urban science

MDPI

Review

Urban Compactivity Models: Screening City Trends for the Urgency of Social and Environmental Sustainability

Nadine Lobner [1,*], Paulo Castro Seixas [1], Ricardo Cunha Dias [1] and Diogo Guedes Vidal [2]

[1] Centre for Public Administration and Public Policies (CAPP), Institute of Social and Political Sciences (ISCSP), University of Lisboa, 1300-663 Lisboa, Portugal; pseixas@iscsp.ulisboa.pt (P.C.S.); rdias@iscsp.ulisboa.pt (R.C.D.)

[2] UFP Energy, Environment and Health Research Unit (FP-ENAS), University Fernando Pessoa (UFP), Praça 9 de Abril 349, 4249-004 Porto, Portugal; diogoguedesvidal@hotmail.com

* Correspondence: lobnernadine0@gmail.com

Abstract: Urban compactivity models are increasing around the globe, and sustainability has become the new buzzword. In recent decades, the focus of ecological responsibility has been shifted to the world's cities, as they are the source of excessive consumption, major waste production, social inequalities, and global imbalances of economic wealth. This literature review is a contribution to the exploration of compactivity models that urgently aim at more sustainable forms of urban land-use, habitation, and transportation and considers: (i) compact cities; (ii) the 15-minute city; (iii) eco-villages/urban villages; (iv) transit oriented development; and (v) transit-corridor-livability. In the second section, we will address the debate on the need for governing authorities and the interdependence between micro-, meso- and macro dynamics for the implementation of transformational plans on a longue-durée. The work will be concluded with the presentation of a set of questions for exploring the need for a priority shift in political decision-making, the role of leadership articulation, and socio-economic inequity under the umbrella of environmental public anthropology.

Keywords: urban compactivity models; environmental and social sustainability; bottom-up top-down interdependence; governing authorities

Citation: Lobner, N.; Seixas, P.C.; Dias, R.C.; Vidal, D.G. Urban Compactivity Models: Screening City Trends for the Urgency of Social and Environmental Sustainability. *Urban Sci.* **2021**, *5*, 83. https://doi.org/10.3390/urbansci5040083

Academic Editor: Mike Jenks

Received: 23 September 2021
Accepted: 24 October 2021
Published: 28 October 2021

1. Introduction

"The future of humanity lays in cities" Kofi Anan, 2002.

As humanity is currently coping with one of the largest ecological issues faced since the rise of modernity, namely the global COVID-19 pandemic and the ecological, sociocultural, economic, and political issues it implies, a shift in habitation and transportation modalities has taken place all over the world. Scientists of all fields are aiming to create and provide solutions to negotiate urban areas and land-use planning, and are strongly reconsidering past patterns of occupying and inhabiting the globe. Cities lie at the very core of (negative) ecological impact, considering that rapid urbanization in the past decades has led to decisive environmental consequences [1,2]. This issue has been acknowledged through the implementation of the Paris Agreement (COP 21), which aimed to tackle the increasing role of cities for environmental and societal transformations: ("Human activities in cities, are in large part responsible for the current climate change trends and dynamics") while at the same time, urban populations are vulnerable to the increasingly negative effects of climate change and air pollution mainly generated by greenhouse gas emission of transportation and heating/cooling systems [3,4]. Hence, considering that cities are at the very core of large scale climate change issues, certain trends are emerging such as urban reorganization of land use, habitation, and transportation towards high density models, fostering proximity in urban development, and sustainable energy use.

When discussing such "trends" within the framework of urban transformation, we refer to the rising movements, processes, and awareness of the need for rethinking former

city models in order to approach a more livable, sustainable, and inclusive space for all. New trends refer to a new approach to envisioning a certain lifestyle. We consider city trends as a reflection of this common movement taking place within the same time-space.

As the United Nations Human Settlements Program estimates 60% of the world's population will be living in cities by 2030, with 70 million new urban residents every year [3–5], there is no doubt that there is an urgent need to rethink previous and current modes of city habitation. This shift is a strong narrative within the Sustainable Development Goals (SDGs) of the United Nations, part of the 2030 Agenda [6], of which the 11th goal comprises sustainable cities and communities, aiming for cities to be inclusive, safe, resilient, and sustainable. The target of the 11th SDG is also to drastically reduce air pollution, waste, and ensure universal access to safe, inclusive, and accessible green and public spaces for all by 2030 [3,6,7].

By 2020, it was clear that such a shift has to be undertaken urgently. The global pandemic has led to a rethinking of human actions towards our planet, which has given rise to a number of urban trends towards more sustainable forms of living. As these trends find their roots in the past decades, mostly arising in a post-WWII scenario, and with the transition of the techno-industrial narrative towards ecological responsibility, and the 'New Ecological Paradigm' [8–10], we present the recurrent urban modes of sustainable reorganization.

Our aim is to address this matter through the following guiding research question: what are the prevailing urban science tendencies/movements to address the urgency of social and environmental sustainability?

