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Conversation with Carlos Moreno: Paradigm Shift towards Proximity and Quality of Life

对话卡洛斯·莫雷诺：面向邻近性与高质量生活的范式转变

Carlos Moreno is Associate Professor at Paris IAE – Panthéon Sorbonne University, co-founder, and Scientific Director of the ETI Lab. A multi-award-winning Franco-Colombian researcher, scientist, and urbanist, he is globally renowned for pioneering the 15-minute city concept, promoting proximity, sustainability, and human-centered urban living. His work has significantly influenced urban transformations in Paris and worldwide. A member of the French Academy of Technologies, he received the prestigious Obel Award and, in November 2024, the Global Leadership Award for Sustainable Development at the UN Headquarters in New York. In June 2022, under his leadership, the ETI Lab launched the Global Observatory of Sustainable Proximity in partnership with international organizations, including UN-Habitat, C40 Cities, and United Cities and Local Governments（UCLG）.

卡洛斯·莫雷诺是巴黎索邦大学副教授、ETI Lab联合创始人兼科学主任。作为一位屡获殊荣的哥伦比亚裔法国研究员、科学家和城市规划专家，他因开创性地提出"15分钟城市"概念，倡导邻近性、可持续性及以人为本的城市生活而享誉全球。他的工作对巴黎乃至全球的城市转型都产生了重要影响。作为法国国家技术科学院院士（Académie des technologies），莫雷诺教授曾荣获著名的奥贝尔奖（Obel Award），并于2024年11月在纽约联合国总部获得了可持续发展全球领袖奖。2022年6月，在他的领导下，ETI Lab与包括联合国人居署、C40城市气候领导联盟以及世界城市和地方政府联合组织（UCLG）在内的多个国际组织合作，发起成立了全球可持续邻近性观测站（GOSP）。

Q=Question

A=Answer

Q: Prof. Moreno, you have developed the 30-minute territory/15-minute city concept for urban living, a concept meant to reduce carbon emissions and promote local growth. How did the idea come about?

莫雷诺教授，您提出了适用于城市生活的"30分钟领土/15分钟城市"概念，这一概念旨在减少碳排放并促进地方发展。这个想法是如何产生的？

A: For a long time, we have accepted those intolerable realities whether we live in big cities or small towns. By default, our concept of time is distorted in cities because we must waste so much time trying to adapt to the ridiculous layouts and long distances of most modern cities. Why is it always us who have to adapt and diminish our potential quality of life? Why isn't it the city that caters to

our needs? Why do we allow cities to go down the wrong development path for so long?

长期以来，无论我们生活在大城市还是小城镇，我们都接受了这些难以容忍的现实——在城市里，我们的时间观念被扭曲，因为我们浪费了大量时间去适应大多数现代城市荒谬的布局和漫长的出行距离。我们为什么总是不得不去适应，并降低我们潜在的生活质量？为什么不是城市来满足我们的需求？为什么我们允许城市长期走在错误的发展道路上？

What do we need to create 15-minute cities? First, we need to start asking questions that we have forgotten. For instance, we need to look harder how we use our square meters. What is that space for? Who's using it and how? We need to understand what resources we have and how they are used. Then we need to ask what services are available in the vicinity, not only in the city center, but in every vicinity. Health providers, shops, artists, markets, sports, cultural life, schools, parks, are there green areas? Are there water fountains placed to cool off during the frequent heat waves?

如何创建15分钟城市？首先，我们要提出已经被我们遗忘的一些问题。例如，我们要更认真地审视如何使用空间——这些空间用来做什么？谁在使用？如何使用？我们需要了解我们拥有哪些资源，以及如何使用这些资源。然后，我们需要问一问附近有哪些服务，不仅是在市中心，而是在每一个周边地区——是否有医疗机构、商店、艺术家、市场、运动、文化生活、学校、公园、绿地？在近年来经常出现的夏季热浪中，是否有喷泉可以降温？

Have you ever stopped to ask yourself: why does a noisy and polluted street need to be a noisy and polluted street? Just because it is? Why it can't be a garden street lined with trees, where people can actually meet and walk to the baker, and kids can walk to school? Our acceptance of these functions and modern cities' indignities has peaked. We need to change that. We need to change it for the sake of justice, our well-being, and the climate.

