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A COLLECTION DEDICATED TO THE 15 MINUTE CITY

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**A COLLECTION
DEDICATED TO THE**

**15 minute
CITY**



UNIVERSITÉ PARIS 1 PANTHÉON SORBONNE
CHAIRE ETI
ENTREPRENEURIAT TERRITOIRE INNOVATION
IAE PARIS SORBONNE BUSINESS SCHOOL



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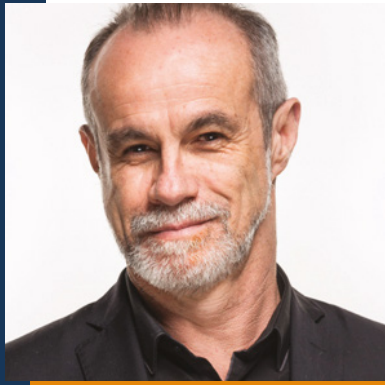
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Pr Carlos Moreno

Scientific Director and co-founder of the ETI Chair

The 15-minute city, a response to the key climate and health issues at stake in our cities and territories

All over the world, the year 2020 is proving to be a turning point, with two crises coming head to head, intertwining and raising a singular challenge for the international and local players whose responsibility it is to address them.

As the international community celebrates the five-year anniversary of the Paris Agreement and the adoption of the 2030 Agenda and its Sustainable Development Goals, the situation of the environment continues to be a concern. Readers will recall that the objective of the Paris Agreement, from which the United States withdrew in 2017, was to keep global warming from exceeding 2°C up to 2100 and achieve carbon neutrality by 2050. Five years down the line, we can only acknowledge that the changes brought about do not match the set trajectory and that the expected results have not materialised.

2020 is also shaped by the covid19 public health crisis, which is mobilising exceptional national and international forces on a global scale. The coronavirus crisis has struck the entire world and urban life, causing everything from the complete cessation of human activities and economic exchanges to the gradual reconfiguration of these in a stringent sanitary framework. This many-faceted problem has particularly affected the way cities work. The global health crisis is bringing to the surface very far-reaching questions about the social choices and urban, social and economic organisational principles best for a more sustainable and liveable future.

At the intersection between these two major crises, for the local city and territories, an urban and territorial reconfiguration is on the horizon, with the 15-minute city and the half-hour territory, making hyper-proximity the catalyst for improving quality of life. Our proposals are an echo to the needs that arise from environmental and health crises: an urban and territorial organisational scheme that limits the environmental impact of city living by significantly reducing carbon-intensive travel, where inhabitants can find responses to their essential needs near home and which, through the quality of life it offers, stirs their attachment to and well-being in their living place.

In cities, the covid-19 crisis has sped up an urban functioning mode which, with proximity, foreshadowed the “15-minute city”, when, during lockdown, limits were placed on travel and essential purchases had to be made as close as possible to home. In addition, to prevent the spread of the virus in public transport during peak hours, alternative transport solutions were swiftly put in place. All over the world, cities demonstrated their agility by deploying hundreds of kilometres of bicycle lanes, expanding restaurant terraces onto parking spaces, and initiating greening plans in neighbourhoods, to name just a few examples. Tactical urban planning proved instrumental in modifying urban expanses, quickly and at low cost. Covid-19 definitively confirmed and sped up the implementation of the 15-minute city in many places, by enabling people to rediscover proximity, encouraging the use of active mobility and strengthening social ties.

It was in this spirit that the mayors of the C40, the Global Network of Cities for the Climate, incorporated the 15-minute city into their common agenda¹, adopted to put an end to the crisis and enable a “green” recovery. The proposed measures are aimed at enabling the creation of jobs in the sustainable development sector, investments in public services, improvements to public spaces and access to nature. In short: a city that is more enjoyable, inclusive, fair and resilient. Their decision illustrated how closely interconnected cities, sustainable development and urban health are, and took the 15-minute city on board as one of their post-crisis solutions. The mayors of the

1. <https://www.c40.org/other/covid-task-force>

C40 have made clear their stance in favour of implementing an urban development policy that fosters proximity, travel by active mobility and the deployment of public service infrastructures within easy reach of inhabitants. That deployment may rely on the implementation of legal regulations, resulting in multi-functionality and flexibility in the way buildings and public spaces are used.

These dynamics show the concept's relevance and value, both as a response to a long-term environmental crisis the threat of which we still need to integrate into our daily lives, through a transformation of our ways, and as a response to an immediate crisis, which by threatening illness and death, crystallises our fears.

The concept of the 15-minute city has opened up a global debate. Its rapid spread across the globe attests to a shared enthusiasm for thinking about our living environments. A discussion has opened up, on the role of proximity in our cities and in our lives. Elected officials, experts, the media and citizens are seizing upon the subject to imagine anew their proximity-based, sustainable and desirable cities. Some of the major players who have taken position on the subject include the C40 Cities, the World Bank, the World Economic Forum, Metropolis, the International Association of French-speaking Mayors, the Association of Mayors of France and Presidents of Intermunicipalities, and more.

In a context of a climate, environmental and health crisis, the 15-minute city has thus thrown open a discussion as to what the city of tomorrow will be, and the movement which it has initiated will likely make it possible to collectively sketch out the sustainable and desirable cities of tomorrow.

This reflection process is a groundswell and this booklet dedicated to it offers perspectives, proposals and testimonials to feed the discussion and exchange.

The ETI Chair is proud to bring to the global ecosystem of the urban and territorial world this concept resulting from our research, our field work, and our reflections and own experience. I would like to thank the Mayors and local elected officials who have done us the honour of committing to this path, first of all, of course, Mrs Anne Hidalgo, Mayor of Paris, who, having adopted this concept, gave it concrete form with an ambitious mandate plan to make Paris a "Big Bang city for proximity". Other partners – community founders of the ETI Chair also committed to this path, the President of the Metropolitan Area and Mayor of Nantes, Ms Johanna Rolland, and in the Grand Est Region, Ms Michèle Lutz and Jean Rottner. We also thank the Global Network of Cities, the C40, and the Pritzker Academy, which is launching a global initiative for joint work between cities and academia. The ETI Chair thus illustrates the value of high-level research that makes it possible to explore new horizons, intersecting with the realities of our lives, to offer us new paths to walk.

01

Chrono-urbanism



Introduction

The concept of **chrono-urbanism** emerged in response to the phenomenon of desynchronisation and transience of social practices and lifestyles. Whereas urban planning is premised on anticipating long-term social behaviours, urbanism falters in cities where “agitation, mobility, urgency and speed have established themselves as the new values”. The essentially spatial zoning of urban planning schemes thus no longer seems sufficient in cities that stay in motion round the clock.

Chrono-urbanism proposes to integrate the temporal dimension into urban planning, to combine places, movements and time, i.e., the built environment, flows and schedules. According to Ascher¹, this urbanism incorporates the time variable just as it does the space variable into design and projects, responds to a need for temporal regulation at the territorial level, and imagines a temporal qualification for the various territories.

Before sensed time can be incorporated into urban planning, it is necessary to understand the rhythm of the city when the traditional opposition between day and night no longer exists. However, the range of rhythms experienced over the day and the multiplicity of social sensed times of inhabitants complicate this understanding: the city has as many rhythms as it has users/inhabitants, and to synchronise these sensed times is a major challenge.

In addition, the rhythm of the city varies depending on the time of year or week. During vacations and when inhabitants desert their cities, a lean season sets in, when places too take a recess: the space left open fosters a temporary evolution. In this sense, the seasons have an impact on urban rhythms. This observation of the shift in collective rhythms can be transposed to the variation between work week and weekend, and even day/evening. Thus, it is the image of a flexible, mutable city, able to adapt to temporal shifts and accommodate the change taking shape that lies under the term “chrono-urbanism”.

In approaching the city as a complex spatio-temporal system, via chrono-urbanism, the aim is therefore to adapt the space and development principles so that users and their rhythms are at the centre of the urban project. Thus arises the question of the temporal scale on which these should be calibrated. While a number of broad rhythms emerge, the question is also social: what life rhythms do we want, and what are the desirable rhythms for good living? Forced into slowdown by the Covid-19 crisis, aware of the ecological and health challenges arising from the exponential intensification of our lives, and swayed by the “slow cities” movements, always mindful of the needs of inhabitants, we appear to have made up our minds for a slower pace.