This question helps to approach the larger issues at stake including potential (dis)advantages, (im)balances, and the role of decision makers for active change. Hence, we raise three subquestions in a later section of this work: (a) What are the (dis)advantages in terms of ecological sustainability and environmental destruction? (b) What are the balances/imbalances in terms of wealth? and (c) How can decision-makers actively engage with citizens to approach effective change on a large scale?

We will address these questions through a focused literature review with a deductive approach. A focused literature review, as applied in our paper, can be understood as a personalized plan designed to address gaps within the given knowledge in order to improve understanding of material that has not yet been mastered.

We examine the framework of Urban Compactivity Models, hypothesize that certain ones are trending, and finally provide relevant input with respect to governance, policymaking, and societal transformations within the urban space. Next, we will give a detailed description of our concrete methodological procedure.

Methodological Procedures

Methodologically, this paper is based on a literature review of the most recurrent compactivity trends within the paradigm of both neotraditional neighborhood design development and new urbanism [11,12]. The analysis of these trends is based on the gap in literature regarding solutions to governance of urban spaces through constructing a platform of interaction, inclusion, participation, and an active sustainable approach towards the future.

Through our main research question (what are the prevailing urban science tendencies/movements to address the urgency of social and environmental sustainability?) we consulted the platform 'Web of Science' as a convenient literature review source in order to find the most relevant results concerning urban compactivity models within the framework of sustainable land use and habitation. Our focus was on articles that, since the turn of the century, consider the shift in urban planning towards meeting the responsibility in the world's urban centers for environmental pollution and destruction. Even though earlier sources and agencies (pre-2000) started to tackle planetary issues through this lens around the 1980s, strongly enforced by the Brundtland Commission in 1987, and are therefore deeply engaging with the UNCED agenda 21 proposals of 1992 towards a 'more sustainable planet' [13,14], the boom since the turn of the millennium has drastically raised the envi-

ronmentally concerns which acknowledged the urgent need of re-thinking urban planning patterns. Compactivity models stand at the very core of this debate, reinforcing a narrative of establishing a responsible behavior towards our planet. When researching the results for the term 'urban compact model', the Web of Science provided 1316 results published between 2000 and 2021. These results we delimited through focusing on highly cited papers (of which we excluded scientific areas such as astronomy and quantum science technology). After these exclusions, 16 articles remained on the fore, which are embedded within the following fields (Table 1):

Table 1. Literature identified through Web of Science database.

Fields	Studies
Co2 emissions in urban areas	Wang et al. [15]; Fang et al. [16]; Zhang and Lin [17]
Transportation research and policy practices	Ding et al. [18]
Urban Heating	Kotharkar and Bagade [19]; Tan et al. [20]
Socioeconomic impacts onto the urban form	Zhou et al. [21]
Compactness vs. Sprawl	Ewing and Hamidi [22]; Ewing et al. [23]
Density	Jiao [24]; Seto et al. [25]
Urban mitigation of global climate change	Matthews et al. [26]; Creutzig et al. [27]; Hang et al. [28]
Spatial Analysis	Hong et al. [29]; Echenique et al. [30]

These articles were the first orientation that helped us to delimit the broad universe of urban transformation models with the shift of the new century in 2000, tackling the urgent need for rethinking human behavior in world's cities. Hence, we created four main categories for the matters given in order to deepen our literature review: (1) high density, (2) mixed use, (3) intermodality, and (4) social inclusion. These four categories serve as a primary guide for our article through the encounter debate between a bottom-up and top-down interdependence for active change in environmental and social sustainability matters. The kick-off for our framework has been set on these preliminary categories, through which we moved further to Jstor in order to provide a broader, and therefore more transparent, representation of urban compactivity models. The articles extracted from the Web of Science serve as a first lead for our research continuance at Jstor, which helped to create two levels of categorization (four main categories through Web of Science, and five viable and active keywords through our focused literature review in Jstor).

Hence, our four preliminary categories allowed us to tackle a specific research line within the realm of urban compactivity trends in the 21st century. Nevertheless, the articles retrieved from Web of Science merely serve for the opening of our analysis, which is deepened through the universe of articles gathered thereafter in Jstor.

With the rise of the global pandemic of covid-19, the debates on urban shifts were booming again. A fast-search on the scientific database 'Jstor' revealed 441 articles since the year 2000 concerning 'urban compactivity'. Within this universe of articles we focused on five keywords which have shown high importance in the past years for actively approaching climate change and urban forms of sustainability: (1) compact cities, (2) the 15 min city, (3) urban villages/transit villages, (4) transit oriented development, and (5) transit-corridor-livability. These keywords concern a crosscut between environmental public anthropology, behavior studies, architecture, and urban planning and strongly engage with the above outlined categories extracted from the 16 most relevant articles to be found in Web of Science. The interdisciplinary character of this realm allows one to tackle the quest of political decision-making, the role of leadership articulation, and increasing socio-economic inequity in the 21st century.

Thus, the two main sections of this work cope with (1) the five trending compactivity models as applied to urban spaces in the 21st century; and (2) a screening undertaken through the light of social (dis)advantages and eventual inequalities for community building within cities, and the need for transformational plans. Finally, further remarks will be drawn with a new set of questions for research to be continued.

