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Saggi

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Preventive Urbanism

The Role of Health in Designing Active Cities

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Preventive Urbanism

The Role of Health in Designing Active Cities

I.

Urban Bodies

I.

The Healthy, Active City Approach / An Introduction

We ought to plan the ideal of our city with an eye to four considerations. The first, as being the most indispensable, is health.¹

This book focuses on both the existing and potential relationships between urban planning, population health and physical activity within the public and collective spaces of the city. *A Healthy, Active City* is one continually creating and improving opportunities in the built and social environments and expanding community resources to enable all its citizens to be physically active in day-to-day life.² A paradigm defining a city in which the infrastructures, transportation system, cultural and recreational services, the mosaic of the urban public spaces and its characteristics facilitate the use of the body in everyday life, contributing to making the city healthier, more intelligent, livable and safe.³

When debating about active cities, we are actually speaking of the most archetypical and essential idea of urban structure and urban living. Active city is not a slogan without meaningful or clear contents, as has been the case for many other fashionable city labels. On the contrary, talking about active cities – especially given the complex and multifaceted urban living conditions of our epoch – means looking at urban settlements through the lenses of sustainability (en-

¹ Aristotle, *Politics* (ca. 350 b.C.), trad. by E. Barker (New York: Oxford University Press, 1995), 275-276.

² P. Edwards, A. Tsouros, *A Healthy City Is an Active City: a Physical Activity Planning Guide* (Copenhagen: WHO Regional Office for Europe, 2008).

³ A. Borgogni, R. Farinella, *Le città attive. Percorsi pubblici nel corpo urbano* (Milan: FrancoAngeli, 2017); E. Dorato, A. Borgogni, “The Active City perspective: A.C.C. as an Active Planning Tool,” in M. Pezzagno, M. Tira, eds., *Town and Infrastructure Planning for Safety and Urban Quality* (London: Taylor & Francis Group, 2018), 53-60.

vironmental, social, and economic); spatial and social equity; health; and bodily safety and freedom of movement (i.e. accessibility in its broader meaning), all through the planning and designing of public spaces and the spatial quality of the urban realm. These aspects embody and also elevate the discipline of Urbanism, with a capital letter. To quote the perceptive words of American philosopher Elizabeth Grosz when addressing the bodies-cities dichotomy,

What I am suggesting is a model of relations between bodies and cities which sees them not as megalithic total entities, distinct identities, but as assemblages or collections of parts, capable of crossing the thresholds between substances to form linkages [...]. This model is a practical one, based on the practical productivity bodies and cities have in defining and establishing each other.⁴

The conceptualization of the *Healthy, Active City* represents a relatively new area of inquiry which started to develop only thirty years ago, that has primarily tried to tackle emerging global health issues and concerns. Through broader and comprehensive approaches and policies, only during the past few years has the attention to health and health-related problems begun to shift from a merely health care approach – domain of medicine and epidemiology – to a more complex and integrated body of knowledge also involving urban planning and design, sociology, environmental psychology, and so forth. Addressing the relationships between the built environment, physical activity and health not only from a public health perspective, has allowed to move conceptually from cure to prevention, supporting more effective health promotion policies and actions targeting entire communities at the urban level.

Within this process of growing awareness of the health benefits potentially coming from the city context and its characteristics, the involvement and the role of physical activity in the urban planning and public health framework also begins to unfold, becoming more and more relevant. It is fundamental to stress that, when addressing physical activity, this work refers to the definition given by the World Health Organization as any bodily movement produced by skeletal muscles that requires energy expenditure; “physical activity

⁴ E. Grosz, “Bodies-Cities,” in B. Colomina, ed., *Sexuality and Space* (New York: Princeton Papers on Architecture, 1992), 248.

includes recreational or leisure-time physical activity, transportation (e.g. walking or cycling), occupational (i.e. work), household chores, play, games, sports or planned exercise, in the context of daily, family, and community activities.”⁵

1.1 *The facts are clear*

The conceptual premises for this broad and rapidly developing topic assume that urban planning and design are disciplines with a great power to influence human behaviors and quality of life. Evidence demonstrates that the ways in which cities are designed and structured can have both a physical and mental impact on the people who live, work, play, love, and grow old in them. The links between the built environment and human behavior have long been of interest to the discipline of urbanism, especially in relation to the sub-fields of urban design and transportation planning.⁶ In his book *People in Cities* environmental psychologist Edward Krupat states that “It is a widely acknowledged fact that human beings are products of their social and physical background,”⁷ implying that the social and physical environments in which people live have a fundamental impact on the personalities and attitude of entire communities: the city is the context for behavior. The characteristics of the urban built environment and how cities and neighborhoods are shaped, together with the transportation system, the environmental pathogens and hazards to which the population is exposed, the safety and accessibility of urban amenities that individuals can enjoy, are only some of the most relevant urban components in terms of how we spend our time and what activities we engage in. In other words, the built environment also influences one important behavior (health-enhancing physical activity) and the health outcomes that are associated with it.⁸

⁵ WHO, *Global Recommendations on Physical Activity for Health* (Geneva: WHO, 2010), 8.

