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#### Research article

# Lifestyles and cities of the future – Rome and Montreal: comparing two realities

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# Abstract

This article presents the results of an international research project carried out in Italy and Canada, conducted by architects, landscape architects, sociologists and medical doctors. The study originated in the conviction that health and well-being are crucial objectives integrated within the notion of a sustainable city. For this reason, the configuration of urban space plays a decisive role in defining lifestyles and can contribute to improving the welfare of citizens. Many of today's diseases are caused by a sedentary lifestyle; it is essential, therefore, to centre prevention on the promotion of physical well-being encouraging an active lifestyle, which can be achieved by changing the urban structure. With the aim of bringing about sustainable and healthy lifestyles, streets are in vogue. Streets are meeting and experimental places, theatres of everyday life and settings for cultural events. They provide crucial urban space for people and, in the context of urban studies, offer intellectual research nourishment to reflect on this fundamental element of the structure of the city. The research project presented here is aimed at encouraging active lifestyles, walkability and the use of public transport by facilitating accessibility to four sites in Rome and Montreal, and by exploring the potential leveraging of existing infrastructures and services. The research-based design proposals start with the idea of redeveloping the system of public spaces, beginning with the increase of bicycle and pedestrian routes in relation to schools, commerce, sports facilities and archaeological heritage. The goal is to build feasible, safe, recognisable and attractive routes and well-equipped public spaces in order to discourage the use of private vehicles, especially for short trips. The projects presented here are based on a systemic vision and make use of existing, but often abandoned or undervalued, spaces and resources.

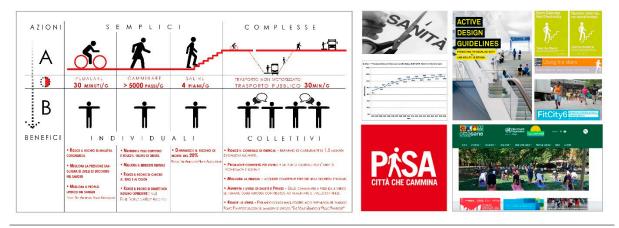
Keywords: city; health; physical fitness; mobility; sustainable development

### Introduction

With the arrival of the modern age, the street as a meeting place for public life seemed to have faded into oblivion.<sup>1</sup> The urban culture had decreed its death with Le Corbusier's apodictic proclamations. Having separated the pedestrian and the vehicular flows, he created streets inside buildings and buildings in the form of roadways. In the era of globalisation, great changes have affected the city's existence.<sup>2</sup> Contemporary life is delimited in non-places, intended as intermodal nodes of the new urbanity, or in the virtual squares of social networks. A significant focus of the contemporary architectural debate, however, concerns the role that public space can still play in the enhancement of cities and in influencing our *spontaneous* behaviour, promoting and inducing active lifestyles. In reality, the street is still today not only the theatre of everyday life but also a place of experimentation for cultural events, as well as for the performance of sustainable and healthy lifestyles.

We know that we must exercise daily to stay fit. The diagram in Figure 1 shows health benefits obtained through simple individual active actions. In addition, these single movements generate complex collective advantages. Introducing physical activity as part of our daily commutes has positive effects not only on our health, but also on the general environment, including on public expenditure since a healthier population demands less public welfare.<sup>3</sup> Among the lines of engagement identified by city administrations, *pedestrianisation* is one of the highest priorities; this primacy is coupled with campaigns to raise awareness of the importance of leading an active life.

Figure 1. *Left:* Health benefits of an active life for the individual and the community; *right:* Italy's Health Public expenditure 2009–19 and actions identified by public administrations (Source: Cities of New York, Pisa, Italian Network Healthy Cities)



Encouraging the daily practice of physical activity is not a matter of warnings or prohibitions; regular exercise implies introducing movement into everyday life, which requires a network strategy and the sensitive enhancement of the streetscape. This necessitates thinking about how to shape an attractive urban context with good architecture, green areas, sports amenities and services, ease of accessibility and high permeability.

