

Call for papers

Géocarrefour

Special issue “Nature, Health and Well-Being in the City”

Edited by Lise Bourdeau-Lepage et Virginie Chasles

At the start of this new millennium, humankind became *Homo urbanus*, as Jeremy Rifkin is fond of saying (2000). Indeed, now more than ever, it is the city and its peripheries that constitute humankind's realm. In this context, it seems necessary to question the way in which the city has been fashioned into a suitable living space. How do we ensure that city-dwellers' living conditions, especially in terms of transport and housing, do not deteriorate? How do we avoid the growth of socio-spatial inequalities induced, in particular, by rising land prices? How can we minimize negative externalities on the environment and on city-dwellers' health – crowded conditions, congestion, pollution and so forth? These are all challenges facing planners, politicians and local stakeholders today. Furthermore, these questions are all linked to our desire for well-being in the city and, in a certain way, to the elements that contribute to the quality of life and health of city-dwellers. It is for this reason that *we have, for this special issue, decided to explore the relationships that have developed between nature and health in ensuring city-dwellers' well-being.*

Some surveys tell us that nature is an essential element for the well-being of city-dwellers (Bourdeau-Lepage, 2013¹) and that its mere presence has therapeutic virtues (André, 2012²). On the other hand, we know that the city carries health risks associated with changes to the environment and various forms of negative factors (air, water and ground pollution; toxic materials; dilapidated housing; radioactivity; etc.) that can provoke what are known as environmental pathologies or lead to weakened health. Accordingly, after cholera in the 19th century and tuberculosis in the first half of the 20th century, today's health risks are chronic diseases (cardiovascular diseases, respiratory diseases, cancers, allergies, etc.) due in part to the degradation of the environment. According to the WHO, some 30,000 premature deaths a year in France can be attributed to atmospheric pollution. Similarly, allergic respiratory diseases have doubled in 20 years, and it is estimated that environmental factors are at the root cause of 20% of cancers. These health risks call for a “new hygienism”, which can be found at the core of discourses on environmental health and the sustainable city, which hold that nature may be solicited for health-related purposes – for example, to reduce pollution or lower city-dwellers' stress levels.

In this regard, many studies have shown the existence of a relationship between a person's health and the proximity of natural elements such as waterways, parks or gardens – what are known as “therapeutic landscapes” (Gesler, 1992³). Roger Ulrich (1984⁴) showed how having a room that looked out on to parkland accelerated convalescence times for patients staying in hospital following a surgical operation. Open spaces in the city have beneficial effects, not just on the environment, but also on the physical and mental health of city-dwellers. They reduce anxiety, stress and depression and may have effects on obesity-related conditions.

Moreover, trees, by their very presence, help to reduce levels of pollutants in the air and attenuate the effects of urban heat islands and noise pollution.

¹ Bourdeau-Lepage L., 2013, Nature en ville, *Métropolitiques*, 22 février.

² André Ch., 2012, Notre cerveau a besoin de nature, *Cerveau & Psycho*, 54 novembre-décembre, pp. 12-13.

³ Selon l'OMS.

⁴ Ulrich R., 1984, View through a window may influence recovery from surgery, *Science*, vol. 224, pp. 420-421;

In addition to the public health issues raised by discussions about nature in the city, there are also challenges in terms of methodology and the analysis of ever more plentiful data. From the first epidemiological maps, produced 160 years ago by John Snow⁵, to the new algorithms enabling the geolocation of information on individuals' health using social networks⁶, the methods for analysing and nurturing the scientific debate in the context of "big data" mean exploring new spatial and temporal scales, and creating diverse and complex indicators.

Accordingly, if we wish to take a closer interest in the interactions between nature and health in the city, in terms of the creation of well-being, we would do well to begin by focusing on a number of (non-exhaustive) aspects, which will form the broad lines of this issue:

- a) The effects of the presence of nature in the city on the health and well-being of its residents;
- b) Health-related and environmental inequalities in the city;
- c) Methods used for the visualisation and spatial correlation of data on health and nature in the city, including with regard to cartographic representations.

Paper submission

The issue will be edited by Lise Bourdeau-Lepage and Virginie Chasles (Université Lyon 3) in collaboration with the editorial committee of the journal. Articles should be submitted September 1st 2014 for a publication in 2015. Interested authors should contact the editor: lblepage-at-gmail.com or virginie.chasles-at-univ-lyon3.fr. As is our usual policy, articles will be anonymously submitted to two of reviewers (double blind procedure). The decision to accept an article is made by the editor of the journal after consultation of the editorial committee. Papers will not exceed 40,000 characters and will strictly respect the bibliographical norms as well as those regarding illustrations that can be found on the journal website. They will include a summary and key-words and should be sent to André Buisson: geocarrefour@revues.org and to the guest editor.

⁵ Snow J., 1855, *On the Mode of Communication of Cholera*, 2nd Ed, London, John Churchill, New Burlington Street.

⁶ Kautz H., 2013, *Data Mining Social Media for Public Health Applications*, 23rd International Joint Conference on Artificial Intelligence (IJCAI 2013), Beijing.