In the following sections, we will draw upon our findings for providing a deep analysis of the remaining (chosen) literature in order to open up the debate about of governing authorities for a future for all.

2. Urban Transformation Trends towards Sustainability

The five most trending 'buzzwords' when city transformations of environmental responsibility are at stake are embedded within the core principles of smart growth [31]: compact cities, the 15-min city, eco-villages/urban village, transit-oriented development, and transit-corridor-livability. Urban planners, environmentalists, the real estate development community, and social scientists increasingly argue for the implementation and fusion of these models/trends, as they seem to proof to be most beneficial for the interweaving of the social, economic, and environmental dimensions [3,31–35], implying the following indicators (Figure 1).

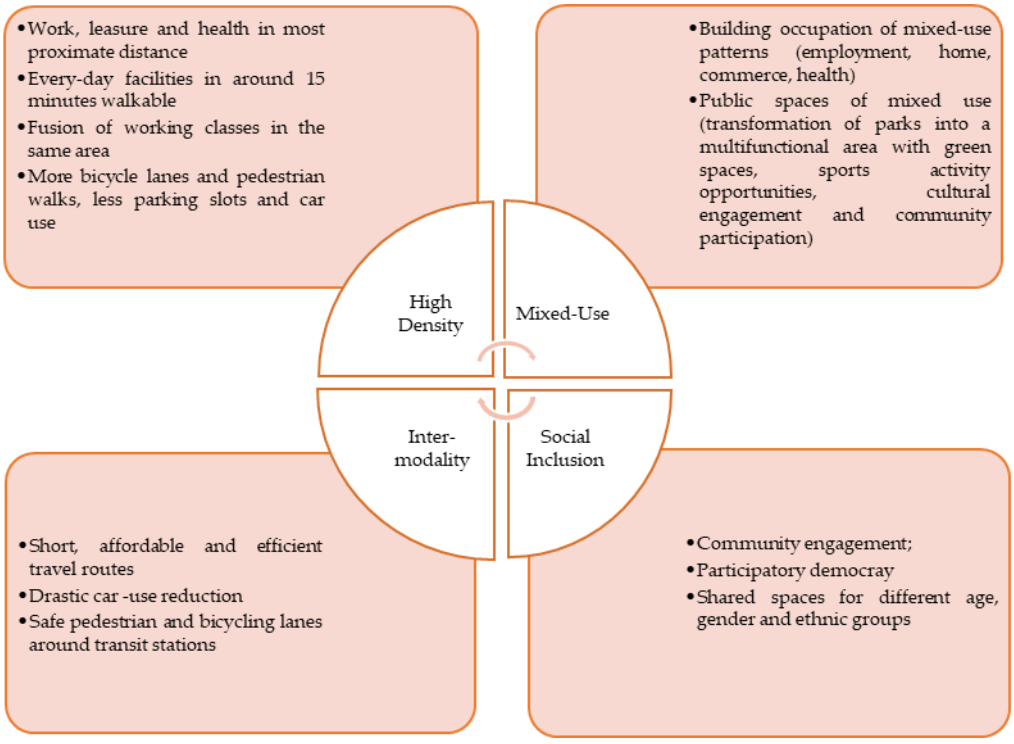

Figure 1. Modes of Compactivity. Source: Own elaboration.

As we present the above outlined compactivity models in this work (to be found within their conceptual and historical constitution), the last section of this paper consists of a deep analysis on how these trends respond to social imbalances, spatial inequity, and authority/governance. Even though critics have been raised in previous studies on compactivity, the main quest has been if planning strategies of density and mixed use (opposing to urban sprawl) are as sustainable as 'promised' by new urbanism theorists [36].

Furthermore, other critics have shown that the social inequity of urban compactivity models remains the indicator which has least improved [3,32,37]. However, a number of cases continue to focus on economic impacts and general urban planning strategies in terms of infrastructure, land use identification, and transit [38–40]. Therefore, this study is a contribution to understand the socio-environmental dimension of urban modification, proposing that transformational plans (between bottom-up and top-down/scale up governance) are needed everywhere [41]. We will look at the issue of urban compactivity through the lens of authority management for social inclusion/exclusion dynamics as a crosscut of social experiences through specific decision-making dynamics, such as participatory

democracy, the governance between authorities and other public and private stakeholders, territorial politics, and the need of municipality cooperation and associations.

2.1. Discussion

Most of the urban forms that enhance and promote a strong shift from irresponsible consumption and production towards a sustainable and resourceful use of city spaces all around the world present a certain form of 'compactivity'.