# New forms of public spaces

The Danish architect Jan Gehl stated that, 'in a society becoming steadily more privatized ... the public component of our lives is disappearing. It is more and more important to make cities inviting, to meet our fellow citizens face to face and experience through our senses. Public life in good quality public spaces is an important part of a democratic life.'<sup>4</sup> All over the world noteworthy projects encourage outdoor activities and healthy lifestyles.

Among the most successful creations of recent years is the suspended garden of the Highline, placed over the defunct railway of the industrial Meatpacking District in New York. Likewise of great interest is the Atlanta Beltline, a 35km-long track, also along an obsolete railway, that connects 45 neighbourhoods with pedestrian and cycle paths, parks and green spaces; its aim is to address resilient socio-economic challenges by creating inclusive transport systems and new jobs. In Chicago, the 606 Elevated Railroad line was transformed by Michael Van Valkenburg Associates into a scenic landscape and a multipurpose bicycle trail, providing unique community connections. Gaeta-Springall designed a green corridor for recreational activities along the tracks of the Cuernavaca Railway in Mexico City; a 4.5km-long urban forest shapes public spaces and generates community spirit, contributing to the implementation of more than 70 other civic actions.

West 8 realised one of the most ambitious transformations in Europe with the Madrid Rio masterplan. A 6km section of motorway along the Manzanares has been buried to reclaim the riverbank, while 43km of tunnels allowed the creation of landscaped areas rich in vegetational biodiversity, sports facilities, art centres, playgrounds, cafés and even an urban beach. Copenhagen has a long tradition of sustainability-oriented urban policies; this translates into not only a greener and cleaner city, but above all a city with a higher quality of life. Along with strategies of pedestrianisation and the promotion of bicycle usage, the city adopted the Climate Adaptation Plan to minimise the risks of flooding and improve its urban spaces. The new Israel's Square offers an interesting model of public space with sports facilities and innovative accommodation. The sustainability-oriented policies date back to the 1947 Copenhagen Finger Plan that provided a systemic strategy for the development of the metropolitan area. Based on the commuter rail lines, five corridors offered a system of green 'wedges' that provided land for agriculture and recreational purposes.

Recent examples in Italy point in this same direction. 'Raggi Verdi' is a vision by Andreas Kipar for Milan and its dynamics for reconversion of the industrial areas. Sensitive to environmental issues as bearers of quality, the proposal promotes a unitary system of slow mobility through tree-lined arteries that traverse the urban fabric, connecting with existing urban parks.

# The city of Rome as a landscape project

Systemic and sustainable thinking is at the basis of a series of studies carried out by our research team within the Babele Laboratory at Sapienza University of Rome. Figure 2 shows Rome's protected natural areas, including the Appia Antica Park settled along the first consular street. This area, although very significant as the primary axis of the populated southern metropolitan context, is today underutilised. For the research team, this area is a crucial part of the city's structure. The diagram imprinted on the cover of our research book gives the sense of the concept we are fostering. In dark red is the shape of the Roman metropolitan area, around which are located the coastline and the northern and southern volcanos. The Tiber and Aniene rivers, the Aurelian Walls and the Grande Raccordo Anulare (GRA)<sup>5</sup> are marked in white, as is the line of the Appian Way on the grey outline of the park, that emerges clearly as the urban and geographical infrastructure that intersects the rings of the Walls and the GRA. The disorder of Rome finds in this sign a geometric and spatial reference. This artery of the past becomes the measure of the contemporary city. The Appian Park can have a similar role in Rome as Central Park

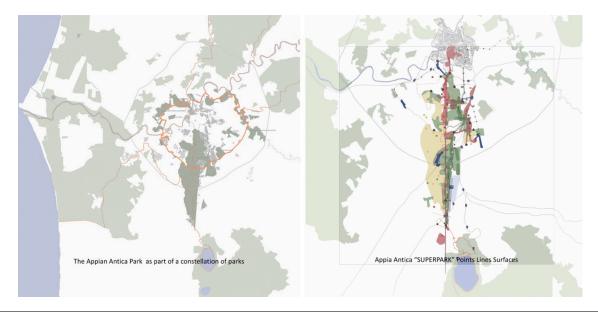
in New York: a green and recreational space at the centre of the city that represents its symbolic and pulsing heart.