The 15-minute city runs counter to modern-day urban planning, in which planning by infrastructure has in some cases been a factor for spatial segregation, due to widespread functional specialisation. The exacerbated separation of space and time ended up pitting the two elements against one another, stripping us of something precious to urban life, and the essence of life itself: the value of Usable Time. The 15-minute city is aimed at bringing living time - usable living time - back to the centre of urban life, in order to preserve quality of life as whole. It proposes a different form of living, in which our relationship to time and, above all, time in mobility, is changed.

The 15-minute city and its usage-based urban planning, create a new urban atmosphere, which in a spirit of reform and for the long-term, addresses mobility questions through the immobility we desire.



Sonia Lavadinho

Urban anthropologist and geographer, founder of Bfluid, a research firm specialising in territorial development and sustainable mobilities

Below and above the 15-minute mark: how can we better embed the dynamics of proximity and connectedness into our inhabiting scales?

The lockdown implemented in Spring 2020 limited the perimeter of most human activity to a radius of one kilometre around the home. Unexpectedly, it provided an unparalleled opportunity in recent urban history to test out de facto and on a 1:1 scale the 15-minute city. However, those 15 minutes were more often endured than elected, carrying a spectrum of inequalities suddenly and starkly brought into view, depending on how strongly established the environment close to home was. Experienced in some cases as a welcome opportunity to slow down and enjoy the home, and in others as quite the brutal house arrest offering only drawbacks, the resulting “living laboratory” built on a global scale can be credited for bringing to light what we knew in silence, but had never really had the courage to take on as solidarity-driven members of an urban society that wants to be sustainable: not every 15 minutes are equal, and not all experiences of proximity living are equivalent.

The public health crisis which we are currently experiencing and from which we have yet to emerge, thus sharply questions the relationship between the dynamics of proximity as close as possible to home, the dynamics of connectedness that make it possible to travel elsewhere faster and farther, and the scales of inhabiting, which interlock all our living spaces, from the closest to the most remote, to form the complex patterns that weave together what we have come to call our living spheres.

From the doorstep to the metropolis, how can we inscribe the architecture of our chosen ways of inhabiting and moving about, slipping from one scale to the next and back? How can we interconnect the space-times of our everyday, both below and above the 15-minute mark? How can we compose life experiences that both make sense with regard to the necessary ecological, economic and social transitions expected in the decade ahead, and are fully desirable considering the behavioural transition that will necessarily need to precede them? For we need to realise that it is the sum of our behaviours, choices and habits in the present that will ultimately form the foundation for this city of the future which we so eagerly await. If there is to be a 15-minute city, it will necessarily arise from more systematic and asserted choices to anchor our lives in truly proximity-based dynamics.

However, it is not by proclamation that we will create a 15-minute city which people accept and want to make their own: resounding proof of this came last spring when we were all asked not to stray beyond one-kilometre around our homes and immediately felt the longing for the restriction to be lifted, not always finding, in the infamous 15-minute city, all the amenities promised to us when we signed our leases. Should we not be entitled to their enjoyment, without having to first travel kilometre upon kilometre? The thing is, we failed to read the fine print in our urban contract, drawn up with what was still the pen of the 20th century. The clause is agreed, or at least implicitly so: the right to the city, most definitely, but subject to mobility.

Pending the necessary radical reconfigurations of our living spaces (and the colossal Recovery Plan that would go along with them) in order to transform our cities to match the challenges laid bare by the virus, the burning question remains how to facilitate the constant to and fro between the proximity scales located below the 15-minute mark, and the connectedness scales, beyond it. The 21st century is resolutely urban and defined by an ever-growing process of metropolisation. It is a fact, and one that will not go away any time soon, whether we like it or not. This fact prevents us from being content with the 15-minute mark as a simple response that needs only be accepted for us to find the solution to the eminently thorny question of how to organise our schedules so that the space-times in this urban and metropolitan experience can enjoy a more sustainable architecture. It is not a matter of choosing

between the now obsolete paradigm of Speed and the revived paradigm of Urbanity, between the Functional City to which we aspired so ardently in the 1950s and the Relational City to which we now aspire for tomorrow.

If we ask people to choose - and it's as simple as starting with ourselves - the answer will come quickly, and it won't necessarily be what we expect, or even want to hear, but the product of our failing environments, especially at the scale of this first kilometre. The idea is thus not to force people to choose, and instead to architecture our choices with a more subtle hand. Keeping a certain flexibility, as does the reed, to bend without breaking: being able to oscillate comfortably between the below and the above; making this quarter of an hour neither an overly rigid demarcation nor an uncrossable threshold, and instead a fertile rim along which we will be able, always gradually but with increasing speed, to plant the seeds of our chosen mobilities. Of course, we must keep leeway to reconcile all the scales of inhabiting that enrich our lives and which we so dearly missed this past spring. Also and above all, we must increase, massively and significantly, the proportion of our default choices that fall into the fertile breeding ground of local dynamics, so that the next lockdown - if it does come - can be experienced in a way that is substantively more positive than the last. This means multiplying the opportunities to augment our propensity to naturally land on our own two feet, without even having to stop and think first. Every twice in a while, more and more frequently, and each time for a little bit longer. Not only when possible, but as soon as we want. Making the 15-minute city credible means, first, making it desirable. Our first task is to stir the Desire for the 15-minute scale. To give depth and breadth to our journeys, nourish them with a substrate rich in emotions, interactions and sociabilities, to bring pleasure to repeating this initial choice to move on our own two feet... and to remain so as often as possible throughout the day, month and year. Time and time again. Until such time as our identity as hurried urbanites becomes that of an adventurer of the nearby, in the apt words of the professional wanderer and Lausanne-based writer, Pierre Corajoud. 2020 is the year after Covid 19. Above all, it is the beginning of a new decade that will prove crucial in changing our lifestyles. Let us take it as the window of opportunity that it is to bring change to our everyday lives.

Once we have reset our urban watches through the experience of the suspended time generated by any Desire-driven dynamic, once we have reconfigured our space-times of the nearby with the Urban Quality (and billions of Euros) that we currently lend to the more remote, the question of the 15-minute city may stop being asked entirely: our default choice will have become, de facto and without our even noticing, one in favour of proximity dynamics.



Luc Gwiazdzinski

Geographer, Lecturer-researcher in development and urban planning at the University of Grenoble Alpes, former director of the IGA and head of the Master in Innovation and Territory.

Towards chronotopian urban planning and a policy of rhythms in the malleable city

The geographer is no longer the scientist in Saint-Exupéry's Little Prince, who wrote "eternal things", but a scientist forced to observe and analyse worlds in the throes of metamorphosis, more labile, fragile and temporary arrangements in a period fraught with health-related, social, economic and environmental uncertainties. The action of the developer and urban planner are naturally impacted and affected by this shift, which requires the deployment of "chronotopian urban planning" and a "policy of rhythms" for a "malleable and reversible city".

► Forgetting.

The temporal dimension has long been neglected by researchers, aediles and spatial developers, though it constitutes a major entry point for understanding and managing societies, a collective challenge essential for people, organisations and territories in terms of societal dialogue, sustainable development and quality of life. Cities are not fixed structures, but entities that evolve not only to daily, weekly, monthly, seasonal or secular rhythms, but also in accordance with events, accidents and uses that are sometimes difficult to interconnect. Our society is taking a new look at its relationships to space and time, urgency, speed, work, leisure, mobility, well-being and "nature", forcing citizens, researchers, politicians and practitioners to adapt.

► Coming to new spatio-temporal terms.

The gradual erasure of the unity of time, place and action of institutions is bringing about new hybridisations, the emergence of temporary arrangements, assemblages and configurations: the development of urban events (all-nighters, festival of lights, etc.), seasonal occupation of public spaces (Paris Seine and Surf, Christmas Markets, etc.). As struggles grow, forms of precarious housing (encampments, slums, etc.) can be seen popping up all over, alongside mass political movements (Occupy Wall Street, ZAD, Nuits debout, Yellow Vests at roundabouts, etc.) or artistic and creative appropriations that contribute to the emergence of a reversible practice of the city.

► The first advances.

Beyond these germinations, the question of time is gradually making a place for itself on the agendas of research, urban planning and public policies. In **research, dynamic representations tools, in particular, have made it possible for a "chronotopian" approach to come to light, in which the "chronotope" is defined as "places of confluence of the spatial and temporal dimensions"**. After the advances of the 1970s (variable hours, daylight saving time, school holiday calendars staggered by geographic zone, etc.), it was not until the late 1990s in Italy and the early 2000s in France, with the experiences of the time bureaus, that temporal policies were deployed. In addition to these local-level experiments, we are also seeing a certain revival of forward-looking approaches, the eruption of concepts such as reversibility, improvisation, hybridisation, the development of societal innovations and modes of intervention in the form of platforms, third places and the first steps of "tactical", "temporary" or "transitional" urban planning, stimulated by lockdown release measures.

