with a smartphone to rent a quiet business space for a few hours in many large North American cities. The fact that users don’t have to meet with anyone at their designated office space – their phones temporarily acts as a key – and the consistency of the space’s features from one city to the next – desk, couch, yoga mat, white walls and free Wi-Fi – tells the story of a trans-urban culture that, increasingly, is only superficially entrenched in specific urban realities. For architect Bernard Tschumi, this situation will have a profound and possibly disastrous effect on cityscapes: it will make them more and more generic in the future (Bürklin & Peterek, 2008, p.68). Pretty soon, according to Tschumi, people will be unable to read the spatial-symbolic forms of traditional and modern architectural types. A bank, for instance, with its monumental facade, humbling itinerary to the counter and intimidating vault as a final destination will not be properly understood as a representation of access to capital in society simply because all of our banking transactions will be (or already are) made online. Eventually, this trend will extend to all sorts of urban forms; everything will be designed as a transparent box that supports any social content, not unlike the Apple stores built in major cities across the world. In the end, when urban life will have completely migrated to cyberspace, what we might be left with is the “generic city” described by Rem Koolhaas (Office for Metropolitan Architecture, Koolhaas, & Mau, 1995), a world covered with urban spaces that all look and feel alike.

The third and final scenario presented here implies that digital culture already has a direct and profound impact on city building, hence its name, the “cybercity” scenario. There are many ways to understand this situation. One of them is to consider, like Dan Hill (2008) in an essay called The Street as Platform, that the sum of technological devices that we interact with on any given day in the public domain is enough to conclude that digital culture has a definitive impact on the way city building is evolving. Eventually, this interactive experience will become the base on which a truly “Smart” city – with the capacity to adapt, in real time, to every situation – shall be built. But what is somewhat problematic with Smart cities is the tendency to reduce digital technology to its capacity to control space. This might lead to what Adam Greenfield describes in his pamphlet Against the Smart City (2013) as a dystopian vision of the city, one that is devoid of free spaces outside the reach of surveillance cameras and GPS localization devices. This “technicist” vision of the “cybercity” is contested by many researchers who, in defending a broader understanding of technology, emphasize the ways in which such technologies serve urban development. However, I will argue here that these researchers tend to view network infrastructures and urban forms as separate entities. Their prevailing interest in issues like digital democracy, while compelling, does little to further the conversation about the transformation of urban forms themselves (Lemos, 2003). As a general rule, this third scenario supposes a technological transfer between the digital world and urban planning, and tries to understand how digital tools are being adapted to fulfill distinct but similar tasks in city building. While this transfer is undeniable, we would like to explore another hypothesis that sees a cultural transfer also taking place from digital culture to urbanism. Arguably, the form of the city is bound to change when the coming generations of urban designers, planners, architects and users start to build cities that are influenced, at the metaphorical level, by their experience of cyberspace. Prior technological revolutions have shown that similar patterns of duplication have arisen between architecture, planning and other spheres of cultural production. Reyner Banham (1960), for instance, argued that the machine age provided a context through which modern aesthetics and functional planning could and must be understood. Similarly, we would like to think that our constant experience of ubiquity and connectivity in cyberspace will slowly but surely transform the way we think about the relationship between urban forms like buildings, public spaces, transport infrastructures and the other components that make up a city. Some researchers have come up with similar propositions, like Marcel Hénaff (2008) who argues that today’s metropolitan areas are “network-like”, or Rosane Araujo (2014) who sees urbanism morphing into what she calls
“urbanisme” – the joint planning of urban space and virtual infrastructure – but these theoretical speculations are rarely based on any evidence. Obviously, this cultural transfer between digital culture and urban space is not the easiest one to spot, strip down to its core components and document as such, but I will argue here that certain urban design projects have started to show the nuts and bolts of a conception of space derived from digital culture.

The shape of urban design to come

“...For a younger generation growing up in a globally connected world where every moment of their lives are eagerly posted and shared with the world, freedom is not bound up in self-contained autonomy and exclusion, but rather, in enjoying access to others and inclusion in a global virtual public square” (Rifkin, 2014, p. 76)