In the present day, a variety of sustainable urban concepts have evolved with the turn of neotraditional urban planning in the early 80s of the last century, even though a variety of urban environmental activists have criticized unsustainable forms of living in the city much earlier [42–44]. Also to be found under the designation of 'new urbanism', this design form aims at the transformation of cities towards environmentally sustainable and socially inclusive habitation patterns. Many of these new models of designing and thinking about the city are based on marginal transition experiences and network solutions, established from bottom-up social movements that have been incorporated into mainstream urban planning under new concepts for their potential to respond to global sustainability problems [10,45]. As cities are the source for most waste-production, air pollution, and health issues on one side. and social encounter, cultural diversity, economic growth, and political activity on the other [1,31,45,46], the complexities of a conjoint sustainable attitude for environmental and social benefits for the next generations and our planet at large need to be considered. Compactivity, as argued by urban planners, environmentalists, and urban sociologists, belongs to the most efficient and debated realms in terms of advancing sustainability in cities [3,31–35,47]. Urban compactivity is to be found within the framework of 'neotraditional development', where cities became of increasing importance in economic, political, and sociocultural quests [12,45]. With the industrial boom and the 'modern status' of the car in the 20th century, and specifically within a post-World War II scenario, urban spaces became the drivers of environmental and societal issues [8,12]. On the other hand, urban compactivity also encompasses a whole range of new trends, concepts, and development models that seek to scale up sustainable and even post-sustainable transition solutions (see the e.g., of the regenerative paradigm). Therefore, this evolution and proliferation of terms associated with the conceptual universe of urban connectivity can perhaps translate a progressive permeability of mainstream urban planning to the incorporation of transitional solutions that emerge more or less spontaneously from society.

For exploring the dimensions of this domain, and its relevance for future organizations of city spaces, the following models (Figure 2) remain on the forefront of the literature, aiming at practically answering to global environmental issues through a sustainable transformation of cities:

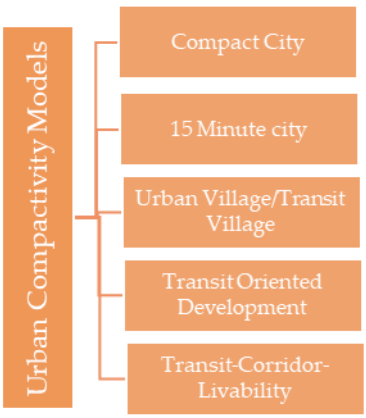

Figure 2. Trending urban compactivity models of the 21st century. Source: Own elaboration.

2.1.1. Compact City

The compact city is a model that dates back to the 1980s, with its main objective to actively and efficiently work towards global sustainability in order to drastically decrease climatic changes caused by the irresponsible human interaction with our planet [36,48]. Its initial framework has been to present a counter movement to urban sprawl for establishing more sustainable forms of urban living. The establishment of the compact city model has first been employed by the Brundtland Commission in 1987 [13] and, thereafter, significantly acknowledged by the UNCED Agenda 21 proposals in 1992 [14]. Based on this first roadmap, a common goal towards a new, sustainable urban form was established: compact cities aim to envision an 'environmentally sound, economically viable and socially beneficial' development [33,36] (p. 4). Compact cities (strongly engaging with the other models) aim at four main principles: (i) mixed land-use; (ii) high density; (iii) central area revitalization and transportation network; and (iv) easy access to services and facilities [32].

Such a multifunctional arena built for all strives economic, political, socio-cultural, and ecological benefits deriving from concentrating urban functions. This means that the compact city model encourages sustainable urban development through several dimensions: the increasing of built area and residential population densities, the intensification of urban economic, socio-cultural patterns and engagement, and the manipulation of urban size, form, structure, and settlements in order to enforce global sustainability benefits [32,33].

The indicators of urban compactness (density, transportation network, mixed land-use) are maintained through the following measures [32]: city compactness, accessibility, public transport system with cycle and pedestrian interaction, urban regeneration with the development of brownfield and greenfield land, and also public spaces.

Previous attempts to define and understand the compact city model are based on the framework of sustainable urban development applied to a polycentric urban structure, considered and applied by national urban policies on a global scale [32,33,37,49–51]. Nevertheless, its sustainability and social inclusion dynamics have been questioned earlier [36,51], where the actual implementation of the concept has been analyzed through its counter point of urban sprawl and opposing critics that enhance a relocation of the population to the 'outer areas'. Ecological recovery and improved livability remain to stand on the very core of the model's vision [33].

2.1.2. 15-Minute City

Similar to the compact city model, the 15-minute city is based on the framework of socio-cultural, environmental and local economic recovery, precisely tackling the needs and well-being of people within their neighborhoods in short walking or bike-riding distance, improving the physical as much as the environmental conditions whilst refusing further car use. First expressed was the model by Carlos Moreno in 2016, focusing on the application of the 15-minute city vision upon Paris. On the core of his idea is that the city should follow humans, not cars, aiming at the transformation of existing neighborhoods into a multiple purpose area [35,52]. Giving his speech at TED (October 2020) on the global initiative for active solutions towards the climate crisis ('Countdown'), Moreno reinforced a narrative that counteracts the usual heavy socio-economic city patterns urban livers so regularly have to accept, namely a level of dysfunction based on long commutes, noisy streets, and underutilized space. Through the promoted 15-minute city model, Moreno and the C40 network (global city network of urban visionaries) newly engaged with the concept for establishing an active force against climate change issues [35,47]. The model is based on four main pillars: proximity, diversity, density, and ubiquity [52]. On the core of the vision lay easy and fast access to healthcare facilities, schools, green areas, food supply, workplaces, public sports areas, multiethnic and multi-age encounter, mixed-use functionality through flexible spaces, roads and buildings, and the revitalization of the urban space. Followed by this rich engagement, the 15-minute city became a new buzzword during the rise of covid-19: the C40, a global network of urban visionaries, (re)enforced the concept for actively approaching climate change issues on the very core of the city [34]. Furthermore,

the model has aroused interest of several international organizations, such as UN-Habitat, WHO, and OECD [47].