► Chronotopian urban planning.

These first advances make it possible to reflect on “chronotopian urban planning” defined as “all the plans, structuring of schedules, and coherent actions taken across space and time that enable the optimal organisation of the technical, social and aesthetic functions of the city for a more human, accessible and hospitable metropolis”. It will explore partial ways of occupying city spaces and times and on “calendars”. It will draw on appropriate chronotopian representation tools in which the “chronotope” is defined as “confluence of the spatial and temporal dimensions”. This approach requires that the “temporal architecture” of the city and territories be conceived of as a separate expression of urban culture. It makes it possible to address concepts such as the “temporal identity and colour” that characterise a place in space and time and to establish its “temporal signature”. It requires the emergence of new professionals (“architects of time», “time managers”, “urban temporalists”, choreographers, etc.), responsible for setting the city’s sensed times to music, finding the right tempo and coming up with new “trust-based contracts”.

► **The figure of the malleable city.**

This chronotopian urban planning makes it possible to deploy the figure of “the malleable and adaptable city”, a sustainable city that can be shaped without breaking. It takes into account the permanent and multi-level scalability of uses through a reflection on the sustainable city, one of the key aims of which is to limit spatial consumption and sustain the city’s intensity by setting maximum time limits between residential places and services in urban planning documents. It is an endeavour to optimise space through versatility, modularity and alternating use of public space, buildings and the city by breaking the zoning logic in the Athens Charter. It requires the deployment of a certain number of systems: adaptable, modular and convertible urban furniture, real-time signage; “local innovation platforms”; “temporal consistency scheme” to manage territorial agendas, as well as the institution of a “high temporal quality” principle for each project. Lastly, flexibility and adaptability require that principles be asserted concurrently to prevent the emergence of new inequalities: the right to the city, participation and urban equality.

► **Towards a policy of rhythms.**

Beyond observation and analysis, rhythm is a political matter. A “policy of rhythms” - in the sense of a “specific way of flowing” - invites individuals to aim for harmony and “eurythmia”, i.e. “Positive rhythms that magnify when combined”. It offers the opportunity to reflect on the risks of saturation and imagine breathing spaces, voids, hollows and silences that are not immediately usable, non-full space-times, of which ownership will be taken in the future, potential space-times for innovation, imagination and citizen emancipation. The development of a “policy of rhythms”, combining time, productive systems and space can enable us to define a more balanced and flexible approach to development and democracy and the invention of a new urbanity, drawing on broad public debate. Faced with the risks of saturation and the prevalence of a stable and permanent metaphysics, it helps move beyond the current debate over speeding up and slowing down by calling forth the feeling dimensions, vacancy, emptiness and discontinuities so that we can properly inhabit the city.

► **A broader questioning.**

This approach makes it possible to imagine a “temporal ecology” that incorporates the feeling dimensions and urban comfort. It questions the notion of “temporary inhabiting”, “mobile” and moving inhabiting, or “habitable movement”. It forces reflection on the idea of “ephemeral and situational citizenship”, the shift from an identity of areas to an identity of traces, from a “territorial identity” to an “open and situational identity”. Lastly, the shift in relations between time, spaces and temporary inhabitants raises the question of new territorial “trust-based contracts”, even of limited duration.

This is a fine opportunity for citizens to reconquer room for manoeuvre and to take back control of our future around concepts such as quality of life and sustainable development for more human, accessible and hospitable cities.

02

Chronotopia



Introduction

How can we take up the challenge of chrono-urban planning, whereby the city is adapted to the diversity of individual rhythms, when space is restricted and limited?

The concept of chronotopia offers a response and enriches the potential of chrono-urban planning. The term refers to the shifting uses of a space depending on the time factor: the chronotopian space can accommodate different uses as time periods unfold. The village square is one example, drawing on tradition, of a chronotopian space, in that it hosts different uses depending on the time of day or year: a marketplace, a neighbourhood or village festival, a car park or a place of protest.

Proceeding from the observation that urban space is limited and urban density high, chronotopia aims to uncover realms of possibility by calling into question the uses of pre-existing places. The idea is to reflect on the rhythmic sequences of a place to reveal its potential, by multiplying its uses.

The diversification of uses within a single place offers multiple benefits:

- For individuals, these are new spaces to take over, new living spaces in which to engage in activities, enter discussion and solve problems,
- For the places' owners, chronotopia makes it possible to optimise the use of an existing facility or space.

Like chrono-urbanism, chronotopia has multiple timeframes. A given place can be used differently depending on the time of the day (car parks, classrooms, etc.), depending on the day of the week (market, school courtyard), depending on the time of the year (university, conference room, museum, seine quay), etc. Transitional urban planning also invites us to think about chronotopia on a larger space-time, for example by modifying the use of a vacant space during the pre-figuration phase of a planned permanent development.



Céline René

Project Manager
at ReSPACE

Chronotopia by ReSPACE: conceiving of the working space where space and time meet

Céline René is in charge of the development, programming and animation of the ReSPACE initiative and its community.

ReSPACE is a platform of expertise and a community of reflections on the future of workspaces and a fortiori of work.

Chronotopia. The term is a recently-born one, and enjoys a certain popularity in discourse about the “15-minute city”. The central concept in a new approach to urban development, chronotopia continues to make headway in our cities and urban spaces, at a time when our daily lives seem marked by acceleration and desynchronisation, due in part to the successive phases of lockdown entry and release. Making time and space coincide, arranging and accommodating rhythms is the response offered by chronotopia to creating a more human and accessible city for everyone.

With **ReSPACE**, we see chronotopia precisely as a renewed questioning of space, time and use around work and workplaces. The concept enables the conception of a new way of designing, building and arranging workspaces according to their use. Rather than focusing on buildings and their efficiency levels, we take into consideration the relationships, inclusion and participation of people, ways of inhabiting, occupying and taking ownership of places, depending on sensed time. What’s more, the current context created by the public health crisis has come to show that, now more than ever, we need to think about work beyond its traditional places. It is a prime opportunity to re-examine workplaces, and possibly even work itself.

So, how can workspaces include different functions depending on the time? How can we foster and facilitate certain uses of a workspace? How can we harmonise the rhythm of the individual and that of the community at work? Hereafter, we offer a number of examples and actual cases that can serve as inspiration and proof that it is possible to think of the workspace through the prism of chronotopia.

To start out, we will limit our focus to chronotopian workplaces. Also known as the multi-use workplace by design. What forms can the office take on if conceived of according to the different needs of an employee, a team or a company? How can this versatility be integrated into workplaces from the very design stage?

A recent study conducted in the UK showed that there are at least 21 activities which an average employee can carry out in the office during a working day. These activities range from collaboration to individual work, meetings and more informal interaction and conversations. Each of these activities involves a certain use of the office, a specific function. It is in this regard that a versatile and flexible space can contribute to the creation of a more inclusive, pleasant and efficient working environment.

So-called multi-purpose spaces, designed from the outset as such, are already a reality at certain companies. A great French example of an adaptable workplace, designed based on the uses and needs of employees, is the one on which the SNCF is now working. The company has created a platform of non-allocated modular workspaces and offices at 5 of its sites, fully adapted to the new working modes and the different activities which employees can carry out over the course of the day. According to studies carried out internally, these activities reflect different working rhythms: making a call in a quiet corner, having a one-on-one conversation, delivering a presentation, etc. In addition to contributing to greater savings, these dynamic spaces will also make it possible to strengthen the ties between employees and management, to bring the community to life and embody the SNCF experience beyond the physical workplace itself, by taking into account the growth of nomadism and remote working. An effective solution to real estate and organisational problems.

BNP Paribas, for example, carried out a complete restructuring of a historic building in Boulogne-Billancourt, in an operation called *Metal 57*, which is part of a broader process of repurposing iconic buildings. The existing site will be adapted to become the company's new headquarters, with new functions and multiple modular spaces, while preserving its distinctive original architecture. The project's most important feature, however, is its continuity and consistency with the urban fabric. The office is no longer a closed place that looks within, and instead open and designed as an active part of its environment, with spaces that can also be made available to passers-by. The case has even become a book: *'57 Métal, Métal 57: l'histoire d'une mutation'* (57 Metal, Metal 57: the story of a mutation) shares a bit about the transformations of this very special site for the history of Paris.

These two initiatives thus illustrate different approaches to the creation of multi-purpose spaces, designed not only to promote the different activities related to work but also to offer an opening onto the city and greater integration with the urban fabric, and social living around these sites.