As stated before, connectivity is arguably the core value of digital culture. It holds the promise that everything is linked up inside the network, and thus, instantly and randomly accessible anywhere, without any institutional barrier or interference blocking access to it. Seeing the level of agitation and anxiety created by a malfunctioning Wi-Fi network might be a superficial – but nevertheless revealing – symptom of our new social expectations regarding connectivity. Cyberspace, at least from the point of view of cooperative cyberculture (Fuchs, 2008), needs to be transparent and connected, and current urban planners seem to think of cities in a similar way. Another sub-feature of cyberspace that we will mention here expands on the idea of connectivity, and states that a satisfying on-line experience, especially on the world wide web⁶, lets you glide seamlessly from one “content” (a substantial source of information or entertainment,) to the next (Doueihi, 2008). We mention this focus on “content” because it is perhaps the clearest metaphor to understand how digital culture might increasingly impact urban design. Looking at contemporary urban plans, it is indeed tempting to think that the combination of these two ideas – connecting components of the city together, and highlighting paths that lead to interesting and distinctive features in the network (like monuments, heritage sites, or any poles of activity) is one of their main features. Not that the city of yesterday was only made of broken links (after all, urban planning is the art of tying the city together in a cohesive manner), but it seems like the act of connecting urban spaces transcends the modern notion of functional separation (Le Corbusier, 1971), and the postmodern notion of “collage” (Rowe & Koetter, 1978) where the idea was to juxtapose city components that weren’t necessarily linked together, or barely so through formal entry points. This change is not just rhetorical, although the discourse used to describe current planning is invaded by concepts and notions borrowed from the digital vocabulary. It is worth adding that the graphical presentation of contemporary urban designs typically highlights movement over immobility by featuring arrows and lines crossing a blank (and usually black) canvas.

But above and beyond these discursive and visual trends, a new type of physical component seems to be appearing in those urban plans. Sometimes drawn as transversal lines cutting open spaces, or as intersecting trajectory that stitch together existing urban fabric, they will always act as spatial devices that connect the dots together in the city. We will call these components “urban connectors”⁷ in reference to Gilles Deleuze and Félix Guattari’s “principle of connection”. That principle is one of the main features of the “rhizome” (1976), a form of non-hierarchical organization – and a philosophical concept – often compared to the structure of the Internet (Buchanan, 2007). For Deleuze and Guattari, this principle states that inside the rhizome, “[…] the connections are random in relation to each other and any point can be connected to any other” (Cited in Miller, 2011, p. 26). Urban connectors, in that sense, are metaphors of the connectors (websites, social media, forums, etc.) that establish points of contact in cyberspace. They invite people to engage in serendipitous encounters, to browse the cityscape in an unconventional fashion, and to reconnect points of interest that were previously disjointed. Urban connectors are the physical counterparts of online connectivity, the unexpected applications not of digital technology itself, but of the values that entail its usage.

These urban connectors can take on very different forms, and can even be somewhat intangible, but they usually belong in two vast categories. The first category is made of old urban typologies like bridges, bike trails, or any existing infrastructure that are enhanced and refurbished to serve new connecting functions. By adding a visual code such as a cohesive lighting plan, they become part of a network of routes and paths that binds together areas of urban intervention and gives them new meaning. Perhaps the most famous example of this kind of reused urban connector is New York’s High Line, an

http://contour.epfl.ch/
elevated section of a disused railroad line that was turned into a linear park tying together disjointed parts of the Lower West Side of Manhattan. The second category of urban connectors never form an entirely new typology, but their rebranding suggests some level of novelty in their form and use: they are called green corridors, art routes, thematic light plans, and so on. They may offer a different take on modular street furniture, landscape design and urban projections, or make use of interactive devices that react to passers-by with sounds and LED lights, but their main task is to make sure that poles of interest in the environment are highlighted and accessed without any kind of cognitive disruption in the user’s experience of the said space.

It is understood here that these urban adaptations of online experiences are truncated and partial, mainly because movement in cyberspace is not concrete, but virtual, even if it rests on a physical structure made of computers, wires and Wi-Fi networks (Strate, 1999, p. 391). The user, standing in one physical place at a specific time, is experiencing ubiquity as he jumps from content to content on the web\textsuperscript{10}. Cities, on the other hand, are meant to be crossed one block at the time, thus meaning that “there” is not experienced cognitively at the same time as “here” (unless it is reproduced figuratively). The urban experience is better understood as a sequence of legible events (Lynch, 1970). Still, the parallel here is that contemporary planning tends to reinforce the connectivity of the city by enhancing the internal coherence of this sequence. It creates a code with which we can read and access the city. This is why it is proposed here that these emerging urban forms have founding principles that are embedded in digital culture.

**Connecting the dots in Montreal**

In order to illustrate this point, some aspects of recent planning projects in Montreal will now be analyzed, starting with **Quartier des spectacles**, the city’s most important example of creative urbanism in the last decade. Montreal may not be viewed as a major hub in the development of digital culture, but it is a city bustling with young people working in the field of digital technology, and particularly in the video game cluster (Grandam, Cohendet, & Simon, 2013). Its low rents compared to other major cities in Canada have also made it a destination for many North American artists, especially in the music scene. It is also the only Canadian city to be officially designated as a UNESCO City of Design. In 2014, the City of Montreal launched a Smart and Digital City Office with the mandate to create a “[…] framework for the kind of transformational projects that affect every aspect of life here, whether they involve government, infrastructure, public services or social issues” (Ville de Montréal, 2016). While similar initiatives may be found in many cities, Montreal remains a relevant example of a city where the all-encompassing digital culture is taking root recently, and should also be viewed as an interesting laboratory to study how urban design has been used in recent years to enhance the connectivity of the city.