你有没有停下来问问自己：为什么一条嘈杂脏乱的街道就非得是这样呢？就因为它一直是这样吗？为什么它不能成为一条绿树成荫的花园街道，在那里人们可以实实在在地相聚，步行去面包店，孩子们也可以步行去上学。我们对这些城市功能以及现代城市种种不堪状况的容忍度已经达到了极限。我们需要改变这种状况。为了公平，为了我们的幸福，以及为了应对气候变化，我们需要做出改变。

It's funny if you think of it: the way many modern cities are designed is often determined by the imperative to save time, and yet so much time is lost to commuting, sitting in traffic jams, driving to a mall, in a bubble of illusory acceleration.

有点可笑的是，许多现代城市的设计方式是出于节省时间的目的，而实际上人们却在通勤、堵车、开车去大卖场等虚幻的"加速"中浪费了大量时间。

I want to propose a concept of the city that runs counter to modern urbanism and tries to bring life together in spaces that are fit for human beings rather than splitting it up into inhumanly large spaces and then forcing us to adapt. I call it the "15-minute city". In a nutshell, the idea is that cities should be designed or redesigned so that within the distance of a 15-minute walk or bike ride, people should be able to live the essence of what constitutes the urban experience, to access work, housing, food, health, education, culture, and leisure. The 15-minute city idea answers the question of saving time by turning it on its head and suggesting a different pace of life—a 15-minute pace.

我想提出一种与现代城市主义背道而驰的城市概念，试图将生活汇聚到适合人类生存的空间中，而不是将城市分割成非人性的巨大空间，然后迫使人们去适应。我称之为"15分钟城市"。简而言之，这个理念就是城市应该被设计或重新设计，以便人们在步行或骑自行车15分钟的距离范围内，能够体验到构成城市生活体验的核心要素，能够获得工作、住房、食物、医疗、教育、文化及休闲娱乐等服务。"15分钟城市"这一理念通过彻底转变思路，提出一种不同的生活节奏——15分钟的节奏，来回应节省时间的问题。

The 15-minute city is the urban revolution based on happy proximity for offering services in a city. In 2010, I realized that the most strategic issue in cities would be climate change. For a successful fight against it, we need to modify our mindset, transform our mobility, and develop

a more vibrant local economy for our neighbourhoods. In 2015, Paris hosted COP 21, and we negotiated the Paris Agreement. In 2016, I proposed this concept for the first time to develop an urban revolution: proximity within the 15-minute city and 30-minute territory as the best vector for reconciling sustainability, reducing our carbon footprint, and fostering our local economy and local employment while rebuilding social links in cities and neighbourhoods. It's about the transition from a decarbonized world toward a greener, thriving neighborhood for human-centered urbanism.

"15分钟城市"是一场基于邻近性、为城市中提供各类服务的城市革命。在2010年，我意识到城市中最具战略性的问题将会是气候变化。为了成功应对这一问题，我们需要改变思维方式，转变出行方式，并为社区培育出更具活力的地方经济。2015年，巴黎举办了第21届联合国气候变化大会（COP 21），我们就《巴黎协定》进行了协商。2016年，我首次提出这一概念，以发起一场城市革命："15分钟城市"及"30分钟领土"内的邻近性，是协调可持续发展，减少我们的碳足迹，促进地方经济和本地就业，同时重建城市及社区社会联系的最佳途径。这关系到从一个减碳化的世界向一个更加绿色、繁荣的街区过渡，实现以人为本的城市化。

The 15-minute city attempts to reconcile the city with the humans that live in it. The 15-minute city should have three key features. First, the rhythm of the city should follow humans, not cars. Second, each square meter should serve many different purposes. Finally, neighborhoods should be designed so that we can live, work, and thrive in them without having to constantly commute elsewhere.