In a broader sense, a second way in which *chronotopia* can play out is that known as the *chronotopia* of work. In other words, multiple places that can serve, as one of many uses, the function of workspace. Which places can be transformed into workspaces and at what points? How can work activity be integrated into these spaces, from the very start of the design phase?

Conceiving of work as an activity beyond the spatial restrictions which its usual places (offices, headquarters, etc.) carry is also already a reality for many companies. They believe in the benefits of decoupling and freeing work from traditional office environments. Whether involving the creation of full-fledged living spaces, *ad hoc* workspaces or the implementation of bold internal policies, certain actual cases are emerging as major reference points.

We will begin with that of **Accor Hotels** Group which, seeing the logistical challenges raised by the pandemic, turned guest rooms into teleworking spaces. Since August, the Group offers rooms solely dedicated to remote working from 9 am to 6 pm in all its 250 hotels in Great Britain. The initiative was born of a simple observation, confirmed by a survey: not everyone was having an easy time working from home and the obstacles to productivity were manifold. With a large volume of rooms to offer, and in compliance with public health requirements, the Group thus decided to roll out a new service, in response to the needs of employees as well as companies.

In the field of corporate culture and bold internal policies, it is the case of **PSA** that deserves to be mentioned. Also in response to the singular period we are all experiencing, the French car manufacturer has made teleworking its new standard. Since July, at the initiative of the Human Resources Department, on-site presence will be required only 1.5 days per week for more than 40,000 employees performing activities not directly related to car production. The expected gain in space occupied is between 10% and 20%, resulting in major savings for the company, and helping drive employee motivation and well-being in the recovery after the health crisis. This bold measure illustrates that it is not only possible but also essential to conceive of work beyond the constraints of the traditional office: at home in home office mode, but also in co-working spaces, third places, etc. Rethinking work means rethinking living spaces.

At **ReSPACE**, we believe that, with our working modes turned on end, we are witnessing a real creative revolution that will redefine the working environment. *Coworking, corpworking, third places* and the like are only the beginning of a broader movement, marked by the profusion and multiplicity of work places. We have thus made it our mission to provide support to companies as they develop, and sometimes even prescribe different uses for their spaces, each for a different place, time, audience and need. Work is no longer defined by the place in which it is performed but by the type of activity conducted. Seamlessly, it will be possible to move from a head office to a third place, stopping at the home office on the way, depending on the use and need at hand. It is our mission and the task we take to heart to make this world possible.

The concept of *chronotopia* as we see it, combined with the transformations of the working world, will thus enable us to reunite with our humanity at work. By conceiving of the work space as multiple, and planning for its use by the employee-citizen, we are fully in step with the exploration conducted on "the 15-minute city", and on the evolution of our urban lifestyles. It is only by understanding the traces that we leave behind, i.e. the way we make each of these different spaces our own, that we can plot out the future of our cities, our living places, and our workplaces.

The idea is to take part in these societal changes and ensure that the future that we are building is more friendly, collaborative and creative.

With chronotopia, let's rethink the workspace!



Marco Broekman

Urban planner and architect,
and partner of BURA
urbanism (Amsterdam)

Merwede : green, car-free and mixed city district

Marco Broekman is urban planner and architect, and partner of BURA urbanism (Amsterdam). Since four years he works on the planning of Merwede, where he leads the design team of Merwede, commissioned by the Ownerscollective Merwede.

Is it possible to create a green and almost car-free area in the middle of a city that achieves high density and at the same time does not lose the living qualities of a neighborhood? The Merwede district in Utrecht tries to give a positive answer to this question. Merwede will be a unique and innovative 21st-century city district of Utrecht where approximately 12,000 people (=6000 houses) will be living in a healthy and sustainable way. The project focuses on increasing the quality of public space, strengthening the idea of city on eye level, providing enough green in public spaces, courtyards and on the roofs, reinforcing the biodiversity, creating climate adaptation conditions and introducing meeting places for social interaction. The Urban Plan for Merwede has been created by the Municipality of Utrecht together with seven other landowners. Due to this collaboration, this

24-hectare site can be developed integrally as a whole, including collective organization of for example the mobility hubs and the energy system. Within two years the first construction will start in Merwede, while the area already is being activated by current hotspots like Vechtclub, Kanaal30 and Stadstuinen, and other placemaking in public space. Merwede is part of a larger area: the Merwedekanaalzone which is being developed in phases into an area with a maximum of 10,000 houses.

► Ambitious mobility strategy for an accessible city district

Mobility is definitely one of the key aspects in the urbanization process, and especially in the case of areas with high density, like Merwede, new mobility strategies are essential to ensure a feasible project. What makes the Merwede project special regarding this topic is its almost car-free character in combination with a strong vision on sustainable forms of transportation. The main focus in this neighborhood is put on pedestrians and cyclists. We propose a low parking norm of 1 car per three households which becomes possible because we ensure good public transport connection and other mobility facilities like mobility hubs, Mobility as a Service (MaaS) and carsharing (300 cars!) and bikes available for everyone. The logistics within the area is organized through logistic hubs, a fine network of smaller paths for Light Electric Vehicles (LEV) and time slots for exceptional bigger vans. This ambitious new mobility identity increases the development potential of the area, making a larger spatial program possible. By having this car-free area, we can design spaces without the straightjacket of the car, and thus focus on essentials for a high density area, which is the quality of public space, city on eye level, green, biodiversity, climate adaptation and meeting places for social interaction. The mobility vision could be seen as time-based urbanism because it aims to decrease the amount of space being used by car mobility and logistics (both indoors as outdoors), but increasing the amount of time it will be used (using carsharing, timeslots, mix of functions etc). We call it "time makes space".

► Lively mixed area

Merwede is not a monofunctional residential area but a mixed urban area where all basic facilities are available in the vicinity, which stimulates healthy transport. The non-housing program consists of commercial and social program, in total approximately 15% of the total program. The essential services are provided within walking distance and the attractive, lively ground floor of buildings together with the design of public space encourage people to walk and cycle through the area. Within the area the program is distributed according to a 'place' oriented strategy, where the public space is divided in categories from dynamic urban squares, lively boulevard, 'local' neighborhood places to quiet green living 'streets'. Synergy between program leads to sharing of space in time and space. For example, the auditorium of the school is the neighborhood theatre in the evening. Residents and visitors have the opportunity to

do their shopping, work and sports in the neighborhood and relax at a terrace on a city square. Children will be able to attend primary or secondary school there. The current bicycle depot will be a bustling place with a market hall, restaurants, creative activities and food cultivation for the entire district and surroundings. Merwede could also be described as a self-sufficient neighborhood. But next to that Merwede is also connected to the surrounding, by two new bridges and east-west bike routes and being part of the new Merwede park along the canal. Merwede changes from being a barrier to making connections between socially different neighborhoods, making the 15-minute city concept available for more people.

▶ **A sustainable and healthy neighborhood**

Merwede aims in being as much as possible an energy-neutral area. It will have the largest underground heat and cold storage facility in the Netherlands, using water from the Merwedekanaal. The motto is 'no roof unused', and therefore, greenery and solar panels are placed on all the roofs contributing in this way a healthy and sustainable neighborhood. The 'Merwede Lab' involves residents and experts through the design of the public, collective, and private spaces while the latest technologies are being used. This ensures that the district becomes as sustainable and circular as possible. Next to that, Merwede follows the principle of the "Coulisse City", which means it combines high density with a pleasant human scale approach, focusing on micro-climate, light, wind, green and city on eye level.

▶ **Envisioning a lifestyle transition**

With the proposal for the transformation of Merwede we aim in setting the right conditions for people to adapt their behavior and lifestyle from car depended into a more sustainable and healthy way of transporting and subsequently living. Through the combination of the collective approach, the mobility strategy, the high quality of green public space, the programmatic mix and the principles of the "Coulisse City", Merwede is possible to have an intensive use of time, still leaving space for flexibility; time makes space. We acknowledge that this is a challenging assignment which requires good collaboration between various stakeholders: developers, investors, designers, companies, users and politicians. Merwede has all the ingredients of the "neighborhood of the future", but time will tell! When we start constructing in 2022, hopefully in some years we can walk around to see if our assumptions of the 15 minute city were true.



Icade

Groupe immobilier français,
filiale de la Caisse des
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Chronotopie

Icade is a founding partner of the ETI Chair and is actively working on the “15-minute city” demonstrator project which it has integrated into its own vision of the city of tomorrow. This partnership quite naturally proceeds from Icade’s policy, one of the pillars of which is to facilitate a creative dynamic, so as to generate new projects and new urban innovation approaches.

