

## Natural Environments as Figure on the Ground of the City

Marco Adria  
University of Alberta  
marco.adria@ualberta.ca

*Today the entire human community is being translated into “auditory space,” or into that “field of simultaneous relations,” by electric broadcasting. It behooves the architect and town planner, above all, to know what this means. (McLuhan 1961, p. 52)*

### Understanding the City and Nature Through Metaphor

The media-rich cityscapes of North America have raised new questions about public space and private space. How can we create and sustain cultural and economic spaces? What new images can we use to understand the city and what it might become? I want to introduce an insight on these questions, which Marshall McLuhan expresses clearly and repeatedly and that has become a cliché. Nonetheless, it is an insight that can be used as a heuristic for examining the relationship between culture, nature, and technology. We must revisit it whenever we encounter a contradictory or paradoxical phenomenon in the cultural or natural worlds. It is that technology changes an environment immediately. As a consequence, media innovation drives social change over space and time in ways that we do not immediately comprehend. Significantly, we often misunderstand, ignore, or fail to see these changes.

His university studies in English literature gave McLuhan a deep sense of the power of deploying metaphor in communication. His system of ideas thus begins with a metaphor, which is that media are like *extensions* of the human senses. We use media to increase our reach and power. The camera is an extension of the eye, the shoe an extension of the foot. McLuhan used the metaphor of “numbness” to demonstrate the effects of these extensions. The implications of our relationship with technology are deep in our culture but often only vaguely visible. Even as we use technology to experience the world more intensely, we become more separated from it. Using another metaphor, McLuhan argues that new media can be imagined as “punctuations” in history, since a media innovation introduces these immediate, and apparently irreversible, cultural, social, and economic changes at a particular historical moment. An elision of media into the broader category of technology follows the practice of medium theorists such as Innis (1951), Marshall McLuhan (1964), and, more recently, Ronald Deibert (1997). The category of media for McLuhan includes both codes *and* channels. Similarly, the category of probes takes in metaphors, rockets, satellites, clichés, archetypes, jokes, and advertising slogans, collectively constituting what McLuhan scholar Josh Meyrowitz (1997) calls a “sense of global familiarity.”

McLuhan’s epistemology is characterized by a continual stretching and adaptation of taken-for-granted categories. This fluidity constitutes part of the utility of his work. It also helps to explain the bemusement expressed by critics. His heuristic method is to uncover or reveal the unseen. This heuristic is drawn from his conviction that the environment is largely invisible. As Douglas Coupland (2010) notes in his new biography, McLuhan’s religious experience helps to explain this preoccupation with the unseen. But the unseen is not only a characteristic of the divine. By environment, McLuhan refers to what sociologists call social *structure*. One way of

thinking about his perspective on and observations of the unseen is that McLuhan is a humanist making observations about sociology. He uses the language of metaphor to describe changing social structures. In McLuhan's work, metaphors lead to application and reapplication across all aspects of human culture and experience. Metaphors provide guidance for understanding McLuhan's work. We must enter into and use the language of the humanities and occasionally of the social sciences if we are to understand the full cultural scope of the city and its relationship with nature.

In this paper, following McLuhan's practice, the metaphors of the city as a technological composite and as an organism are compared, combined, and expanded. I argue that the relationship of natural spaces to technological spaces is compositional rather than organic. Rather than asking where natural spaces are and how large they are, we may ask how they adjoin technological spaces and their proportion to human scale. Whereas cities and human culture previously appeared as a figure on the ground of the natural world, television, satellites, and the Internet now create a reversal of figure and ground.<sup>1</sup> The form of the city is a hybrid, or *composite*, of living and non-living features on which we perceive the figure of the natural world.

The metaphor of nature as the figure on the ground of the city can lead to the recognition that natural environments have in fact vanished. McLuhan takes the metaphor of figure and ground from visual art. The figure is before and in front of the ground. McLuhan argues that perspective in visual arts supports the critical individual of the print era. In another biography, this one by Philip Marchand (1989), McLuhan describes how the metaphor of perspective first arrived in his consciousness:

Marshall later claimed that his earliest memory . . . was a view of the Peace River in Edmonton, seen from a streetcar on a bank overlooking the river. According to this memory he saw horses in the distance and was profoundly impressed that they appeared small enough to fit into his nursery. In view of McLuhan's later obsession with visual perspective as an invention of the print era, and his almost visceral rejection of that perspective . . . the memory is almost too pat. (p. 4)

Natural spaces are inherently valuable to us as natural beings. I will argue that natural spaces may be reimagined, if not reconstituted in their original "natural" form, by using the metaphor of the city as a composite. The composite form of the city becomes a ground on which we can understand what was a natural environment previously, but which is now a cliché.