As the 15-minute city draws upon neighborhood construction/re-arrangement for proximate distances with all needed facilities surrounded (health care service, workplaces, education, commerce, and more), not just the physical health is aimed to be increased, but also the psychological improvement through mixed social networking, green spaces and access to every-day needs just around the corner. Moreno et.al. [35] have framed the 15-minute city as a space for sustainability, resilience, and place identity to dissolve socio-economic inequalities and respond to the extreme global crises the planet currently finds itself in, for a post-pandemic19 future. As one of the most recent trends towards urban transformations, the model has been applied in numerous cities all over the planet. It seems to be increasingly accepted and engaged with, and in other cases extended towards a 20-minute city model and 30-minute city model [53], which includes (besides walking and bicycling) additional transit options to needed facilities, strongly declining car use and focusing on the shift to accessible, convenient, and affordable public transport options.

2.1.3. Eco Village/Urban Village

The Eco village model has its roots in the GEN (Global Ecological Network) 1995 with the vision to reorganize co-living spaces into sustainable forms of living, based upon intentional communities that are locally designed and owned for the active participation in sustainability strategies within the four main dimensions (social, cultural, ecological, economic). Ecovillages are based on the principles of sociocultural diversity and the support of the ecological environment through communitarian engagement and participatory decision-making in the domain of sustainability quests to respond to major environmental issues. The most relevant ideals reproduced by GEN are local participatory processes, an active regeneration of the natural and social environment, and the integration of socio-cultural, ecological, and economic dimensions into the system at large to actively engage with sustainability mechanisms [3] (p. 4). Strongly intertwined with the eco village model is the philosophy of permaculture, the protection of the natural environment, and drastic waste- and air pollution management [10]. The eco village is usually settled in rural areas as a 'move away' from urban modes of living. Nevertheless, in 1993, the first official urban eco-village has been established in a downtown neighborhood of Los Angeles, in the form of an 'urban demonstration project' [3] (p. 5). This establishment is based on the core principals of sustainability articulated through the urban space, re-organized urban neighborhood consumption choices, and individual-participatory decision making on reducing the global footprint whilst living in urban areas.

The urban eco village was, in the 90s (and even up to today), a rather visionary approach towards city lifestyles. It increasingly became a new trend in the western hemisphere of the world in the turn of the century. Simultaneously, in the United Kingdom, the 'urban village' has been realized based upon the analogical idea of an inevitably needed shift from previous city patterns of consumption, air pollution, and urban sprawl towards sustainable forms of living through the focus towards compactivity and community participation. The overlapping of eco village urban village concepts is an example of the incorporation of marginal experiences that were born on the fringes of society in terms of planning and formal governance [45].

This model has its roots in the 1980s in the United Kingdom with the aim to provide alternatives to common city patterns marked by urban sprawl and decentralization. The model has been introduced by the Urban Villages Group who responded to most recurrent urban issues such as strong car dependence, clear sociocultural, class, and age division, and imbalances between rich and poor neighborhoods [54]. The focus within this model also lays on high density, sustainable mixed use, accessible and affordable public transport options, and the revitalization of the public space. A strongly influencing pioneer voice some decades prior to the establishment of the Urban Villages Group has been by the urban planner Jane Jacobs, who firstly expressed the need for multi-

functional neighborhoods with the increase of mixed-use and diversity in the 1960s of the United States [42,55]. Furthermore, on the core of the urban village model are community involvement in every-day transformation and creation processes, urban design that strongly engages with transit-oriented development and pedestrian friendly zones, and, most importantly, with sustainability. Urban villages are mostly to be found in inner urban areas, built on previous land uses (mixed use inner urban sites, railway sidings, ex-industrial sites, etc.) [55]. In Homs words: "The urban village is structured around a "core" which includes the most densely occupied grounds (collective housing, business, offices...) and symbolic buildings for the community (a school, a district house, a town hall annex, a place of worship . . .). [. . .] one of the principles of the urban village is to introduce a functional diversity and a mixture of forms of soil occupation allowing socially heterogeneous individuals to live in proximity of their place of work, consumption and leisure. To reduce the movements of the individual outside his district, the "urban village" must therefore "possess" a significant holding capacity" [56].