Is chronotopia² a phenomenon of the past? Traditionally, the village square has always adapted to the days of the week and the times of day, accommodating in turn the weekly market, parking, village banquets or festivals, the mayor’s new year’s address, strolls or even play and leisure for its inhabitants. While it is relatively standard to design a public space to accommodate different uses depending on the major events in the day, designing spatial sharing at the scale of closed and private spaces within a housing or office building proves to be an entirely different challenge.

By definition, public space is shared between citizens, without restriction, without a specific purpose or type of usage defined a priori. It is thus easy to combine varied uses when they are, by definition, freely-determinable and relatively unrestricted.

The challenge today concerns places intended for a single type of use: restaurants, shops, office buildings, housing units, gyms, schools, etc. This reflection on the chronotopia and diversity of uses within a single place according to a differentiated time is more relevant than ever: in our tightly-meshed modern cities, rationalising the use of spaces is a necessity to be able to accommodate more city-dwellers while reining in the cities’ footprint.

Whether shopping, enjoying leisure time or structuring their day at work, city dwellers today are more flexible, autonomous and mobile (some might say “agile”!) than they were fifteen or twenty years ago : all this also influences their expectations of city life. These are expectations which Icade has already taken on board: our raison d’être is to design, build, manage and take ownership of blended places, where people enjoy being, working and living. Developing a neighbourhood today automatically implies providing for functional diversity, generational interaction and the end of monospecifics. Our ambition is thus to bring our buildings forward accordingly.

A few years ago, the first hybrid and modern polymorphic places known as «third places» came into being: places with no programming defined a priori, and thus genuine laboratories for urban chronotopia. We took that chance to gradually integrate into our projects spaces that can be, depending on the time of day or week, co-working spaces, restaurants, party venues, exhibition venues, training venues, and any number of building blocks going by zippy names such as biohacker spaces, workafés, repair cafés, etc.

If we think on the scale of a building, particularly office buildings, questions soon emerge as to whether the function of a space can be extended within a single day: can the company cafeteria become a meeting room? The reception desk a co-working space? The conference room a yoga space?

While such occupancy, 24/7, represents an opportunity for spatial planners, real estate developers and investors, it also offers a response to the challenges of spatial consumption (urban sprawl) and material efficiency, as well as the broader issues of climate and mobility.

2. La notion de chronotopie fait appel aux notions croisées du temps (« chronos ») et de l’espace (« topos »). Dès lors, évoquer la chronotopie dans le domaine de l’urbanisme revient à faire appel à des éléments de description et de réflexion à la fois spatiaux et temporels.

To enable it, we are seeking to implement new recomposed places and functions, to accommodate these hybridisations. Initially, we focused on the two spaces that are the easiest to occupy, in response to our requirements of versatility and modularity, namely the ground floor and the roof, which are distinctive in that they can be pooled and shared by the occupants of a building, or even open to everyone, when legislation allows. This de-specialisation of premises facilitates the neutrality of the spaces at hand and thus the integration of ancillary uses and functions which, in principle move away from a site's primary purpose.

What happens when we move from theory to practice? Projects have been carried out in recent years around the concept of the «reception area» in office buildings. Aside from the reception stand and the kitchens of the company cafeteria (difficult to modulate), these spaces, designed to be neutral and freely-determinable, can be the object of successive assemblages, with new spatial recompositions to bring to life the community of occupants and punctuate the day. Offering a smile and coffee in the morning, they can turn into shops until lunchtime, before morphing into a place for rest and work, becoming a space dedicated to sports at the end of the day and, last but not least, hosting neighbourhood associations in the evening.

What are the first lessons these projects have taught us? First of all, the success of such projects lies in the ability of the individuals to organise spontaneously, thus building a common framework, and a set of shared and often informal rules of use. Likewise, these successive occupations require a simple, adaptable and transparent legal and financial framework, and are ultimately based on collective intelligence, including soft skills and know-how.

Technical difficulties do, of course, arise, though these are surmountable:

- The design of the premises: from the outset, spaces of this kind must be designed with high ceiling - ideally accommodating two levels, facilitating compliance with safety and public usage standards.
- Storage of overlay materials, whether specific or generic, when essential to a given activity (tables and chairs, sofas, display cases, machines, miscellaneous equipment, etc.) Flow management, i.e., water and air, that meets the requirements of all partners involved; for example, water supply should be provided for in each space so that a coffee machine can be installed, air replenishment should be available throughout so as to accommodate meetings with larger numbers of participants, modular facilities (acoustic curtains, screens, modular partitions, etc.) should be preferred.

The chronotopian approach to places prompts a conception of spaces in terms of flow rather than stocks, but also in terms of temporary rather than final. It can be clearly seen that these two concepts of times and places serve spatial development. To respond to these successive occupations, they must obey the principle of solidarity and work in synergy: the interactions between place and time become, more than ever, the keys to new uses.

To usher our buildings into a new urban planning, our endeavour is indeed to combine societal and space-time connections, and to create a place for multiple uses within a day.



Rafael Luna

Assistant Professor at the Hanyang University and co-founder of the architecture firm PRAUD.

Infrastructural Duality

Rafael Luna is an assistant professor at Hanyang University and co-founder of the architecture firm PRAUD. He received a Master of Architecture from the Massachusetts Institute of Technology. Luna is the award winner of the Architectural League Prize 2013, and his work has been exhibited at the MoMA in New York, Venice Biennale, Seoul Biennale, as well as published internationally.

As originally proposed by Ildefons Cerda for the expansion plan of Barcelona in the 1850s, Urbanization is originally an infrastructural project for de-densifying city centers into an endless landscape. The expanding infrastructure paired with the mass production of the automobile ultimately led to suburban developments such as the American mono-functional Levittown in the 1950s for example, or the post-war New Towns in England or Japan. While these were mid-century planned attempts at expanding the urban field, urbanization is a continuous process regardless of planning. It can be informal slums that aggregate in the fringe with makeshift infrastructure as much as a master-planned gridded city.

The NYU Urban Expansion Program led by Schlomo Angel defines urbanization as the project of moving people from the proximity of the land to proximity to each other producing built settlements of different densities³. This process is often associated with the promise of the city offering more opportunities than the rural setting, yet the 21st infrastructural urban expansion has ultimately blurred the once definite boundary between rural and urban, as seen in the suburban patterns outside Hangzhou or Shanghai. This causes a challenge for urban efficiency as a way to provide equitable access to the same amenities regardless of location. This challenge could be tackled through the hybridization of infrastructure as a programmable architectural space that would allow a duality of use of the same structure.

Infrastructure is the ultimate public space, conceptually owned by its citizens whose taxes have paid for its maintenance and development. These are spaces that could ultimately be accessible to all at all times, especially the sprawling transportation infrastructure.

Transportation networks have to perform an engineered role of providing services for personal automotive transport and mass transit systems. Just as with other infrastructural networks, their sunken value makes them incredibly difficult to be discarded when they become outdated. Yet, smart technologies have allowed for a new understanding of their performance in order to optimize their efficiency. Studies on their use have ultimately led to cities evaluating the digitization process, these mono-functional spaces could eminently become a new breed of hybrids that might allow for adaptability of use based on time.

The duality of an infra-architectural hybrid could follow four models: first, use of the same structure at the same time for multi-functionality; second, use of the same structure for different uses at different times; third, seasonal change in use through temporal adaptations in the structure; and fourth, real time adaptable change in use through a transformable responsive structures.

► Model 1 (use at the same time)

In Atelier Bow Wow's Made in Tokyo, hybrid infrastructure is described as a result of the densification of Tokyo and the need to optimize its real estate. This produces the effect of cross-categorical typologies such as a Highway Department Store or Retaining Wall Apartments. These typologies serve a dual function at the same time as they are part of the overall network of the city's operation while their private programming provides local amenities and services. In a city like Seoul, the subway network has been hybridized as an infra-architectural space that not only works as a transportation infrastructure, but also as a catalyst for neighborhood activity within a ten-minute radius from each station. Programs as diverse as convenience stores, clinics, recreational facilities, offices, groceries,

3. <https://youtu.be/a2RaiA0RKks>

retail shopping, markets, restaurants, cafes, government services, museums, and galleries can be found inside the stations across Seoul. This effect produces an underground network that could be conceptualized as a single building, a horizontal skyscraper (floors = stations and the elevator = the train) where each level can be programmed with amenities according to the neighborhood needs. (Figure 1) As the subway system stimulates activity in the city with an annual ridership of 1.9 billion people in Seoul, the stations present a premier allocation for allowing users to commute from their home to work while providing a third space at the same time.