### **City as Technological Composite**

**M**cLuhan has something to say about a wide range of human culture, behavior, and communication. His comments about urban spaces are the most expansive in their implications for understanding media. McLuhan gives special and sustained attention to the changes in our social world that accompanied the introduction of a new medium. His *City as Classroom* (1977), coauthored with his son Eric McLuhan, and Kathryn Hutchon, provides a rich guide to the methods by which the city could be understood. The book reveals the ways that learning and discovery were much more useful in the university and school classroom than older

---

<sup>1</sup> We observe another reversal of figure and ground in the continuing development of regional cultures and the bringing together of the local and the global, in a conflation that Robertson (1995) has called the "glocal." Glocalism is the character of the citizen's existence at once as a subject of the nation-state and as a subject of global media systems.

methods of teaching, which relied on “transmission” of information and ideas from teacher to learner. Engaging learners is now accepted wisdom in Canadian universities and schools, but McLuhan was a pioneer in arguing for how and why we should involve students deeply in their learning.

But McLuhan’s comments are not confined to urban spaces. He assesses change in all sorts of communities, including those in rural and remote areas of the world. In McLuhan’s view, for example, the launch of Sputnik in 1957 eliminates both the objective and subjective concepts of wilderness that were held previously. Applying his training in literature and his vast knowledge of the visual arts, he suggests that the globe is now a *figure* on the *ground* of the universe: “At the moment of Sputnik, the planet became a global theater in which there are no spectators but only actors” (1974, p. 48).

The city is a technological composite that we may examine by experience and reflective perception. The city’s forms emerge through the process of “patching” in technologies. Araujo (2008) describes the metaphor of the technological composite in morphological terms:

For McLuhan, the city is a technological composite that was created as a social organism, a mechanism of mutual feedback between human beings and the social machine. Coupling, feedback, and interdependence are terms that are linked to the second cybernetic revolution, which would be opposed to the first one, that of the mechanical servants. An analysis of the patterns of automation shows that perfecting the individual machine by making it automatic involves different forms of “feedback.” That means introducing an information loop or circuit where, before, there had merely been a one-way flow or a mechanical sequence. Feedback is the end of linearity that came into the Western world with the alphabet and the continuous forms of Euclidean space. Feedback or dialogue between the mechanism and its environment leads to a further weaving of individual machines into whole galaxies of such machines (McLuhan 1994: 354). This feedback and dialogue between the man-machine mechanism and its environment are necessary so that we can achieve the dimension that Flusser attributes to the city: a device of intersubjectivities. (p. 5)

The radical disjuncture that is described by both McLuhan and Flusser began with the advent of the telegraph. The telegraph removed the requirement for transportation of information; in doing so, it changed our conception of time.

With the advent of new communication technologies that allow information exchange and remote control, the distance between urban and rural agglutinations was minimized. . . . Only with the telegraph could the message be faster than the messenger. McLuhan concludes that, with computerized communication, we are facing an unprecedented organization that renders urban space and roads—and even the airways—obsolete. (Araujo, 2008, pp. 2-3)

The previous metaphor of the organism allowed for “reading” the form of the city by attending to the relationship between humans and their material culture. Consider the hardware store. The hardware store is organized and established in ways that correspond to the marshalling and distribution of lumber and nails for their use in building structures in the surrounding region. The

hardware store's relationship to the city may be understood by means of the organic metaphor in terms of its visible relationships to the productive components of the city.

A comparison between the differing features of the organic and composite metaphors are provided in Table 1.