# Figure 2. Left: diagrams of protected natural areas in the Municipality of Rome; centre: Central Park on Manhattan Island; right: book cover of Rome and the Appian Way: Ruins Utopia Design (Source: authors)



The Appian Way belongs to the past, it affects the present, but above all it projects into the future, outlining a tangible utopia for the city; what we call the 'Superpark', shown in Figure 3, is a strong environmental infrastructure that could generate a fundamental connection system. This constellation can significantly increase systemic networks of soft mobility, new uses of open spaces and healthy corridors.

# Figure 3. *Left*: the Appian Antica Park as part of a constellation of parks; *right*: Appia Antica 'SUPERPARK Points Lines Surfaces' (Source: authors)



A more recent study considers the areas left unused by the eastern directional system of the 1962 Rome masterplan. The future of these areas was discussed in the 2017 design workshop ArchaeoGRAB,<sup>6</sup>

conducted within the Sapienza University master's programme, Architecture for Archaeology. In relation with the Grande Raccordo Anulare delle Biciclette (GRAB),<sup>7</sup> the bicycle ring launched by Legambiente, we stimulated the idea of a project for the enhancement of green archaeological sites in the ex-Sistema Direzionale Orientale (SDO) areas.<sup>8</sup> Following the workshop, in 2020, the municipality of Rome proposed a potential Green Ring.

'The city as a cure and the care of the city' is the name of another multidisciplinary research project carried out by six departments in Rome, Venice, Naples and Pisa that includes physicians, sociologists, traffic engineers, architects and landscape architects. This work is being published in eight books. The primary ones are the outcome of three conferences that addressed the topic from a theoretical point of view (*Del prendersi cura, Streetscape, Healthscape*), three of them are dedicated to field explorations in the cities of Rome, Venice and Naples, and the last two are intended as operational tools: an atlas of best practices and policies and a lexicon to describe the city of care.

# Figure 4. 'The city of cure and the care of the city': Sapienza as generator of public space in Rome 2019 (Source: www.curacitta.com)



For Rome, the case study is Sapienza University,<sup>9</sup> a settlement sprawling in the city that generates complex cultural and educational interactions. Academic institutions, especially in Europe where the campus is part of the city texture, are often engines of urban regeneration, capable of revitalising the streetscape of entire districts of the city. The most interesting element of these educational structures is the texture of open spaces, the main characteristic feature of university life which is far more important than the buildings themselves. Sapienza University in Rome is the largest European university, attended daily by a significant population, presenting an interesting opportunity to introduce into the urban fabric changes to improve the quality of open spaces and encourage a less sedentary lifestyle. By assuming health as a parameter, the research project, as Figure 4 shows, suggested: (1) the reconfiguration of pathways and city nodes, in correspondence with the university facilities and the main transport stations and (2) the use of residual green spaces, with several environmental and social advantages.

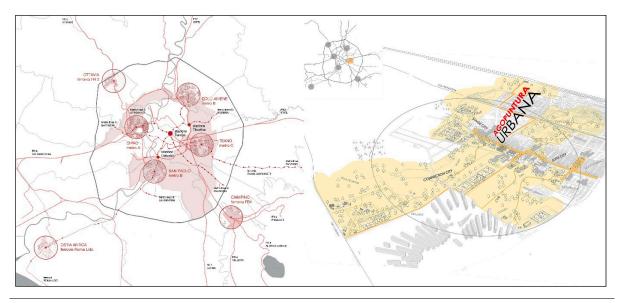
# Rome and Montreal: comparisons

The enhancement of historical areas and green spaces leads to a discussion to introduce briefly the research carried out in both Rome and Montreal. Our research group has long collaborated with the UNESCO Chair in Landscape and Environment at the University of Montreal on issues concerning urban design and its relationship with nature in the city. On this occasion, a parallel investigation was undertaken comparing urban projects and strategies to be implemented in the two cities for urban well-being, enhancing the presence of water and encouraging walking and cycling. Two areas with a medium- to high-density fabric were chosen to encourage Transit-Oriented Development (TOD), which

promotes more sustainable forms of mobility in areas around public transport stations. The intention was to offer an adequate diversity of land uses and excellent pedestrian and bicycle accessibility in some peripheral urban nodes in Rome and Montreal. The two case studies of Via Teano in Rome and Rue Decelles in the Saint-Laurent district of Montreal are described here.