► **Model 2 (use at different times)**

As cities grow in density, the need for public space becomes a challenge for providing a better quality of life inside the city. Cities like New York and the Department of Transportation (DOT) have implemented a policy where all residents should have accessible public space within a ten-minute radius. This has resulted in a reduction of car lanes that have been transformed into appropriated public spaces, gradually transitioning into formal plazas. While the New York example is moving towards permanence, roads could be converted for public use not in a permanent state but temporarily through the analysis of transit data. In Seoul, for example, Sejong-daero is turned into a family-friendly plaza on certain weekends, filled with pop-up activities (figure 2). Manseon Hof in the Euljiro district of Seoul has become a popular appropriation of the street as an outdoor pub. Functioning at night, when there is less traffic, the road is filled with outdoor temporary seating changing a banal street into a beer garden. Although these are analog examples of street appropriations, through the digitization of transit data as well as pedestrian data, based on their availability more infrastructural spaces could double as public space for pop-up kiosks, impromptu events, or mobile vendor markets, for example. In this manner, the infrastructural space could allow the city to operate as a larger platform within the framework of a digital shared economy.

► **Model 3 (change through seasonal use)**

In 2014, the city of Boston was shortlisted as a potential runner to host the 2020 Olympics. This presented the opportunity to investigate a new model for a temporal adaptive reuse of the city's existing infrastructure as an Olympic village rather than a standalone Olympic Park that requires the development of new infrastructural networks⁴. The Boston Metropolitan Region has 45 higher learning institutions, some of which already have Olympic quality facilities, and dorms that become empty during the summer. While academic facilities are private, the city could form a public private partnership to provide both athletic installations and dormitories for the athletes during the summer event during the same period when university campuses are less active. This would require to envision a new Olympic venue through the grouping of institutions based on proximity and accessibility to their facilities, and only constructing supporting infrastructure that could later be reused by the community of students and neighbors. This model offers a temporal condition of mutating existing facilities that are already ingrained in the urban fabric, upgrading them to serve a specific city function while also allowing them to return to their original operations after. The failed traditional amusement park model for the Olympics and World Expos, fails to imagine the city as an existing framework for these massive events. Expos could also function in this temporal fashion, asking participants to build pavilions to be placed on urban voids around the city. Once the event is over, these pavilions could become social infrastructures serving as community center facilities. Visitors to the Expo event would then explore the city promoting the overall economy of its neighborhoods rather than a secluded mono-functional ground.

► **Model 4 (real time change of use)**

Transformable responsive environments allow for real time adaptation of space based on its users. This could be achieved through a physical transformation of the space or through its virtual response. Robotics allow for movable parts to offer an adapting response to a user, such as the 2001 Hyposurface by dECOI, or the SwissTech Convention Centre in Lausanne by RDR Architectes. Infrastructural robotics at the scale of a building such as cranes, vertical lift bridges, or car elevators could be adapted in the urban fabric to offer transformable public spaces such as the Shed by DS+R in New York.

Spaces could also be transformable through their virtuality. Augmented reality as well as virtual reality require no physical transformation of space but allow for the immediate immersive environmental response to a user's need. Architecture would become the interface for transactions and a blank canvas for operations, especially as the built environment becomes more digitally connected and analytical, always capturing and interpreting data making the

4. https://issuu.com/figureground/docs/praud_boston_olympics_february_2014

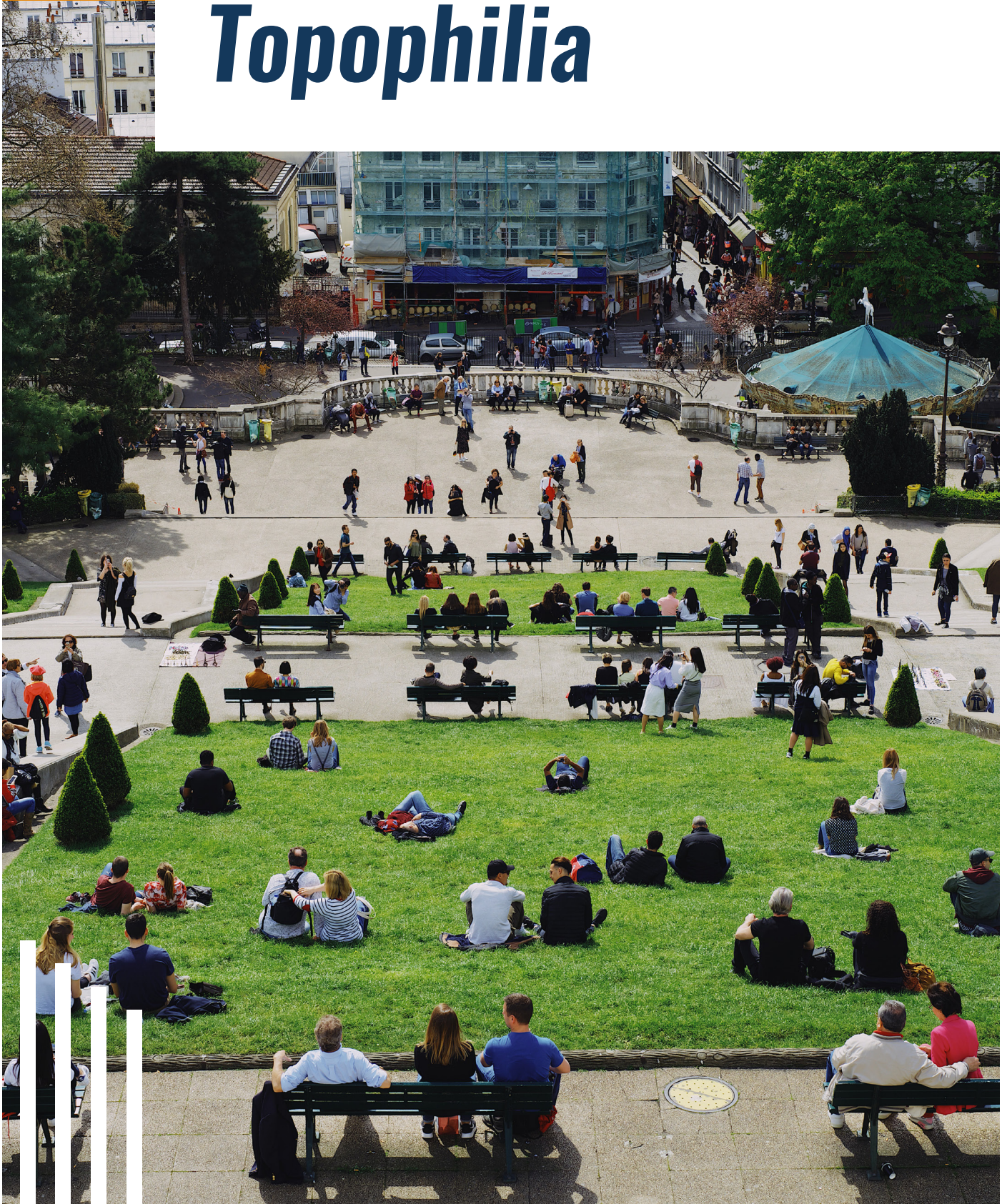
city more customizable. The infrastructural space could become a dynamic portal for virtual amenities.

While cities are trying to achieve equitable environments for its citizens, there are still discrepancies between a city's infrastructure (be it hard infrastructure, social infrastructure, or smart infrastructure) and the development of the urban fabric, sprawl and speculative developments. As presented by Sarah Williams at the Civic Data Design Lab at MIT, speculative developments in China, for example, have caused a series of ghost cities where residents lack the basic amenities to produce an active neighborhood⁵. By tackling the adaptability and hybridization of a city's infrastructure through the four models presented, urban voids could be transformed as accessible public amenities for its citizens, both from a physical typological aspect, as well as from its virtual capabilities that will enhance a digital shared economy.

5. <http://civicdatadesignlab.mit.edu/#projects/GHOST%20CITIES%20-%20BEYOND%20THE%20IMAGE>

03

Topophilia



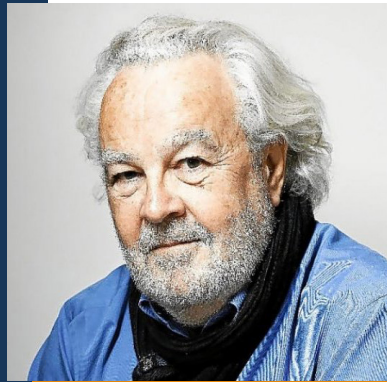
Introduction

Diversity in sensed times and uses: who and what do they serve? Inhabitants and users are the main subject of urban planning. The primary objective of implementing a chrono-urbanism and developing chronotopia is to serve inhabitants, by making their experience of their environment enjoyable and even optimal. This kind of spatio-temporal organisation requires taking into account the needs of these inhabitants/users and integrating them into the endeavour. It extends from the dynamics of consultation, involvement and usage management initiated in urban projects over the past twenty years.