	<b>City as Organism</b>	<b>City as Composite</b>
<b>Formal</b>	Incremental growth	Counterposition of like and unlike
<b>Temporal punctuations</b>	Interval or rhythm	Disjuncture/gap
<b>Relational</b>	Symbiosis	Fracticity
<b>Growth</b>	Autopoeisis	Externalization
<b>Urban and natural environments</b>	City as figure on the ground of nature	Nature as figure on the ground of the city

Table 1. Features of two metaphors for the city

First, *incremental growth* refers to the successive positioning of the city's precincts and quarters. The logic for this positioning involves a hierarchy of exigencies, an open system of inputs and outputs. The exhaust of human and animal wastes, an element of productivity, provides the first infrastructure for the modern city. Subsequent hierarchies give precedence to innovations in productive systems. Second, *intervals or rhythms* represent the historical breaks and disjunctures in the city as a productive system. The interval separates the transformation of the city from one productive system to the next. Third, *symbiosis* and visible symbiotic relationships are based on the observed mutuality inherent in shared survival. Until just a few years ago, industrial districts have been the source of efficiencies but also sites for long-term relationships of trust. Productive systems involve interdependence. The city as organism is open to the world outside the city. Systems are nested in other systems. Fourth, the city as organism grows by absorbing and digesting externalities. The city as organism can grow continuously because it is *autopoietic*. It feeds itself by establishing mutually beneficial relationships with the external world. Fifth, following the principles of the Enlightenment, the city is a *figure on the ground of nature*. Nature is productive, and the city as progeny of nature is also productive. Nature's rhythms of fertility and growth are mirrored in the city as a productive organism. In the same way that nature can be altered through agriculture, the city can be reorganized from time to time in order to create a new era of productivity.

The city as organism and the city as composite both allow for interpretations of a continually changing entity, the "unfinished city" in the words of my colleague Wayne DeFehr. The two metaphors provide different lenses on the features of growth. The parts of the city are no longer bound one with another but co-located. Productivity and shared survival give way to resonances. As a result, for example, we have, first, the counterpoint of like and unlike. In the organic city, land use is managed and mandated. In the composite city, by contrast, the massive housing complex appears apparently out of dust and sand. Parque deo Gato in Brazil adjoins and intervenes in the slum. A mountain of waste is seen in the foreground of Figure 1.



Figure 1. Parque do Gato, Brazil

<http://fubango.blog.uol.com.br/images/Martagato1.jpg>

Second, in the city as technological composite we have disjunctures and gaps. The rhythms of development occur over decades as new technologies of production are adopted. The disjunctures and gaps can give way to large-scale vacancies and flight, as we can see in images of cities such as Detroit, shown in Figure 2.



Figure 2. Detroit, 2009

[http://www.eyemaze.net/blog/uploaded\\_images/VacantLots\\_03-796818.jpg](http://www.eyemaze.net/blog/uploaded_images/VacantLots_03-796818.jpg)

Third, we have fractal patterns. Fracticity—or *fracticity*, the fractal city—represents the reproduction of images and text at various magnitudes. Fractal images are multiplied and mirrored via digital devices. We see fractal architecture in the new global cities in which rapid growth occludes traditional cultural modes of time. The architecture of Bahrain is shown in Figure 3.





*Figure 3. Manama City Harbour, Bahrain*

[http://www.happytellus.com/img/manama/bahrain-financial-harbour\\_65.jpg](http://www.happytellus.com/img/manama/bahrain-financial-harbour_65.jpg)

Fourth, we see in the metaphor of the technological composite, nature as external to the bounded city and city-region. “There are no remote places” in the world, says McLuhan (1965). “Under instant circuitry, nothing is remote in time or in space. It’s now” (n.p.). Previously, nature could be encountered through the design of the city, through the city’s human scale and its adaptation of the straight line. Nature can be encountered now only through escape from the city. The novelist Robertson Davies suggests that, in the case of Canada and the Canadians, people visit the wilderness in order to forget who they are. Figure 4 shows a cyclist who has escaped the city to the wilderness.



*Figure 4. Nature as externality - Ecotourism*

<http://www.btrails.com/trails/wilderness-trail-lincoln-nebraska>

Fifth, the image of the city as technological composite gives way to the master metaphor, or cliché, of nature as a figure on the ground of the city. This is a reversal of the Enlightenment conception of the city as a figure on the ground of nature. Nature is externalized. It is an externality.