"15分钟城市"试图让城市与生活在其中的人们和谐共处。为此，"15分钟城市"应具备三个关键特征：一是城市的节奏应当以人而非汽车为导向；二是每平方米的空间都应具备多种不同用途；三是社区的规划设计应当能让我们在其中生活、工作并自我发展，而无需频繁前往他处通勤。

Q: How do walkability and public transportation play a role in the concept?
在这个概念中，步行适宜性和公共交通是如何发挥作用的？

A: Walkability and public transportation are pillars of mobility required to break away from car dependency, which is one of the most significant difficulties for changing our paradigm in cities today. The automotive industry lobby is very present and powerful, and at the same time, the mindset of inhabitants is totally intertwined with this idea that having a car is essential to being someone in a city; a car is not only a means for mobility in cities but a symbol of social status. It is also one of the most significant emitters of carbon emissions and fine particles that generate many diseases, as well as a source of obesity. Walkability can reduce these urban diseases, though we still need to convince people. We need to create a new human behavior to break away from this idea and transition to a city 100% for humans. Walkability and bikeability are two pillars of this transformation.?

步行适宜性和公共交通是摆脱汽车依赖所需的出行要素，对汽车的依赖是当今改变我们城市发展范式所面临的最重大难题之一。汽车行业的游说团体势力和影响力都很大。与此同时，居民观念也与"在城市里拥有一辆汽车是成为体面人物的必要条件"这一想法完全交织在一起；汽车在城市里不仅是一种出行工具，还是社会地位的象征。但它也是碳排放和导致多种疾病的细微颗粒物的最主要来源之一，还是导致肥胖的一个诱因。步行适宜性能够减少这些城市病。不过我们仍需说服大众，摆脱这种观念，我们要塑造一种人类行为的新模式，向完全以人为本的城市转变。步行适宜性和骑行适宜性是这场变革的两大支柱。

Q: When talking about the implementation, what are most essential principles?
当谈及这一理念的实施时，最基本的原则有哪些？

A: This is a good question. We need to rethink cities around the four guiding principles that are the key building blocks of the 15-minute city. We also have to ask ourselves; how do we work? Why is the place I live here

and work far away?

这是个很好的问题。我们需要围绕"15分钟城市"理念的四项基础原则来重新思考城市。我们还得问问自己：我们是如何工作的？为什么我住的地方和工作的地方相隔甚远？

First, ecology, for a green and sustainable city. Second, proximity means living within a reduced distance of other activities. Third, solidarity creates links between people. Finally, participation should actively involve citizens in the transformation of their neighborhood. Don't get me wrong. I'm not arguing for cities to become rural hamlets. Urban life is vibrant and creative. Cities are places of economic dynamism and innovation. But we must make urban life more pleasant, agile, healthy and flexible. To do so, we need to make sure everyone who lives downtown and those who live at the fringes has access to all key services within proximity.

首先是生态，旨在打造绿色且可持续发展的城市。其次是邻近性，意味着在更短的距离内就能参与其他活动。再次是团结，它能在人们之间建立起联系。最后是参与，应当让市民积极参与到所在社区的改造中来。请不要误解我的意思，我并不是主张城市变成农村的小村庄。城市生活是充满活力且富有创造力的。城市是经济活力和创新汇聚之地。但我们必须让城市生活变得更加宜人、便捷、健康和灵活。要做到这一点，我们需要确保无论是居住在市中心的人，还是住在城市边缘的人，都能就近获取所有关键服务。

To implement this concept, we need to be aware that this is a multifactorial topic. This is not only one topic. We need to manage several items in parallel to have real success. The first point is to have a long-term commitment. What is a long-term commitment? A vision, a new paradigm for the future. A new local urban plan for the city of Paris, for example, has spent three years from 2021 until 2024 voting for a new local urban plan based on this idea. Two weeks ago, the Paris City Council voted the new local urban plan: the bioclimate local urban plan. This is the new urban policy for the next 10 to 15 years based on the hyper proximities of the nature of the 15-minute city to develop the local economy, the local commerce, the local shops, develop medical services in proximity, develop affordable blooming capability by active mobility, and develop mixed users' quality in public spaces. This is the strategy for having this long-term vision with concrete measures.