Chrono-urbanism and chronotopia can help create a pleasant environment, a prospect any inhabitant would welcome. "The 15-minute city" is designed to take up these two tools to bring inhabitants closer to the functions essential to their everyday lives. It incorporates the dimensions of sharing, culture, and encounters -- in short, quality of life. The social intensity that would result from bringing together a variety of activities in spaces with multiple purposes emphasises the ambition of creating moments of collective and individual contact, places for meeting and interacting. All these elements converge towards the same goal: bringing positive emotions to the user/inhabitant.

The third concept, at the heart of the 15-minute city, is thus topophilia, literally defined as "attachment to place". At the centre of this concept lies the one's relationship to one's city and environment, and the development of an emotional - and thus subjective - bond. Enabling the development of an emotional relationship with a place is a strong ambition, the success of which depends on multiple factors.

A sustainable city, the 15-minute city also considers its relationship - and that of its inhabitants - to nature, water and biodiversity. All the research carried out shows that a densely-filled city, which has managed to incorporate nature into its spatial planning, is a city in which inhabitants scale back their "getaways" aimed at "going green" outside the city. By limiting that travel, they also limit the greenhouse gas emissions they generate. One of the aims of the 15-minute city, offering access to a full-fledged natural green space close to home, is conducive to high quality of life at the local societal level. It is part of a set of measures that make inhabitants want to take advantage of what their neighbourhood has to offer and which contribute to the development of their attachment to their neighbourhoods. For the environment and its inhabitants, greening is an important part of the 15-minute city endeavour. The pedestrianisation of streets and the deployment of cycling paths are contributing, at a pace more appreciable to inhabitants, to the integration of the environment and topophilia into urban policy.



Philippe Madec

French architect, urban planner, pioneer of eco-responsibility, and writer.

Proximity, every day and every morning

“ Slowing down means giving the stretching of time and space a value greater than any other value gained by the contraction of space and time. ”

Gilles Clément⁶

Now, to evoke a place, an environment, and to connect up living things, their habitats and their characteristics is an explainable and even mandatory approach. Yet integrating these aspects into the design of buildings and urban projects remains a battle, as it signals the end of the Modernist era and its abstract utopia. The death of Modernism is imposed on a France heir to machinism, where spatial development has been shaped by two movements: that of royal engineering school Ponts et Chaussées (18th century) and the modernist school of speed and power (20th century). Both physiocratic in essence, they are aimed at liberating trade and industry: “let do, let go”. Over the course of Modernism, we were fascinated by the infinite possibilities of machine evolution. We remained deaf to the philosophers who warned us of our enslavement and the risks of our choices for the ecological, social and economic balance of the planet. Energy management, overexploitation of the Earth, unflinching faith in the machine, accumulation, everything is tending towards an overvaluation of power. Always farther, always faster, always stronger, always whiter!

Something is changing. A frugality is emerging, as are care for resources and nature as source of inspiration, conceived of as an expression of the living. The values of humanity and reality are known and acknowledged: places, the everyday, the multiplicity of times experienced, social structure, the body, etc. For this metamorphosis, we must reject the modernist thought that previously separated beings and functions, certain that the machine would provide this tie. The dominant industrial and commercial discourse, the glorious doxa of mobility, must be complemented by a humanist narrative about slowness, proximity, land, place and neighbourhood. Mobility is no longer synonymous with freedom: forced daily displacement alienates the lives of a large part of humanity, and contributes to the deterioration of our planet. Since the 1990s “walkable cities” movement with Dan Burden⁷, Cittaslow born in 1999 of the intuition of Paolo Saturnini, mayor of Greve, in Tuscany⁸, the writings of Paul Ariès to relay these efforts⁹, the work is continuing with the long-term research conducted by Hans Thoolen in Breda¹⁰ with whom I developed the notion of the “slipper city”. And with the “15-minute city”, of course.

In 2007, with Hans Thoolen, an obvious truth came to light: the sustainable city will be a city of proximity, every day and every morning, to be experienced all around the home! All the features of the everyday will be within walking distance, in a happy frugality of movement that measures the city in minutes rather than metres; the pandemic brings water to this mill. The result is a theory linking planning, surface area, population, and a wheel of time.

First of all in Montpellier, with an experiment in new construction¹¹, and the definition of the bio-islet, a mixed-purpose, figurative neighbourhood, which identifies zones dense enough to accommodate the population of a small town, so expansive that a closely-knit everyday unfolds amply there. A spatio-temporal establishment strategy, the bio-islet varies depending on the cultures, sites and climates. It is the gene of a fractal city, its analogous figure¹²: each islet has the characteristics of the whole, only the scale and age varying. By its size and location, it combines

6. Clément Gilles, <http://www.gillesclément.com/cat-copy/lefttextes-tit-Textes-en-copyleft>

7. www.walkable.org

8. www.cittaslow.net

9. Ariès Paul, *Ralentir le ville*, éditions Golias, Villeurbanne, 2010

10. [5]- Hans Thoolen, *coordonateur de la qualité urbaine de Breda, lors du jury European 9, 2007*

11. Madec Philippe, *La ville de la pantoufle et le bio-îlot*, in *ecologiK* #95, 2008

12. Madec Philippe, *Vers une génétique urbaine*, Société des Auteurs et Gens de Lettre, Paris, 1983, et « Masséna Analogon » in *La Consultation Masséna*, éditions d'Art Albert Skira, Genève, 1996

the qualities of the village and the metropolis. From the village, it takes away a distinctive measure of diversity and a subdued temporality; through the metropolis, it enjoys a density and exceptionality that gives everyday life its flavour. Offering mediated uses, a neighbourhood logic, a place of belonging, it rounds out the abstract design of the “desterritorialized” city, through concrete aspects of localized life. Between the bio-islets green continuities come into place, for walkers, cyclists and riders, instruments of the marshy city, to counter the hardships of the city once drained, the overheated mineral environment, the aridity of which is driving biodiversity out of the cities.

Our next stop is Villeurbanne, where we can check in on an existing city. Placing a bio-islet on a city raises questions about its shortcomings as far as an appeased everyday, the possibility of better living through lower resource consumption¹³. Thinking about the ability of an area to evolve into a complex fabric, the bio-islet questions Villeurbanne about the future of its industrial and residential fabrics based on the future daily lives of its inhabitants. In a densely-meshed city, greater proximity requires the installation of polarities, the reinvention of neighbourhoods and the opening of porosities to invent cross-roads. “Reduced to 1 kilometre, [the bio-islet] becomes a living expanse enabling its inhabitants to recover the scale of everyday proximity”, conclude Julie Hamm, Cécile Barras and Mathilde Bey, “we live in complete contradiction: the more free time we have, the greater our sense that we are running out of time. [...] By offering a spatial organisation favourable to local scales in terms of services, shops, infrastructures, workplaces, leisure and culture, the city of 2050 will give all inhabitants the chance to take ownership of their life rhythms”.

Des échos à cette approche se retrouvent, notamment, dans l’urbanisme Newar de Bhaktapur en Inde, la politique des Contrats de quartier à Bruxelles en Belgique, ou celle des supermanzanas de Barcelone, en Espagne.

13. Année 07/08 du Master « Architecture Stratégie pour un Développement Durable et Équitable » de l’Ensa de Lyon - M. Dupré-Morain, E. Marre, F. Ortis, F. Torrecilla et Ph. Madec (dir.). Avec ce projet, elles sont lauréates du concours lancé par la revue *La Recherche*, l’Ademe et Generali « Objectif Ville Durable : inventer la cité de demain ».



Samoa

The urban and creative factory of the Island of Nantes

The island of Nantes, or the love of neighbourhoods!

Samoa is a local public company created at the initiative of Nantes Métropole to steer the development project for the island of Nantes, and support the development of cultural and creative industries in the metropolitan area. Its unique status and agility enable it to experiment with a new way of building cities and their uses.