Whilst focusing on land-use and resourceful forms of living, the urban village copes with the quest of spatial organization suitable for implementing localism with the promotion of long-term sustainability. This model is based upon the idea of a degrowth society, promoting a fundamental change in the systems at large that 'can liberate humanity from economism in order to achieve social justice, quality of life, democracy and ecological sustainability' [57], bearing in mind that the planning context of the urban area is addressed through a (re-)negotiation of space in order to establish a re-localization of the economy from the macro to the micro. The urban village is aimed to fulfill 'multi-objectives of a degrowth society by scrutinizing the impacts in the planning context' [45] (p. 130). As the urban village has a transition mode on its core, a set of indicators are to be found: reevaluation, reconceptualization, restructuring, redistribution, relocalization, reduction, reuse, and recycle [45,55,56].

This implies a shift towards local economic decision-making. Through the ideals of the decrease of long-distance transportation (with the car as the main source), the change in production lines and the increasing independency from capital flow on a macro scale, the environment is aimed at becoming recovered and protected and social local engagement is desired to become reinforced [45]. The term 'localism' is inevitable for understanding this compactivity model, as it promotes a reconquering of social forms of community building and organization within great world cities [56]. Advocates of urban villages plead for participatory democracy on the ground of multifunctional city neighborhoods, emphasizing that each neighborhood should drive its own economic decision-making strategies for re-engaging with the local economy.

2.1.4. Transit Oriented Development

By the beginning of the 21st century, a visible priority shift had taken place in urban policy making and planning. The importance of environmentally sustainable transit villages has been brought to the fore as a serious project all around the globe only by the turn of the century, aiming at 'place transit into the heart of communities in order to foster urban vibrancy', contrary to urban sprawl [58] (p. 33). This implies heavy re-negotiations of transit options in urban areas, as cities are the main source of air pollution and greenhouse gas emissions such as carbon dioxide, methane and ozone [34], even though transit-oriented development (TOD) has undergone at least two centuries of change, with remarkable transformations since the beginning of the 20th century. The model itself, in its current use, can be defined through density and sustainable transport options around future transit lines. The base of TOD is to create transit villages through the concentration of development in areas of strong public transportation. This leads to the automatic reduction of car use and the improvement of the environmental, and social and economic sectors [58].

In its historical constitution, TOD can be grasped through three major transformations. Originally being a vision for development-oriented transit in the booming era of industry and innovation, the focus was set on modifications along transit lines merely

including street cars for the wealthy population and bus lanes for the lower income classes. Such transformations aimed to connect outskirt residents to the cities, where employment and public services such as health care, high education institutions, etc. were provided, what created a certain form of a 'two-part city' (work separated from home) [58] (p. 10).

The second phase of TOD took place after World War II with growing traffic congestions due to the rise of automobile production and use as a marker for the new middle-class status [58]. The rise of the car brought the need of sufficient parking slots, whereby green-fields and brown-fields on the suburb of the city have been transformed into major parking lots, drastically occupying and destroying the natural environment that surrounded the urban area like a belt. Beside the natural impact of this TOD phase, nearby communities underwent serious isolation from the previously connected and interdependent zones between the urban and the rural, which led to new forms of social class-building and separation.

In the third phase of the model (i.e., the current one) TOD is focusing on sustainable transformations around already existing transit zones. This brings a set of opportunities to governments and decision-makers, not to mention the economic attractiveness of modifications around main transit stations, which often overshadow the social concerns within these areas. Nevertheless, one of the main principles of TOD is the reduction of household costs and environmental impact. Seven indicators can be outlined, which are understood to define the model [58,59]: compact growth organized on a regional level; transit support; that home, employment, and public services should be reachable within walking distance around the transit zone; pedestrian and biking friendly streets, connecting to local destinations; M = mixed-use, dense housing with low living costs minor environmental impact; P = preservation of the eco-system; green open spaces; a central focus on public space improvement and inclusion; and the redevelopment of existing neighborhoods which require refinement.

In the past few years, TOD has been increasingly criticized for a superficial rhetoric with little beneficial transformations for the local communities. Gentrification remains on the core of the critiques, meaning that in many cases, through the improvement of neighborhoods (in this case, around transit stations), living prices increase enormously and push existing residents of lower-income and diverse social, ethnic, and age groups away to the outskirts.

Notwithstanding, when finalizing this brief outline, it can be said that the increasing shift in transit-oriented development from merely focusing on economics, up to the social dimension and finally including the environmental one, demonstrates how 'the scope and benefits associated with these investments has expanded geographically around transit stations' [58] (p. 47) and aims to impact the actions both of local actors and governments in their every-day practices, decision making and sustainable decisions towards a more livable, ecologically responsible, and socially inclusive future.

2.1.5. Transit-Corridor-Livability

As public transport plays a relevant role in urban compactivity models, we may take one more sight to another relevant compactivity contribution: transit corridor livability (TCL). First expressed has the model been by the Transit Cooperative Research Program [60] in a handbook devoted to the design planning of urban neighborhoods based upon the ideals of walking, bicycling, and high-quality transit in mixed-income areas and promoting community building and sociocultural engagement through easy and fast access to leisure, commerce, employment and home. TCL, after the TCRP [60] enables the mobilization of the implication of compact and sustainable urban models through the following criteria: (i) a new city design where sustainable forms of mobility is increased, with a drastic reduction of individual car-use; (ii) the implementation and promotion of clean transport systems with putting the pedestrian and bike lanes into the foreground; (iii) the planning of simplified connecting points in the urban area that are reachable through a reasonable, amenable walking distance with visual stimulus.