要落实这一概念，我们需要意识到这是一个涉及多方面因素的议题。它并非单一的话题，我们需要同时处理好多方面工作才能真正取得成功。首要一点就是要有长期的投入。什么是长期投入？就是要有一个愿景，一种面向未来的全新范式。例如，巴黎市编制了最新版的地方规划（PLU），从2021年到2024年，耗时三年围绕这一理念对新的地方规划进行投票表决。就在两周前，巴黎市议会通过了这一新版地方规划："生物气候地方规划"（bioclimate local urban plan）。这是面向未来10到15年的城市政策，它基于"15分钟城市"自然亲近性的特点，旨在发展地方经济、地方商业、本地店铺，就近发展医疗服务，通过积极的出行方式来提升可负担的繁荣能力，并提升公共空间中混合使用者的体验质量。这就是将长期愿景与具体措施相结合的策略。

Q: Specifically, which approaches can be applied to implement?
具体而言，可以采用哪些方法来实施这一理念？

A: We need to expand the concrete transformation in this way. We have three axes for developing at the same time of implementation. The first one is the ecological measures. Good capability with the protected bike lanes, new green areas to reduce the space for diesel cars for lowering the surface for the car park to develop the new resilient climate places in the city.

我们需要通过这种方式来拓展具体的变革——在实施过程中，我们有三条同步推进的发展主线。

第一条主线是生态措施。利用受保护的自行车车道、新的绿地来减少燃油车的停放空间，从而降低停车场的面积，在城市中开发新的适应气候的场所。

The second axe is to develop more social interactions in the city. For example, opening the schoolyards during the weekend to give this place to neighbours, and transforming the streets in front of the schools for kids as the new mini park. We have 280 schools for kids in

Paris. We have transformed the streets in front of the schools as a new mini park. We will transform 300 other new streets into many paths to create intimate zones, giving this place for social interaction and social activities, to transform the roundabouts for cars in the new squares, for people to develop more cultural activities in public spaces, in the open air, to develop intergenerational activities and to develop actions for gender equity in public space.

第二条主线是在城市中促进更多的社会互动。例如，在周末开放校园，将其提供给周边居民使用，把学校门前的街道改造成供孩子们玩耍的新微型公园。在巴黎，我们有280所小学。我们已经把这些学校门前的街道改造成了新微型公园。我们还将把其他300条道路改造成小巷，以创造亲密空间，为社会交往和社会活动提供场所，改造新广场上的汽车环岛，让人们在露天公共空间开展更多文化活动，开展代际互动，并在公共空间开展性别平等行动。

And the third axe is about the economic issue, a new business model for a city. The city of Paris was based on the creation of all-day commercial property of the city of Paris. We have created a new agency, the commercial property of Paris. What is its role？It's to manage the different spots in all city for installing local commerce. Bakery, fishery, bookstores, recycling points, theatre. Bakery, fishery, bookstores, recycling points, cultural activities, repairing, artisans, handicraft, etc. The commercial property of the city of Paris is a company subsidiary of the City of Paris. We have in all the city different spots rented with a price very low, below the price of the real estate market, for installing this kind of local commerce. Each local shop is one of the points for developing this local economy and generating local employment to generate a shorter circuit to use raw materials. And in the different points, we have more possibilities, for example, for pedestrianizing streets to foster access to local shops. This is one point in the local economy.

第三条主线关乎经济问题，也就是城市的一种新商业模式。巴黎过去是以全天营业的商业地产为基础来发展经济的。我们成立了一个新机构——巴黎商业地产（commercial property of Paris）。它的作用是什么呢？它负责管理在全市设置的各个本地商业店铺，比如面包店、鱼店、书店、回收站、剧院，还有文化活动场所、修理店、手工作坊、工艺品店，等等。"巴黎商业地产"是巴黎市政府下属的一家公司。在全市各个地点，以远低于房地产市场价格的租金出租场地，用于开设这类本地商业店铺。每一家本地店铺都是发展社区经济、创造社区就业岗位的关键点之一，能形成更短的原材料使用产业链。而且分散在不同的地点，我们将有更多的可能性，例如将街道改造成步行街，以方便人们前往本地店铺购物。这就是本地经济中的一个要点。