Figure 5. *Manufactured provisional park, 2009*

<http://cityroom.blogs.nytimes.com/2008/09/19/the-year-of-the-parking-space/>

Figure 5 shows two people who work for a landscape architecture company. They used recycled boxes, tubes and business cards to create a temporary “park” out of a parking space on 27<sup>th</sup> Street in New York, an example of the externalization of nature.

### Reflection on Methodological Implications

I want to consider now some methodological implications for the study of urban and natural environments. The city as a technological composite has at least two implications for those studying the integration of technology and place in cities. First, communication is continuous. We can never fully understand the meanings of the messages being created in and by the city, but we can immerse ourselves in the city’s social environment and describe patterns of change and transformation. Immersive perception can be experienced through the deployment of metaphors. The city changes continuously as we introduce new media in more and more inventive ways.

The city as a technological composite means secondly that technology is constitutive of cities. In the same way that the game of chess is indescribable without reference to the rules of chess, cities can only be described by understanding and using technological punctuations in history. Urban forms include technological forms. One subsumes the other in varying contexts.

A caution or caveat. McLuhan’s view of technology is a totalizing view. McLuhan is in the company of Paul Virilio, Martin Heidegger, Jacques Ellul, and George Grant in this regard. Technology is seen as a demiurge, that is, as ultimately influencing and shaping all human experience. Virilio (1997) states, for example:

If *nature* abhors a vacuum, so too does *la grandeur-nature* (life-size). Without weight or measure, there is no ‘nature’ any more or, at least, no *idea* of nature. Without a distant horizon, there is no longer any possibility of glimpsing reality;

we drop into the time of a fall akin to that of the fallen angels and the earth's horizon then becomes just another 'Baie des Anges'. Philosophical let-down in which the *idea of nature* of the Age of Enlightenment is eradicated, along with the *idea of the real* in the age of the speed of light. (p. 6)

We must recognize that such a view underestimates the diversity of technological forms. Although useful for analysis, technology is as variable in form, function, and historical variation as any other part of human culture. Users or cultural actors use technology differently, and they have varying intentions in using the technology. Human agency is resilient, and a totalizing view does not take account of such resiliency. For example, even surrounded by material destruction and technological applications for war, women have found spaces for extending human wellbeing.

The method employed by these theorists, however, is to uncover the unrecognized structuring influences of technology as a means of understanding its full scope in human life. Achieving such an understanding need not be grounded in an anti-technological stance, but may be rooted in the conviction that without an understanding of what is at stake in technological change, meaningful social action in response is impossible. If the gestalt of media ecology could be stated in a word, it might well be to *understand*. Media ecology provides a route to insight and rich description, from which strategies for action may be devised.



## References

- Araujo, Y.R.G. (2008, May). The city as a medium in McLuhan and Flusser. *Flusser Studies*, 6 (n.p.). Available online: <http://www.flusserstudies.net/pag/archive06.htm>.
- Coupland, D. (2010). *Marshall McLuhan*. Toronto: Penguin.
- Deibert, R. (1997). *Parchment, printing, and hypermedia: Communication in world order transformation*. New York: Columbia University Press.
- Innis, H. (1951). *The bias of communication*. Toronto: University of Toronto Press.
- Marchand, P. (1989). *Marshall McLuhan: The medium and the messenger*. Toronto: Random House.
- McLuhan, M. (1961, June). Inside the five sense sensorium. *Canadian Architect*, 6, 49-54.
- McLuhan, M. (1964). *Understanding media: The extensions of man*. New York: New American Library.
- McLuhan, M. (1965). *Take thirty*. CBC Television.
- McLuhan, M. (1974, March). At the moment of Sputnik the planet became a global theater in which there are no spectators but only actors. *Journal of Communication*, 24 (1), 48-58.
- McLuhan, M., McLuhan, E., and Hutchon, K. (1977). *City as classroom: Understanding language and media*. Toronto: Book Society of Canada.
- Meyrowitz, J. (1997). Shifting worlds of strangers: Medium theory and changes in “them” versus “us.” *Sociological Inquiry*, 67(1), 59-71.
- Robertson, R. (1995). Glocalization: Time-space and homogeneity-heterogeneity. In M. Featherstone, S. Lash, & R. Robertson (Eds), *Global modernities* (pp. 25-44). London: Sage.
- Virilio, P. (1997). *Open sky*. London: Verso.

*This page intentionally left blank.*