In Rome, seven nodes have been hypothesised, distributed throughout the urban area. Intended as a 'systemic acupuncture' in neighbourhoods, in these areas, as in the Teano Metro C line station shown in Figure 5, within a 5,000 step radius (about 3km), the intention was to improve walkability conditions. To this end, the following actions could be taken: (1) prioritise non-motorised transport networks with safe spaces and facilities for cyclists, (2) create dense networks of streets and paths and (3) enhance green and heritage areas.

# Figure 5. *Left*: planimetry with identification of the nodes at the metro station; in red the green belt within which there is urban traffic restriction; *right*: Node Teano urban acupuncture (Source: authors)



Rome and Montreal are very different cities with respect to their history, urban development, extremely diverse climates and topography. The former is a metropolis covering an area of over 1,280 km<sup>2</sup>, divided into 15 municipalities and inhabited by just under 3 million people. It is built around seven hills and is crossed by a river, the Tiber, which has proved to be both an economic resource and a source of environmental qualities. The capital city, whose development continues to be conditioned by its historical heritage even now, is structured around a central urban area and surrounded by city walls from which the radial system of consular roads of Roman origin extends.

Montreal occupies almost the entire surface of Île de Montréal, the largest of the islands of the Hochelaga Archipelago, one of three near the confluence of the Ottawa and St Lawrence rivers. Thanks to its history,<sup>10</sup> Montreal is one of the North American cities that has succeeded best in combining its French European origins, which can still be seen in the Vieux Montréal area, with the typical Anglo-Saxon grid system that has characterised the urban layout of most North American cities. Although it has the same number of inhabitants as Rome, its municipal area, divided into 19 arrondissements, is just over 365km<sup>2</sup>, with a population density more than double that of Rome.<sup>11</sup>

In terms of the transport infrastructure's system, radials and concentric rings (the Roman walls, the metropolitan railway network<sup>12</sup> and the GRA) constitute Rome's urban framework. Within this network, however, the city lacks an efficient public transport infrastructure. There are only 37km of metro lines and a network of trams and buses mainly on roads open to vehicular traffic; for this reason, out of 5 million daily trips, 67 per cent are made by private vehicle. The main green mobility infrastructure in Rome is the bike path along the banks of the Tiber, an uninterrupted cycle path almost 35km long. The rest of the

capital's cycle paths are fragmented. To overcome this problem, the GRAB, a 44km ring of cycle paths, now implemented, will allow rapid connections in combination with the Lungotevere linear system.<sup>13</sup>

Four subway lines and six metropolitan transport railways compose Montreal's metro network. It extends over 71 km, almost twice the length of the Roman network, but it is spread over a municipal territory that is only about one third of the Italian capital. The most important station is Montréal Centrale, which welcomes 593,000 passengers daily. Montreal has an extensive network of cycle lanes, covering a total distance of more than 870km, making cycling a popular means of transport. Under construction is a system that – once completed – will extend another 180km, guaranteeing that 44 per cent of Montreal's residents will be able to safely use a cycle path in all seasons.<sup>14</sup>

# Vital elements

It is precisely because of their inevitable urban and cultural differences that the two metropolises, Rome and Montreal, are interesting case studies of public space design in the city. Although there are differences, we focus our attention on a more unusual aspect, which is the similarities between these two cities in terms of lifestyles, health, walkability and the use of public transport and collective spaces. We have aimed to compare these urban contexts through three vital elements that can be interpreted as new urban ecologies: *water, air* and *green areas*.