Furthermore, Paris has created 14 incubators in all cities to foster entrepreneurship for developing companies. We have 14 incubators with different topics: digital technologies, sustainable food, medical services, tourism, and well-being. And we have located them in different places of the city. These kinds of incubators are created to promote the multi-use of buildings. For example, the incubator dedicated to a sport is located in a stadium, in the ground zero of a stadium. The incubator dedicated to tourism is located in a conventional exhibition centre. The incubator in charge of digital technologies is installed in a pool in a popular district in the north.

此外，巴黎在全市范围内设立了14个创业孵化器，以推动企业发展。我们有14个主题各异的孵化器，涵盖数字技术、可持续食品、医疗服务、旅游及健康等领域。我们把它们设置在城市的不同地区。设立这类孵化器旨在促进建筑物的多功能利用。例如，专注于体育领域的孵化器位于一座体育场内，就在体育场的地面层。专注于旅游的孵化器设在一个传统的展览中心里。负责数字技术的孵化器则被安置在城北一个大众街区的游泳馆内。

This is the third axis. A roadmap for ecology, footprint, social interactions, for having a more active neighbourhood, and different local actions for fostering economic employment. In this way of a proximity for revitalizing our city.

这就是三条主线。这是一份关乎生态、碳足迹、社会互动的路线图，旨在打造更具活力的社区，以及采取不同的本地行动来促进经济就业。通过邻近性来重振我们的城市。

Q: Not only Paris, but also other cities in France are implementing 15-minute city. In your opinion, what are the successful examples of implementation and what are the challenges encountered in the process?

不仅巴黎，法国的其他城市也在推行"15分钟城市"理念。在您看来，实施过程中有哪些成功的案例，又遇到了哪些挑战？

A: The first city to adopt the 15-minute city idea is Paris, France. In 2019 Mayor Anne Hidalgo suggested a big bang of proximity, which includes, for instance, a massive decentralization of developing new services for each of the districts, a reduction of traffic by increasing bike lanes into spaces of leisure, new economic models to encourage local shops, building more green spaces, and transform existing infrastructure. For instance, fabrication labs can be located in sports centres or schools can be turned into neighbourhood centres in the evenings. That's actually a golden rule of the 15-minute city: every square meter that's already built should be used for different things.

第一个采用"15分钟城市"理念的城市是巴黎。2019年，市长安妮·伊达尔戈（Anne Hidalgo）提出了一个"邻近性变革"的构想，这包括大规模权力下放，为每个区开发新服务；通过增加自行车道、将部分空间改造成休闲区域来减少交通流量；采用新的经济模式以鼓励本地商店；建设更多的绿地；改造现有基础设施。例如，制造工坊可以设在体育中心，或者学校在晚上可以变成社区中心。这实际上是"15分钟城市"的一条黄金法则：每一平方米的建成土地都应该有不同的用途。

The C40 Cities, the largest network of metropolises fighting against climate change, embraced this concept in 2020 — we had Buenos Aires, Montreal, Milan and other cities around the world in different continents. Given that the 15-minute city and the 30-minute territory work as a double framework, there is a vast possibility for customizing the condition of each city. Buenos Aires is totally different from Paris, which is totally different from Seoul. However, each of the three cities has developed this concept to generate its own transition pathway.

C40城市气候领导联盟，作为全球最大的致力于应对气候变化的城市网络，在2020年接纳了这一概念——我们有布宜诺斯艾利斯、蒙特利尔、米兰及世界上其他大洲的城市。鉴于"15分钟城市"和"30分钟领土"作为一个双重框架发挥作用，每个城市因地制宜的可能性是很大的。布宜诺斯艾利斯与巴黎截然不同，巴黎又与首尔全然不同。然而，这三个城市都对这一概念进行了各自发展，以形成它们自己的转型路径。

Together with UN-Habitat, United Nations, UCLG (United Cities and Local Governors), the oldest international organization of mayors, and my team, we have created the Global Observatory of Sustainable Proximity at Sorbonne University. This organisation federates around the world on the five continents regarding the best practices in implementing the 15-minute city. We have created a website, 15-minute city Initiative Explorers, for promoting and explaining the implementation process in different places around the world. Each one of the cities has a different context. For example, we have a city such as Paris, which has a high density of 120 square kilometers and 2.3 million inhabitants. This is a high density in Europe. The implementation is different in other cities in Europe.