The island of Nantes, historically an industrial and port city, has gradually urbanised since the 1960s, generating a composite urban landscape with a multitude of atmospheres. With the decline of the industrial era at the end of the 20th century, a large-scale urban renewal project came into being in the 2000s and contributed to transforming this 337-hectare piece of the city, at the heart of the Nantes metropolis. The project was guided by far-reaching objectives: creating a city for all, reconnecting with the Loire, developing alternative mobilities and building a new metropolitan centrality. As to the principles, they included: starting from the existing landscape, and proceeding with the utmost regard for the history and uniqueness of the sites to be transformed.

As an urban developer and economic developer of the cultural and creative sectors, Samoa is vested with a dual mission that gives it a unique status and constitutes its strength. Its multi-disciplinary team works daily alongside the inhabitants, economic players, institutions and all those who make the city, to design, plan, develop, activate and reveal the territory.

To respond to the climate and social challenges of tomorrow, Samoa questions the existing models and experiments with new ways of producing the city of tomorrow. Its action is thus guided by the desire to build a city focused on uses, commons, well-being and proximity. Over time, it has asserted a strong commitment to environmental and sustainable development, and has created a proprietary method that has become its trademark: openness to new initiatives, the desire and capacity to experiment, the tight interweaving of culture, creation and urban planning, and lastly, the important place given to citizen participation. All these principles were reaffirmed in 2020 with the Manifesto for a Sustainable Island, which serves as a guide to all the partners and identifies four guidelines that translate on the ground into concrete actions:

- the “commons” island (home to diverse groups, encouraging co-production, sparking the creation of living communities, welcoming initiatives, etc.),
- the “well-being” island (developing nature in the city, looking for quality of life at home and at work, fostering physical activity, neighbourhood life, solidarity, etc.),
- the “friendly mobility” island (fostering “walkable” island, making room for cycling, anticipating the multi-modal city, developing mobility services, etc.),
- the resilient island (making the island fertile, reusing as much as possible - both buildings and land - enabling temporary uses and scalability, developing “energy intelligence”, etc.).

De là, découle toutes les actions portées par la Samoa et ses différents partenaires, pour une ville sobre, agréable à vivre, solidaire et conviviale.

► What does this mean concretely?

To the west, in the Prairie-au-Duc district, once occupied by shipyard activities, a highly-active neighbourhood scene has taken root. The housing units now coexist with offices, schools, shops and activities, cultural venues, generous public spaces including a large urban park open to a variety of activities. Here, the attention dedicated to the everyday and to neighbourhood vitality interconnects with more open and intense metropolitan functions. The way people live in and move around the city has been completely reworked, with hyperproximity the new name of the

game, alongside attachment for the neighbourhood and the uniqueness of the places that make it up.

Special attention has been paid to the quality of housing (large, regulation-compliant 2.70-metre-high ceilings, unusual, modular through-volumes, for optimal views and natural light, etc.), and to their accessibility by all (25% social, 20% affordable, 45% free), but also to the ground floor activation policies that contribute to city liveliness and well-being. With the assistance of a single developer in charge of putting together an attractive and diverse commercial offer, 90% of the shop spaces were occupied as soon as the inhabitants and active workers arrived, thus offering numerous local services within a limited perimeter, just minutes from their homes: schools, child-care facilities, medical practices, food shops, a playground, gym, etc. as well as business premises of various types (traditional offices, co-working, business incubators, artist or craft workshops, etc.).

Looking ahead to 2026, the future République district will offer a tailor-designed, multi-functional and diverse city, the key urban principles of which will be the combination of small and large, and the development of different ways of living and working, aiming for variety in the scales of living places and neighbourhoods, from the intimate to the metropolitan. Samoa, in collaboration with the landscape architect and urban planner team Ajoa – laq (for the «Love of neighbourhoods», a name that says a lot!), takes care to promote well-being and social relations and favours short distances by integrating the essential needs of daily life: housing, working, learning, buying, entertaining, taking care of oneself. Nature meshes with the buildings (alleyways, heart of islets, squares, etc.) and the fine mesh of the urban network encourages walking or cycling. For travel outside the neighbourhood, a public transport service will be developed (tram) to limit individual car travel and thus promote a low-carbon city.



Carine Rolland

Deputy Mayor of Paris in charge of Culture and the 15-minute City

Making school the capital of the neighbourhood

Paris is a world city. Every day, millions of men and women cross paths there, as denizens, workers, terrace guests, metro users, museum visitors and shop customers.

With an average of more than 21,000 inhabitants per square kilometre, Paris is the 7th most densely-populated city in the world. This density lends Paris an unparalleled charm: everyday living here is as intense as tourism and economic activity.

This compactness is a legacy which must be defended, as it makes Paris a paradigm of a sustainable city in the face of climate change, a walkable and cyclable city, equipped with one of the most tightly-meshed public transport systems in the world, in which carbon-intensive travel can be limited.

However, this compactness is also a challenge that needs to be overcome to avoid saturation of public spaces and transport, and to maintain social cohesion.

Paris is a vibrant, lively, creative city, which looks resolutely to the future.

To defend this compact city model while preserving quality of life for Parisians, Anne Hidalgo wanted to make «the 15-minute city» a major thrust for her new term.

The aim is to make Paris the city of all proximities, by bringing public services closer to the inhabitants, supporting local shops, creating spaces for slowing, meeting others and enjoying solidarity. A city where everything is possible, just a few metro stations or bicycle stops away, and where the essentials are within reach, at the building's doorstep, or on the next street.

And in the age of ultra-globalisation and sometimes unbridled acceleration of life's rhythms, the health crisis has reminded everyone of the importance of neighbourhood life.

To make the 15-minute city a reality, in a city as constrained in terms of urban planning as Paris, we will all gain from foreseeing multiple uses for the same place and creating chronotopian places – places that evolve over the course of the day and the week.



Patrick Bloche

Deputy Mayor of Paris in charge of Education and Early Childhood, Families and New Apprenticeships

Our ambition is not to heighten the density of Paris in square metres, but to increase its density of uses. These uses include services and activities common to all of us, as well as others that remain to be defined together with inhabitants and associations in each neighbourhood.

This philosophy is one which Paris intends to apply first to schools, to make them the capitals of their neighbourhoods. Schools are the first place of socialisation for children, beyond the family. They are also an anchor for these families, regardless of where they live, and whatever their social background. Every morning and every evening, hundreds of children and parents converge towards schools which, in Paris, bear the name of the street on which they are located. We all have these first memories of school to look back on, the first lessons learned, the still vivid memory of a teacher, playing in the courtyard, eating at the cafeteria and taking part in extracurricular activities. Later, some continue as parents, through citizen involvement in the school's activities, or meeting new friends through their children's friendships.

However, when the weekend rolls around, the schools shut down. In addition, in contrast to what happens in many towns and villages in France, the school is a place for education alone, in Paris. And the drastic health protocols put in place in the context of the COVID-19 pandemic have further accentuated the closure of the schools from outside spaces.

Yet, on weekday evenings and weekends, the 650 public schools in Paris are in effect a dense network of unused courtyards and premises.

The City of Paris has thus decided to make school courtyards accessible to local residents during non-school and extracurricular hours. This move represents a complete paradigm shift, desired and driven by Anne Hidalgo.

Transforming and opening up these school courtyards is not something done on a whim, or by decree. For several years, the City of Paris has been gradually repurposing them as part of its fight against global warming: they are intended as islets of fresh air: "oasis courtyards". The concrete has been removed and replaced with plants, and creative spaces are sprouting, with paintings on the ground and bleacher seating. New oasis courtyards will be created throughout the present mayor's term, and are intended to become accessible to all.

To facilitate and encourage ownership of these spaces by all, the courtyards will be opened up gradually and the project will be built with the city's inhabitants. An initial experiment will be launched in early 2021 in the 17 districts of Paris in order to open school courtyards on weekends and offer activities in conjunction with neighbourhood associations. These courtyards will become further public spaces, a few steps from every building door, where parents will be able to play with their children in a secure environment, read, play sports, rest, or even to put together a citizen project. Concurrently, the streets adjacent to the schools will gradually be pedestrianised and planted. They will become the backdrop for new cultural, sporting and recreational activities, to be tested and determined with the local inhabitants.

Our aim by the end of the mandate is to have the schools and their surroundings become peaceful and lively green spaces, living, breathing spaces open to neighbourhood inhabitants, where not only families, but also seniors, isolated people and young people come to enjoy new places of living together.

Making the school the capital of the neighbourhood is a powerful symbol and the first step towards the 15-Minute Paris. It is around it that we will subsequently create a network of local infrastructures and services at the level of each territory. We will work with cultural and sporting venues, define new uses at the doorsteps of Paris buildings and thus draw a dynamic, friendly, more ecological and innovative city ground floor together.

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