### Water

Both cities are situated on the banks of two major rivers. The water system in Rome is divided into three typologies: the fluvial one, on the Tiber and Aniene (which in some sections is ideal for sporting activities such as canoeing); the four lakes near the capital (Bracciano, Martignano, Nemi and Albano); and the maritime area (with sailing sports in Ostia). Although Rome was subject to periodic emergencies due to the frequent flooding of the Tiber up to the unification of Italy, it was precisely the lack of danger of the waterway that over time allowed the creation of a soft mobility infrastructure and sports facilities in areas along its embankments.

With a flow rate more than 50 times that of the Roman river (12,309 m<sup>3</sup>/s compared to 240 m<sup>3</sup>/s for the Tiber), the St Lawrence also periodically qualifies as a risk factor for Montreal and other Quebec localities, recently leading to radical proposals to demolish inhabited areas in flood-risk zones. The St Lawrence is also known to be an important source of economic well-being as it is an essential 'route bleue' for the movement of goods. Equipment and industrial plants have been built on its banks, thus driving the development of the Quebec metropolis, and have subsequently been reused as important public spaces. This is the case, for example, with the nineteenth-century Canal de Lachine, built to shorten the route of merchant ships, leading to direct contact between the river and the industrial plants. In the 1970s, after being closed to river traffic and a period of relative abandonment, it was transformed through various programmes (first and foremost Action 77) into an urban park much enjoyed by the community. It is bordered by a cycle path which then connects to the urban cycle and pedestrian network in downtown Montreal, as illustrated in Figure 6.

### Air

Critical issues due to pollution and population density underpin the search for healthiness in the second vital element: air. Since ancient times, the mansions of the great patrician families in Rome have been located on the heights that characterise the capital, in sumptuous villas (such as Villa Medici or Villa Borghese) surrounded by vast parks. In the seventeenth century, the popes themselves moved the papal residence from Palazzo Venezia, at the bottom of the Capitoline Hill, to the palace on the heights of the Quirinal. In the modern and contemporary age, in both Rome and Montreal, healthy air is associated with heights that have become iconic for both cities. In Rome, Monte Mario (139 m high) and the Janiculum Hill (88 m high) became over time alternative green zones to the Sette Colli, now almost entirely urbanised.<sup>15</sup>

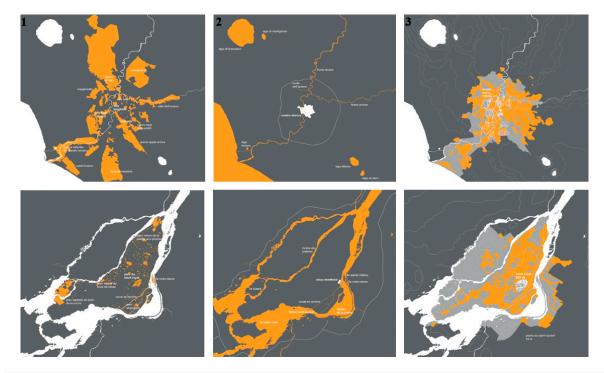


Figure 6. Vital elements: *Left column*: green areas; *centre column*: water; *right column*: air; *top row*: Rome; *bottom row*: Montreal (Source: authors)

While Montreal owes its name to the Mont Royal, a 234 m-high hill on whose slopes the French began to build the future city of Saint-Laurent, this area is an immediately recognisable landmark and a park, as well as an island of coolness much frequented by the people of Montreal. Together with nine other hills, Mont Royal forms the sequence of the ten Collines Montérégiennes, which are characterised as healthy outposts for citizens and tourists in search of outdoor well-being.<sup>16</sup>

### Green areas

The presence of vegetation in urban areas is an element capable of triggering in citizens virtuous mechanisms for more conscious lifestyles to pursue individual and collective well-being. The Municipality of Rome is the greenest in Europe, with a percentage of parks, nature reserves and agricultural areas, which comprise approximately one third of the municipal area. The presence of vast green areas imposes great efforts on the administration to preserve and enhance them, but often the Romans themselves, due to an overly fragmented and unsystemic arrangement of urban greenery, underestimate this value. The historical villas are locations for outdoor sports, both for citizens and special events: for example, the main public park in the city, Villa Borghese, hosts an area specifically dedicated to horse riding (Galoppatoio Equestrian Centre).<sup>17</sup>

In the Montreal context, there is a more active relationship between citizens and the available nature (thanks in part to dozens of 'neighbourhood gardens', the *parcs d'arrondissements*). The parks, starting with the one on Mont Royal designed in 1876 by F.L. Olmsted, although generally smaller than the Roman villas, are set up in a widespread green network.<sup>18</sup> This system involves a large and diverse catchment area, where nature is embedded in the daily lives of the city's inhabitants.