联合国人居署、联合国、世界城市和地方政府联合组织（UCLG）还有我的团队一起，在索邦大学创建了全球可持续邻近性观察站（Global Observatory of Sustainable Proximity）。该组织汇聚了全球五大洲在实施"15分钟城市"方面的最佳实践案例。我们创建了一个名为"15分钟城市倡议探索者"的网站，用于推广并阐释这一理念在世界各地的实施过程。每座城市都有不同的情况。例如，像巴黎这样的城市，其面积为120平方公里，却有着230万居民，人口密度在欧洲处于高水平。在欧洲的其他城市，实施情况又是不一样的。

For example, Scotland, a nation belonging to the United Kingdom, is a significant territory with different cities, even small cities. The Scottish government voted in February 2023 on a strategic program in the framework of 20-minute territory. This is the strategy that we need to vote a local urban plan. This is the case in Scotland, 20-minute territory in 2023. One year later, in February 2024, they published a book on the *Guidance for the Application of the 20-Minute Territory in Different Cities and Territories in Scotland.* This is a public document, and I suggest you download both documents in the framework of the 2023 Appliance Guide. We need to give a priority, for example, for middle cities and small cities.

例如，苏格兰作为隶属于英国的一个地区，是一片有着不同城市，甚至包括诸多小城市的重要地域。苏格兰政府于2023年2月就"20分钟领土"框架下的一项战略计划进行了投票表决。这就是我们要对地方规划进行投票的策略。苏格兰的情况就是如此，在2023年推出了"20分钟领土"计划。一年之后，也就是2024年2月，他们发布了一本关于《苏格兰不同城市及区域"20分钟领土"应用指南》的书籍。这是一份公开文件，我建议你们在2023应用指南的框架下下载这两份文件。我们需要优先考虑中等城市和小城市的相关情况。

What is the difference with the city of Paris? Paris has a high density. We could ban cars because we have the capability of public transportation. In the small territories, we need to reinvent the question of mobility. We need to reduce the role of individual cars, such as diesel cars. But we need to reserve the mobility solutions. The new proposals to use, for example, electric vehicles in a shading way to propose the new public transportation as the virtual lines, developer lines and the digital lines that depend on the user's habits. We need to recreate the on-demand transport. This is real-time mobility.

与巴黎市有何不同呢？巴黎人口密度高，我们能够限制汽车出行，因为我们具备公共交通运力。而在一些小的区域，需要重新审视交通出行问题。降低燃油车等私家车的作用，但也需要保留一些交通出行解决方案。比如，要巧妙地利用电动汽车，提议将新型公共交通打造为虚拟线路、开发线路以及依据用户习惯设置的数字线路。需要重新打造按需出行的交通模式，这就是实时交通出行方式。

At the same time, in small towns or small territories, we need to reimagine new services, such as medical services, education, and cultural services, with digital technologies. In small cities, we need to imagine the question of supply to avoid people driving to a big mall. We need to recreate and regenerate the process for supplying with, for example, the truck, for going to people, for generating the new schedules, for offering in the different localities the essential things for supply. This is the case in vast territory.

与此同时，在小城镇或小区域内，需要借助数字技术重新构想诸如医疗服务、教育及文化服务等新的服务形式。在小城市，需要考虑物资供应问题，避免人们开车前往大型购物中心。重新打造和优化供应流程，例如安排货车送货上门，制定新的配送时间表，以便在不同的地方提供生活必需品。这就是广大区域面临的情况。

In other places, for example, Latin America, we have big metropolises with many informal settlements. The question in these informal settlements is different. The question is how to provide spaces for affordable housing, medical services, private schools for kids, sport activities, and green areas to fight pollution. For that, we need to establish a niche. Each city interested in implementing the 15-minute city needs to conduct a diagnostic. The first step in implementing the 15-minute city is to establish a diagnostic.