The **Quartier des spectacles** is the result of a public/private partnership to consolidate some of the existing infrastructure dedicated to art, culture and festivals in a specific district in downtown Montreal (Harel, Lussier, & Thibert, 2015). Since its creation in 2002, the goal has been to make it a cohesive thematic area by creating hybrid public spaces built for outdoor concerts and more, and by adding referential elements like street furniture, art installations, new cultural institutions, and an iconic system of signage that strengthens the sector’s character. What is interesting about this planning initiative is the fact that its planners, guided by an extensive consultation process, were dealing with a vast perimeter of one square kilometer with three major poles: the Place des arts in the West, St-Laurent Boulevard in the middle (the historical entry point to the city’s immigrants and the imaginary line that separates the Anglophone and Francophone sides of the city), and **Quartier latin** in the East, a nerve centre of academic life during the day, nightlife after sunset, and a gathering point for social protest around **Place Émilie Gamelin**. Between these poles, what we find is a very unstructured urban fabric, made out of a lot of vacant land and unoccupied buildings, fractured by all sorts of social problems and crime, and deprived of the very quality that would make this area a liveable and vibrant destination for arts and culture.

The first phase of planning of the **Quartier des spectacles**, an initiative present in 2002 by the Québec Association for the Recording, Concert and Video Industries, followed the guidelines outlined in a targeted planning project that was adopted by the City of Montreal (2007). This first phase was centered around **Place des Arts**, an architectural complex built in the 60’s that houses several concert halls, theatres, and cultural facilities. In a sense, it was
perhaps the simplest phase of the planning process because it was mainly monofunctional (dedicated to culture), and was an attempt to ensure the long-term viability of the festival infrastructures. Some of the elements that structure the surroundings of Place des arts could be considered urban connectors, like Promenade des artistes and Place des spectacles, a new kind of public square described by Eleonora Diamanti (2014) as a “place-conteneur”, that is, a surface devoid of memory and open to any content. But at the same time, no major obstacle in the public domain prevented the area from being fully knit around Place des arts, which is why in this case, urban connectors are not performing to the full extent of their potential.

In 2013, a second planning phase, focusing on pole Quartier Latin, presented planners with a much more complex task (Ville de Montréal, 2013). The three poles forming the Quartier des spectacles now had to be connected in a way that would give the eastern sector a distinctive character, for it to become, for the most part, a residential neighbourhood. In short, the area needed to be opened up, but also densified with housing, which means that some of it had to be set apart from the network of cultural activities. To add to the complexity of the task, the planners had to deal with the largest public housing project in Quebec, Habitations Jeanne-Mance, which, with its eighteen hundred tenants, sits right at the heart of Quartier des spectacles. According to the 2013 plan, the residential complex is safe for now because it enhances the social diversity of the area. However, an implicit pressure to open up its grounds – in order to reconnect the different poles of Quartier des spectacles – has led corporation Jeanne-Mance to embellish its alleys, public spaces and park with public art and cultural animation, an initiative that has turned out to be a success so far, because it facilitates the social integration of its underprivileged dwellers in the neighbourhood (Corporation d’habitation Jeanne-Mance, 2010). But these “connecting” interventions are nothing compared to what was proposed during a design competition held in 2012 to reimagine Quartier latin (Arrondissement Ville-Marie, 2012). Analyzing the twenty-five entries to this contest, we find that the case of Habitations Jeanne-Mance, which was not the competition’s main focus, was still addressed in thirteen submissions. Out of the thirteen, four proposed that the public domain of the housing complex should be made more easily accessible by creating attractive entry points; five went further by proposing some level of activity in the residential sector along “art loops” or an “arts promenade”; while four other propositions, in the name of a better networking among the Quartier des spectacles poles, suggested to keep only the towers of the modern complex, or gain some ground on its land with new condominium complexes, or even to wipe the habitations off the map completely and transform the site into a park! Of course, other issues were dealt with in these entries, like the creation of a public market at Place Émilie Gamelin, roof top gardens, and a better distribution of traffic, but most of the concepts, fifteen out of twenty-five to be precise, made explicit mention of the need to “connect” the important axes of the neighbourhood, or to improve the relationship with the underground network of tunnels that spread from the Berri-UQAM metro station, and so on. One very original example of urban connector was found in the primed project of Groupe Leclerc, architecture + design. Their idea was to create a transitional space between the Place des arts pole and the Quartier latin pole by adding “lodges” over St-Laurent street. Interestingly, these condominiums would cantilever over the street and unite the experience of looking at the spectacle of urbanity on the street and being looked at as a sight in a spectacular landscape.