# One kilometre around the metro

In both cases – Rome and Montreal – we selected areas around the metro stations (defined with a circle in the graphics of Figure 5) to be reached with a short walk of maximum 2,500 steps (1.5 km). The notional circle, which measures distance as the crow flies, indicates a walkable distance, as well as an area that,

if enough facilities are provided, should encourage safe places to exercise, meet or gather in order to improve well-being and the relationships between people.

The design proposal aims at enhancing the system of public spaces, beginning with the development of bicycle and pedestrian routes in relation to schools, commerce, sports facilities and archaeological heritage (especially in Rome). Building feasible systems of safe, recognisable and attractive routes and well-equipped public spaces not only discourages the use of private vehicles for short trips, but also supports people's desire to socialise and citizens' essential need to live an active life. The projects make use of existing but often abandoned or undervalued spaces and resources. What emerged through the research, including thorough on-site investigation and resident questionnaires, is the need to improve the environmental quality of urban life by creating more natural spaces and encouraging outdoor living.

Therefore, the design proposal concerns a framework of topics relating to the environment, health, urban landscape and physical well-being. The work aims to achieve ambitious goals and consists of a coordinated set of minimal actions which would be low-cost and have high impact, while reaping great rewards for the city as a whole, making it pleasant, safe and convenient (also in terms of time) to travel significant distances on foot in association with public transport.<sup>19</sup>

### Via Teano, Rome

Teano Line C metro station occupies a marginal position in relation to the other adjacent stops, which are located near densely populated areas in the Centocelle and Pigneto districts, facing important and well-structured communication routes. Here, as illustrated in Figure 7, the project works on the hypothesis of linking performance characteristics of urban space, lifestyles and preventive healthcare measures starting from the valorisation of existing resources. In an area of 1km around the station, existing paths connecting rural farmhouses and archaeological areas were used to create a network of bicycle and pedestrian routes. In addition, areas for active life in the open air were implemented, like gyms for the elderly, children's playgrounds, sports' facilities, spaces for entertainment, for street art and WiFi hotspots. These activities were organised into three thematic itineraries: gym city, stage city and connection city.

Figure 7. Rome Node Teano Metro C; the central location of the Teano metro station and the main cycling and walking routes and activities that can be carried out in the public space equipped for outdoor activities (Source: authors)



### **Rue Decelles, Montreal**

In 2015 the Department of Infrastructure launched an ambitious programme for pedestrian and shared streets (*Programme des rues piétonnes et partag*ées – PIRPP)<sup>20</sup> with the aim of creating new public spaces. The redevelopment of Rue Decelles, between Boulevard Décarie and Boulevard Sainte-Croix, responds

both to the need to enhance active transport and to connect neighbourhoods. The project reinforces the links between commercial spaces (concentrated on Boulevard Décarie), local educational establishments (for example, Collège Vanier and Cégep de Maisonneuve) and transport facilities (for example, the cycle path on Avenue Sainte-Croix and Côte-Vertu metro station). Four new areas in the public space along Rue Decelles have been created.<sup>21</sup> The first section consists of the entrance marked by coloured pillars, the second and third sections are used as a linear garden and the fourth section hosts equipment for recreational and cultural activities: tables, benches, a theatre area, picnic area and an open-air exhibition space<sup>22</sup> as illustrated in Figure 8.