⁶ S.L. Handy et al., “How the Built Environment Affects Physical Activity: Views From Urban Planning,” in *American Journal of Preventive Medicine* 23 (2002): 64-73.

⁷ E. Krupat, *People in Cities. The Urban Environment and Its Effects* (Cambridge: University Press, 1985), xi.

⁸ L.D. Frank, P.O. Engelke, T.L. Schmidt, *Health and Community Design: The Impact of the Built Environment on Physical Activity* (Washington DC: Island Press, 2003).

Up until today, most of the works investigating such relations have been developed within the public health field, directly addressing the physical activity habits of the population and behaviors in relation to health outcomes. The WHO reviewed the evidence linking corporal exercise to health benefits, underlining the reduction of obesity, cardio-vascular diseases, and stroke risk, the prevention of type II diabetes, the reduction in the overall risk of cancer (especially colon, breast, and prostate), the increase and maintenance of musculoskeletal health, and overall psychological well-being reducing symptoms of depression, stress and anxiety.⁹ Similarly, scientific research has established that physical inactivity is a fundamental contributor to non-communicable diseases, especially in higher income countries.¹⁰

The so-called “sedentary pandemic” our world is experiencing has been identified as the fourth leading risk factor for global mortality after tobacco use, alcohol and drug consumption, and unhealthy diet,¹¹ leading to the manifestation of chronic pathologies. The contribution of inactivity to all-cause mortality amounts to over 500,000 deaths per year in the WHO European Region.¹² In addition to the costs in terms of mortality, morbidity and quality of life, inactivity leads to high financial expenses due to both health care costs and indirect costs, such as the value of economic output lost because of illness, disease-related work disability, or premature death.¹³ Low physical activity imposes economic costs of € 80.4 billion per year to the EU member states through four major non-communicable diseases (i.e. coronary heart disease, type II diabetes, colorectal and breast cancer) and the indirect costs of inactivity-related mood and anxiety disorders. This is equivalent to 6.2% of all European health spending; € 5 billion more than the entire world spends on cancer drugs

⁹ F. Bull et al., “Physical Inactivity,” in M. Ezzati et al., eds., *Comparative Quantification of Health Risks. Global and Regional Burden of Disease Attributable to Selected Major Risk Factors* (Geneva: WHO, 2004), 729-881.

¹⁰ See: WHO, *Global Status Report on Noncommunicable Diseases* (Geneva: WHO, 2014); I. Lee et al., “Effect of Physical Inactivity on Major Noncommunicable Diseases Worldwide: An Analysis of Burden of Disease and Life Expectancy,” in *The Lancet* 380(9838) (2012): 219-229.

¹¹ WHO, *Global Recommendations on Physical Activity for Health*.

¹² ISCA, *The Economic Cost of Physical Inactivity in Europe* (Report, June 2015).

¹³ See: C. Breuer, “Economic Benefits of Physical Activity,” in EHFA, ed., *The Future of Health and Fitness. A Plan for Getting Europe Active by 2025* (Nijmegen: BlackBox Publishers, 2014), 42-52.

each year, or half the annual GDP of Ireland or Portugal. Looking ahead, this economic cost burden is set to rise, estimating that in 2030 annual costs could reach over € 125 billion. Potentially, this could be avoided if all Europeans were to achieve an average of twenty minutes per day of simple and inexpensive activities such as walking and running.¹⁴

1.2 *A collective (urban) challenge*

As urban health issues and resulting approaches are changing fast globally, the medical world is now appealing to architects, planners and engineers to join and share the challenge. The aim is to build urban environments that are more conducive to practicing physical activity, promoting active and healthy living primarily through the structure and the features of the city itself. To investigate the active city paradigm – that is to shift the point of view and possible interventions from medical, social, physical activity concerns to an urban planning and urban design perspective – a major emphasis needs to be put on bodies: both *urban* and *human*, and the many-sided relations existing between them. As Danish architect Jan Gehl wrote in the foreword of his book *Life Between Buildings*, it is necessary to be concerned about

[...] The people who were to move in the spaces between the buildings, [urging] for an understanding of the subtle qualities, which throughout the history of human settlements, had been related to the meetings of people in the public spaces, [pointing] to the life between buildings as a dimension of architecture, urban design and city planning to be carefully treated.¹⁵

Even though there is no doubt that, worldwide, the active city is becoming more and more an essential object of study requiring interdisciplinary efforts, integrated approaches, and good political and professional expertise and cognizance at various levels in order to be effective and feasible, there is still a lack of a sound theoretical framework capable of guiding empirical work and new research

¹⁴ ISCA, *The Economic Cost of Physical Inactivity in Europe*.