The transit-corridor-livability model is mainly applied in mixed-use neighborhoods, envisaged through a variety of sustainable transit options such as walking, bicycling, or public transport of maximum quality with minimum time investment. Through these transit options, it is approached that social classes live in a mixed form near economic and socio-cultural opportunities, governmental services and health facilities. Through such a fusion, a decrease in social inequalities is aimed, as well as the promotion of a multigenerational and multiethnic communitarian life establishment with re-creational opportunities, yielding at health, travel, welfare and sustainability [40,60,61]. Livability can be understood as an organizing principle for when and how to engage with transportation, and to articulate land use planning strategies to decision makers.

The model is based on the vision to reduce automobile dependency, pollution, suburban sprawl, and to promote higher transit ridership, a healthier environment and a more efficient organization of public and private transportation/infrastructure investment. The idea is to link transportation and land use integration with easy, affordable, and sustainable access to livability opportunities [40,60,62].

To summarize, Table 2 demonstrates our comparison work. This aims at giving a clear insight into the similarities and differences for grounding the framework of discussing the governance of spaces in order to approach a more livable future for all.

Table 2. Urban Compactivity Model Framework.

Urban Compactivity Models	Purpose	Spatial Range/Unit	Indices	Strategies
Compact City	Global urban sustainability to drastically decrease climatic changes; envisions environmentally sound, economically viable and socially beneficial development	Urban centers of social and commercial activities	i. City compactness ii. Accessibility iii. Public transport system with cycle and pedestrian interaction iv. Urban regeneration with the development of brownfield land v. Public spaces	Increasing of built area and residential population densities, the intensification of urban economic, socio-cultural patterns and engagement, as well as the manipulation of urban size, form, structure and settlements in order to enforce global sustainability benefits
15 min city	Socio-cultural, environmental and economic recovery, precisely tackling the needs and well-being of people within their neighborhoods in short walk or bike-riding distance	Urban Neighborhoods	i. Walkable neighborhoods ii. Decrease of car use, increase of air quality iii. Economic circulation iv. Financial benefits v. Stronger community engagement	New city/neighborhood design with sustainable forms of mobility; promotion of clean transport systems with putting the pedestrian and bike lanes into the foreground; connecting points in the urban area that are reachable through a reasonable, amenable walking distance with visual stimulus
Urban Village/Transit Village	reorganizing co-living spaces into sustainable forms of living, based upon intentional communities that are locally designed and owned, for the active participation in sustainability strategies within four main dimensions (social, cultural, ecological, economic)	Inner urban areas, built on previous land uses	i. high density, ii. sustainable mixed use, iii. accessible and affordable public transport options iv. revitalization of the public space	Focus on sociocultural diversity and the support of the ecological environment through communitarian engagement and participatory decision-making; shift from previous city patterns of consumption, air pollution and urban sprawl towards sustainable forms of living; compactivity and community participation
Transit Oriented Development	Density and sustainable transport options around future transit lines	Urban Transit villages in areas of strong public transportation	i. mixed land-use; ii. high density; iii. central area revitalization; iv. easy access to services and facilities	Reduction of car use; improvement of the environmental, social and economic sectors; sustainable transformation around transit zones
Transit Corridor Livability	Different social classes should live in a mixed form near economic and socio-cultural opportunities, governmental services and health facilities	Urban neighborhoods in walking or bicycling distance, with public transport of maximum quality with minimum time investment	i. Mixed-house neighborhood ii. sustainable transit options	Decrease in social inequalities, and promotion of a multigenerational and multiethnic communitarian life establishment with re-creational opportunities

Source: Own Elaboration.

Based upon this comparison table, we will continue to analyze their purposes for governing urban spaces and to shift the focus of decision-makers to social inclusion and the balancing of economic wealth, environmental sustainability and citizen engagement.

3. Governing Urban Spaces for the Articulation of Solutions at Large

In the previous sections, we have undertaken a 'screening' of current urban compactivity trends that promote sustainable forms of city transformations. We have presented our findings as five strongly interweaving models: (i) compact cities; (ii) the 15-minute city; (iii) eco-villages/urban villages; (iv) transit oriented development; and (v) transit-corridor-livability.

Now, in this section, we use these trends to raise fundamental questions on their (dis)advantages in future applications: (a) What are the (dis)advantages in terms of ecological sustainability and environmental destruction? (b) What are the balances/imbalances in terms of wealth? (c) How can decision-makers actively engage with citizens for approaching effective change on a large scale?