在其他地方，例如拉丁美洲，有着包含众多非正规聚居区的大都市。这些非正规聚居区面临的问题在于如何为保障性住房、医疗服务、儿童私立学校、体育活动及对抗污染的绿地提供空间。为此，我们需要找准切入点。每个有意实施"15分钟城市"理念的城市都需要进行一次现状评估。实施"15分钟城市"的第一步就是开展评估。

We have developed with my team a complete methodology for establishing a diagnostic based on six essential functions, with each one of colour. Six functions are where people live, where people work, where people supply, where people have access to medical services, where people educate, with access to schools and curricular activities, and where people enjoy. We have six essential functions: to live, to work, to supply, to care, to educate, and to enjoy. Each one of the six functions has a color.

我和我的团队已经研发出了一套完整的评估方法，该方法基于六种基本功能来开展现状评估。这六种功能分别是居民获得住房、工作、日常物品、医疗服务、教育及休闲娱乐的服务，即对应六项基本功能：居住、工作、供给、医疗、教育和休闲娱乐。这六项功能中的每一项都有对应的颜色。

We have defined a knowledge tree for each one. What does it mean to live vertically

or horizontally, what are the conditions, etc.？ Users, services, equipment, infrastructures, frequency, and people use these kinds of services for each of us. After that, we need to define the sociodemographic condition in this area. What is the demography today, tomorrow, after tomorrow？ What are the different revenues？ The price of the square meter for the real estate, rent, etc. And these are the elements necessary for this diagnostic.

我们为每一项都定义了一个知识树。垂直向或水平向的生活意味着什么，需要何种条件等等。对于我们每个人来说，使用者、服务、设备、基础设施、使用频率以及人们使用这类服务信息等都包含在内。此后，我们需要确定该地区的社会人口状况。当下、未来及更远期的人口结构情况如何？收入水平有哪些差异？房地产每平方米的价格、租金情况等。而这些都是开展这项评估所必需的要素。

After that, we need to define the profile of the people who live in this area today. Men, young couples with children, without children, teenagers, boys, girls, etc. We need to define the profile of the women alone with children, etc. We need to define the profile of people and we have developed two ways. The first one is to use geodata science and geodata analytics for matching these six functions with the accessibility today to the different services and to geolocalize for having a global picture. Where are the various services？ How do today's people access them, transport them, commute, spend time, etc.？ To localize the areas for walking or biking, etc.

我们需要确定当下居住在该地区的人员构成情况，比如性别、子女、年龄等等，以及独自抚养孩子的女性等各类人群的情况。为此我们制定了两种方法，第一种是运用地理数据科学和分析，将六种功能与当下获取不同服务的便捷程度相匹配，并进行地理定位，以便形成一个整体图景。各种服务位于何处？如今人们是如何获取及搬运这些服务，以及如何通勤、如何花费时间？还要确定适合步行或骑行等区域的所在位置。

After that, we will cross with the inhabitants' profile and design a new roadmap for developing this integrated way based on three new indicators of the quality of life. My personal well-being with my family, my social well-being with my worker colleagues and my neighbors, as well as my sustainable well-being, my footprint in my other nest. This is a complete methodology with digital and participative tools for having the opinions of people who live. This methodology is used for the high-density zones, middle towns, ruralities, etc. With this methodology, we can implement this concept in different cases, regardless of the size or the density.

然后，我们将结合居民的人员构成情况，基于三个新的生活质量指标来制定一份新的发展路线图。这三个指标分别是我与家人相处时的个人幸福感、我与同事及邻居相处时的社会幸福感，以及我的可持续幸福感。这是一套完备的方法，借助数字化和参与式工具来收集当地居民的意见。这种方法可应用于人口高密度区域、中小城镇、乡村地区等等。通过运用这套方法，我们能够在不同的情形下实施这一理念，无论区域的规模大小或人口密度高低如何。

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