¹⁵ I. Gehl, *Life between Buildings: Using Public Space* (Washington DC: Island Press, 2011), 7.

design. In fact, although the leading motivation for recent concerns about inadequate levels of physical exercise among the population comes from the already well-established, scientifically based causal connection between physical activity and health, the role played by the built environment and its characteristics represents a relatively new area of investigation.

Since the 1970s, researchers from different fields have begun to theorize how the built environment, its features and possible transformations, represent one fundamental macro-variable capable of affecting people's health, habits and physical activity levels in many different ways. However, the majority of such complex interconnections has not been investigated or tested yet. Many of the behavioral risk factors currently threatening public health are, at different levels and with different intensity, increasingly being tied to the urban environment which, in a growing urbanized world, represents the most frequent context for such factors. Cities have a strong impact on the lifestyles of urban populations, their health status, habits related to the practice of physical activity, ways to travel, eat, and gather together, and today we can affirm that the complex and multifaceted concept of *urbanity* represents a macro-determinant of health and a determinant of physically active behaviors.

[...] While social determinants and multilevel perspectives are not uniquely urban, they are transformed when viewed through the characteristics of cities such as size, density, diversity, and complexity. Ameliorating the immediate living conditions in the cities in which people live offers the greatest promise for reducing morbidity, mortality, and disparities in health and for improving quality of life and wellbeing.¹⁶

While urban planning and design create safe, accessible and stimulating places for people, they should also be conceived “[...] as a form of primary prevention and a contributor to health outcomes,”¹⁷ especially in establishing the physical conditions for enhancing everyday exercise. Today more than ever, given the complex and highly

¹⁶ D. Vlahov et al., “Urban as Determinant of Health,” in *Journal of Urban Health* 84(1) (2007): 116.

¹⁷ L.J. Duhl, A.K. Sanchez, *Healthy Cities and the City Planning Process: A Background Document on Links Between Health and Urban Planning* (Copenhagen: WHO Regional Office for Europe, 1999), 8.

articulated and interconnected economic, political, social and urban circumstances of our time, as well as the transforming concept of health itself and the approaches related to it, it appears fundamental to further investigate and eventually revise the relationships between urbanism and health. This is true also in order to attenuate the alarming “medicalization process” that Western urban societies are already broadly experiencing, an approach promoting the cure instead of prevention, that has often proven its ineffectiveness.

All the health-related concerns defining our contemporary world represent an important health care, social and political commitment, but also and especially a great *urban* challenge. A challenge for our cities, for the effects that the consolidated urban models have and will have on the health and well-being of urban population and, secondarily, on the performed levels of physical activity. A challenge for the very direct effects that aging, migratory dynamics, new urban social compositions and the evolution of the concept of a fragile population will have on the design and use of public and collective urban spaces, with repercussions on public health. For the economic burden directly or indirectly associated to demographic, social and spatial inequalities in cities. Finally, for the reduced financial resources that, in certain European countries more than others, will limit public investment and the possibilities for good project implementation at the urban level.

Taking care of people’s health and well-being, setting the conditions to assure urban safety, broad accessibility, beauty and high-quality standards has represented one, if not *the*, main goal of urbanism as a discipline, as we conceive it today. Thus, talking about the active city means dealing with the very essence of urbanity, trying to better investigate, understand in detail and actualize policies, programs and projects that are capable of creating more sustainable, safer, more accessible and pleasant life environments for all.

It is a proven fact that, especially during the last few decades, scholars and researchers as well as politicians, public administrators and professionals have started to pay growing attention to the existing relations between the disciplines of urban planning and public health, recognizing the benefits that could come from joined interventions and aiming at more effective and sustainable integrated approaches to the city. A growing number of municipalities, metropolis-

es, regions around Europe, as well as in other countries, have started to implement together with architects and planners, public health professionals, sociologists and traffic engineers, policies and urban projects directly addressing people's well-being, health and active or sedentary behaviors. Surely, not every country is homogeneously following the same path, but undoubtedly new awareness is growing, and the role played by international institutions and agencies such as the World Health Organization is greatly contributing to create important networks that share common issues, expected goals and achievements, by developing guidelines and actions for intervention.

Urban planning and design play – or should play – a crucial role in enhancing healthy lifestyles within the city framework, promoting activeness through the organization of roads and of the transportation system, encouraging active mobility such as walking and cycling, and the use of public transport, guaranteeing people's autonomy and safe accessibility to every urban space, and designing public spaces, parks and open-air areas capable of being responsive to everybody's needs, while supporting recreation, social interaction and well-being.¹⁸

¹⁸ H. Barton, C. Tsourou, *Healthy Urban Planning: A WHO Guide to Planning for People* (London: Spon Press, 2000); M. Rao et al., "The Built Environment and Health," in *The Lancet* 370 (2007): 111-113; H. Barton, M. Grant, R. Guise, *Shaping Neighbourhoods. For Local Health and Global Sustainability* (London-New York: Routledge, 2010).