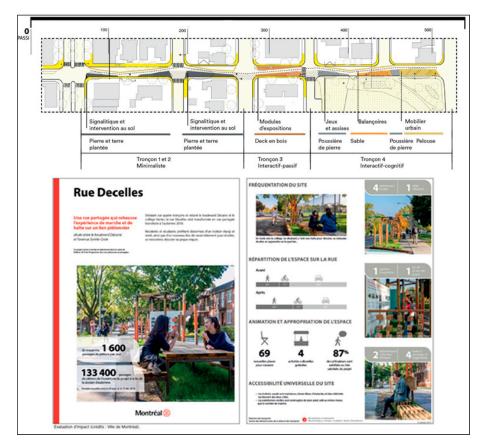


Figure 8. Montreal Node Decelles, the street and spaces equipped for outdoor activities (Source: Ville de Montréal)

# Conclusions

The global crisis caused by the Covid-19 health emergency represented a crucial moment of reflection on living habits. The pandemic restricted and controlled public space, relegating inhabitants to their private areas. Citizens' psycho-physical well-being had to be based solely on the quality of domestic space, which in many cases, especially for poorer households, is low. In this sense, the pandemic crisis can be interpreted as an opportunity to rethink the role and importance of public spaces, green areas and alternative mobility in the city as democratic spaces for social inclusion. The correlation between people's psycho-physical well-being and the availability of equipped public spaces represents one of the new urban egalitarian paradigms for post-pandemic cities.

Indeed, what emerges in the research is that in order to encourage active lifestyles that contribute to the physical well-being of the population we need to raise the environmental quality of urban life in terms of connections, natural resources, outdoor equipment and landscaping. Both Rome and Montreal have tried to create spaces that are, above all, related to each other, public, interconnected and accessible,

and which can promote the creation of a free democratic space of inclusion. These projects enhanced the areas' potential, provided facilities and implemented walking areas around the station within a radius of 5,000 steps, creating the conditions for a healthy life. Intended as an acupuncture of virtuous living environments in the urban fabric, the combination of these interventions acts in a systemic way.

As John Brinckerhoff Jackson said: 'roads not only lead to places, but they are also places. And, as always, they play two important roles: as promoters of growth and dispersion, and as magnets around which new types of development can be grouped. No other modern space is so versatile.'<sup>23</sup>

### Notes

<sup>1</sup>The research, partly published in the book *Lifestyles and Cities of the Future* (2020), was carried out by: Sapienza University of Rome – Dipartimento di Architettura e Progetto: Alessandra Capuano, Principal Investigator, Anna I. Del Monaco, Laura V. Ferretti, Federica Morgia, Fabrizio Toppetti, Andrea Valeriani, Davide Luca, Eleonora Tomassini, Lisbeth Ahon; Dipartimento di Medicina Sperimentale: Andrea Lenzi, Francesco Romanelli, Daniele Gianfrilli; Dipartimento di Sociologia: Sandro Bernardini, Carmelo Bruni, Marina Ciampi; University of Rome Foro Italico Dipartimento di Scienze della Salute: Silvia Migliaccio. Université de Montréal – Chaire Unesco en Paysage et Environnement: Philippe Poullaouec-Gonidec, Principal Investigator, Sylvain Paquette, Alessia Zarzani, Jérome Glad.

<sup>2</sup>Capuano, 'How many roads'.

<sup>3</sup>Fondazione CENSIS, *Gli italiani e la salute*.

<sup>4</sup>Stubbs, 'Jan Gehl quotes', 2.

<sup>5</sup>The GRA or Grande Raccordo Anulare (literally: great ring junction) is one of the most important roads in Rome: a toll-free, ring-shaped 68.2km-long orbital motorway that encircles Rome.

<sup>6</sup>ArchaeoGRAB is the name of a research study that is still ongoing about the creation of a green network for sustainable mobility and public space projects for the enhancement of archaeological and natural heritage in the suburbs of the city of Rome. The idea of ArchaeoGRAB got underway in 2017 via a workshop held as part of the master's programme, 'Architecture for Archaeology' (Architettura per l'Archeologia), coordinated by Alessandra Capuano.

<sup>7</sup>The GRAB or Grande Raccordo Anulare delle Biciclette (literally: great bicycle ring road) is an annular infrastructure that runs for 44km. This big ringroad for bicycles traverses territory full of historical and environmental richness, partially in a state of emergency and neglect.