These are, of course, only a few examples of spaces that carry the essence of urban design in the age of informational society. The will to open up spaces with connectors is not only expressed in the context of official and public urban planning, although it is probably the best place to observe this phenomenon since the planners have greater agency on publicly-owned land. In a way, public urbanism synthesizes connecting practices of opposing natures found in participatory and private urbanism. If we look at the recent rise in participatory planning in North America, we find that many community initiatives try to make abandoned city land come alive with cultural activities and better accessibility. In Montreal, for example, many citizen organisations are currently trying to stitch together two vibrant neighbourhoods, Plateau Mont-Royal and Rosemont–La Petite-Patrie, that are separated by an enclosed railroad track bordered on both sides by interstitial space (Casemajor & Davis, 2014). Some of these groups’ actions, for example asking public powers to intervene and build rail crossings for bikes and pedestrians, or occupying a brownfield called...
“Champ des possibles” (Field of possibilities), could be regarded as acts of “urban connection.” These urban connectors belong mostly to the realm of the software rather than the hardware, and they express themselves mostly through inclusive social practices and ephemeral installations, but they share with their professionally planned counterparts at Quartier des spectacles the fundamental idea that urban spaces should be connected, appealing and accessible at all times.

Walking on software

Urban forms, as it was mentioned before, have the capacity to act as agents of urban living. Tracing back to the inspiration behind proposed reconfigurations of space is key to understanding how these changes might affect our behaviour in urban environments. My proposition was precisely to look at the current tendency to improve accessibility in cities through the ideological filter of digital culture. But this is by no means a definitive answer. After all, accessibility is also the consequence of a growing desire to pedestrianize cities, and these “connectors” might be conceived as nothing more than disguised walkways and bike paths. While pedestrianization may explain some aspects of the phenomenon we are trying to grasp, it would be inaccurate to think, firstly, that urban planning is only driven by functional requirements (and not ideology), and secondly, that digital culture has no influence whatsoever – or never will – on other spheres of cultural production like urban design. Adam Greenfield, along with Kevin Slavin, have similarly argued that “[…] ubiquitous and pervasive computing technologies […] couldn’t possibly not have a radically transformative effect on everything we understood as urbanism, on the physical form of the city and on metropolitan experience both” (Greenfield & Shepard, 2007, p.9).

How this transformation will take shape, however, is still a matter for debate.

Among different scenarios concerning the potential effect of digital culture on cities, we have argued here that a cultural transfer has started to change urban design. Emerging urban spaces seem to duplicate certain values nurtured by digital culture. This shift, described here through the identification of urban connectors, might usher in an era where cities will appear to be more familiar, safe, open and inclusive to residents and tourists who experience them from within newly created networks. But it could also herald an age of renewed exclusion for those parts of town that were de facto avoided by unaccompanied flâneurs, places that will experience the new burden of being alienated from the enclosed network of distinctive features that make up the image of a city.

Footnotes

1. As pointed out by Albert Lévy, « urban form » is a complex notion that is both polymorphic and polysemic. In this article, “urban form” mostly refers to Lévy’s sub-concept of “urban landscape”: “[…] urban space visually grasped in its three-dimensionality and its plastic materiality (texture, color, materials, styles, volume, size of buildings and public space)” (Lévy, 2005, p. 30).
2. Italics emphasis added by author.
3. Many early contributors to the definition of cyberspace, for instance, were “[…] associated with the field of architecture” (Strate, 1999, p. 388).
4. “sentiment de raccordement”.
5. https://breather.com/
6. William J. Mitchell noted in 1995 how electronic funds transfer networks and ATM machines had already rendered the traditional architecture of banks obsolete, and forswa future where every banking transactions would be made with a laptop computer: “By this point in the evolution of the digital era, we have almost forgotten the original banchi – the trestle tables at medieval fairs, where bankers and their clients met face-to-face to exchange promises” (Mitchell, 1995, p. 81)
7. The neologism “urbanism” refers to “orbis”, the latin word for cosmos. It designates a practice that would be broader than the planning of urban environments.
8. Internet is “[…] the single worldwide computer network that interconnects other computer networks, on which end-user services, such as World Wide Web sites or data archives, are located, enabling data and other information to be exchanged” (Dictionary.com).
9. The term “connector” have also been used in network theory to describe, in cities, “[…] individuals or bodies which have a bridging function”, like public transportation systems or “[…] interstitial places where different social groups converge (markets, cultural events, participatory procedures)” (Pflieger & Rozenblat, 2010, pp. 2726-2727). Although our definition partly coincides with this one, ours is limited to new forms of urban design, and do not extend to individuals.
10. This phenomenon is also known as “telepresence” : “The experience of presence in an environment by means of a communication medium” (Steuer, 1992, p. 77)

References


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