<sup>8</sup>The SDO or Sistema Direzionale Orientale (literally: eastern directional system) is an equipped axis, unbuilt, designed in the Rome Masterplan 1962. It was designed as a linear system along which ministries, public and private offices, services and large urban facilities were to be concentrated, as an alternative to the historic centre.

<sup>9</sup>'The city as a cure and the care of the city': Sapienza as generator of public space in Rome, 2019. Research group: Principal Investigator, A. Capuano; team: G. Celestini, A. Criconia, A. Giovannelli, L.V. Ferretti, F. Toppetti; with A. Lanzetta, A. Valeriani; collaborators: I. Cellini, S. Damiano, D Frediani, M. Gilistro, D. Navarra, M. Sarlak, E. Tomassini, A. Veisz.

<sup>10</sup>It is a city with considerable French colonial history dating back to the sixteenth century. It began as a missionary settlement but soon became a fur-trading centre, a role that was enhanced after the conquest of New France by the British in 1763.

<sup>11</sup>Valeriani, 'Roma/Montréal: Due capitali a confronto'.

<sup>12</sup>The railway network in Rome focuses on Termini Station (480,000 passengers a day), a gateway for passengers coming from the hinterland as well as from major Italian cities and is closely integrated with three subway lines, eight metropolitan transport railways and six tramway lines.

<sup>13</sup>'GRAB, la Ciclovia romana', Romamobilita.it, https://romamobilita.it/it/progetti/pumsroma/grabciclovia-romana.

<sup>14</sup>All information related to public transportation in the city of Montreal is published on the following websites. Projects for infrastructure development planned for the coming years are also described there: www.ville.montreal.qc.ca, Communauté métropolitaine of Montreal, www.cmm.qc.ca.

<sup>15</sup>In Italy, air health data are studied in various scientific fields. This article refers to the work of CittàClima. It is an observatory of Legambiente, with the support of UnipolSai Assicurazioni, on the impacts of climate change on the Italian territory, with particular regard to urban areas. Through the cittaclima.it website, it

aims to enhance and broaden awareness of the phenomena that are increasingly changing in size and frequency.

<sup>16</sup>Poullaouec-Gonidec and Paquette, 'Des paysages de l'urbain'.

<sup>17</sup>The Municipality of Rome has licensed the area of the Galoppatoio, within Villa Borghese, to protect the welfare and health of horses, as well as the safety of users: www.comunediroma.it.

<sup>18</sup>Reeves-Latour, *La représentation du bien-*être.

<sup>19</sup>Capuano et al., 'Percorsi e Nodi'.

<sup>20</sup> Programme d'implantation des rues piétonnes et partagées: Un franc succès en 2017 et 3 nouveaux projets pour 2018 (Montréal: Ville de Montréal, 26 January 2018).

<sup>21</sup>Ville de Montréal, Plan d'action 2018–2028, créer des initiatives de design actifs, 2018, www.ville. montreal.qc.ca. Global Advocacy Council of Physical Activity, International Society for Physical Activity and Health, La Charte de Toronto pour l'activité physique: un appel mondial à l'action, 2010, https: //www.sports.gouv.fr/IMG/pdf/charte\_de\_toronto\_pour\_l\_activite\_physique.pdf. En 2014, la Ville de Montréal lors du Sommet Montréal physiquement active adhérait à la Charte internationale de Toronto pour l'activité, https://actualites.uqam.ca/2014/le-gref-participe-au-sommet-montreal-physiquementactive/.

<sup>22</sup>Zarzani, Glad and Voyer, 'Le nœud de la Rue Decelles'.
<sup>23</sup>Jackson, A sense of Place, 187.

# Declarations and conflicts of interest

### **Research ethics statement**

Not applicable to this article.

### **Consent for publication statement**

The author declares that research participants' informed consent to publication of findings – including photos, videos and any personal or identifiable information – was secured prior to publication.

### **Conflicts of interest statement**

The authors declare no conflict of interest with this work. All efforts to sufficiently anonymise the author during peer review of this article have been made. The author declares no further conflicts with this article.

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