When considering the implementation of multifunctional urban spaces/neighborhoods as represented through each compactivity model, several opportunities and constraints rise simultaneously. The literature has shown that current urban trends can provide significant advantages for environmental change towards apparent sustainability outputs of cities [3,32,35,56,63], considering the multiplicity of indicators that foster ecological recovery and community engagement (mixed-use housing, pedestrian friendly zones, drastic car use reduction, easy access to services and facilities, expansion and implementation of green areas, high density, etc.). However, what seems to be a gap in previous studies is how the trending urban transformations do actually create balances and imbalances in terms of constructive implementation, economic (dis)advantages (such as the issue of gentrification and profit for the wealthiest), and environmental deterioration. What needs to be strongly considered is the emerging role of governance and authority to ensure most efficient performance of sustainable urban forms of (co)living. As explored in the model of ecovillage/urban villages, a strong shift towards local economic activity has been promoted. Nevertheless, participatory and shared decision-making processes seem to be an absent realm in most of the debates. If the focus is set on the modification of a specific neighborhood only (in relation to the larger area), the sustainability and ecologic recovery of a region cannot be advanced, as these are dynamics which are interdependent with the system at large [3,32,33,56]. Even though we agree to the fact that change also has to be strongly approached from the local scale, it needs to be urged that the micro cannot function without the macro (and vice versa).

Hence, when bearing in mind the implementation of multifunctional, sustainable neighborhoods, we see it as inevitable to create an articulation between different authorities and multiple stakeholders. A balance has to be established between forms of governance in a particular area: the state, the metropolitan area, the variety of incorporated municipalities, and equally important, local communities. What needs to be enforced is the engagement and interaction between governing bodies, and eventually an association of different municipalities within a metropolitan area in order to articulate different needs on different levels, keeping ecological responsibilities and social inclusion on the very core of the debate. If the focus is set on particular neighborhoods without engaging with the entire region(s) at stake, the urgency for large-scale sustainable transformations fails to become a reality. Upscaling urban transition models implies a multilevel perspective, so that local projects can expand from niches to the transformation of dominant urban regimes [64,65]. Following this perspective, governance emerges as a critical success factor for the sustainable transformation of cities [66]. Participatory, engaged, and border-crossing decision-making needs to be a priority for new urban developments, understanding that without a proper governance between authorities at different levels of government local solutions are only temporary. 'Transition management' implies open, integrative governance and a constant mode of reflection and interaction between different visions to create a fruitful and rich cooperation arena between decision makers and actors, both public and

private. In these arenas, different stakeholders are invited to frame their shared problems with the current system and develop shared visions and goals that are tested for practicality through the use of experimentation, learning and reflexivity [67]. Bridging knowledge between contemporary identities has to become a priority of stakeholders [68].

As the earlier screened compactivity models represent the ideals of distributing space, employment, transport, education, health, commerce, aspired transformations need to be clearly negotiated and communicated. For establishing and incorporation transformational plans, the matter of 'audience' needs to be strongly re-considered. Who is the audience of urban planners and stakeholders? Is the city aimed to be a space for all income and social groups, or are the transformations of economic interest only (and, if so, are they by the municipality, by the metropolitan area, or by the state?) How is space being negotiated, and who profits from the actual shift of habitation and consumption modes? In many cases, financial output and economic gain stand on the forefront of transformation strategies [32,55].

Compactivity models, as much as they raise promising benefits and opportunities, equally involve certain disadvantages such as gentrification. Through these disadvantages, imbalances are produced in terms of wealth and leisure/employment/qualitative public service access. The restructuring of neighborhoods into a multifunctional area is often implemented in economically attractive areas, surrounded by high education standards and facilities advanced by high income classes [3]. This is being reinforced specifically through transformations which focus largely on transit-oriented development without engaging with other compactivity models with stronger social inclusion dimensions, what leads to negative side effects of an important model: environmental destruction, a lack of local community and (as mentioned earlier) gentrification through attracting an influx of wealthy businesses and residents in concrete locations, which shows the other side of the transformation coin [58]. The focus needs to be shifted from improving one particular area only. A polycentric approach for coping with a metropolitan area should strongly be taken into account, understanding that transformation merely of the economic or most profitable area of a region leads to a number of rising issues in terms of social imbalances (vivid, wealthy neighborhoods attracting high income actors opposed to disadvantaged neighborhoods and lower income groups) or ecological disadvantages (arbitrary construction of expanded transit options between economic post profitable areas; e.g., noise pollution). This is to be understood as a common result of the absence of a proper governance between authorities (as is here the case, municipalities) for approaching regional modification through a common strategy; social, ecological, and economic disadvantages need to be avoided through the equal distribution of everyday necessities in the wider metropolitan area (schools, employment, health, etc.): "Therefore, to think globally and act locally implies a certain well thought transition, which goes from the 'all-encompassing Politics' to the 'environmental Politics'" [56].

We propose that participatory democracy and shared decision-making (between bottom-up and top-down) (Figure 3) can strongly contribute to create sustainable and socio-economic solutions on a large scale, enabling a balanced, reciprocal, and communal path towards our future for establishing intrinsic change on the micro, meso, and macro level [41]. Even though, this issue of new approaches for governance strategies raises further quests, such as the one of borders, of spaces, of areas and of regions.

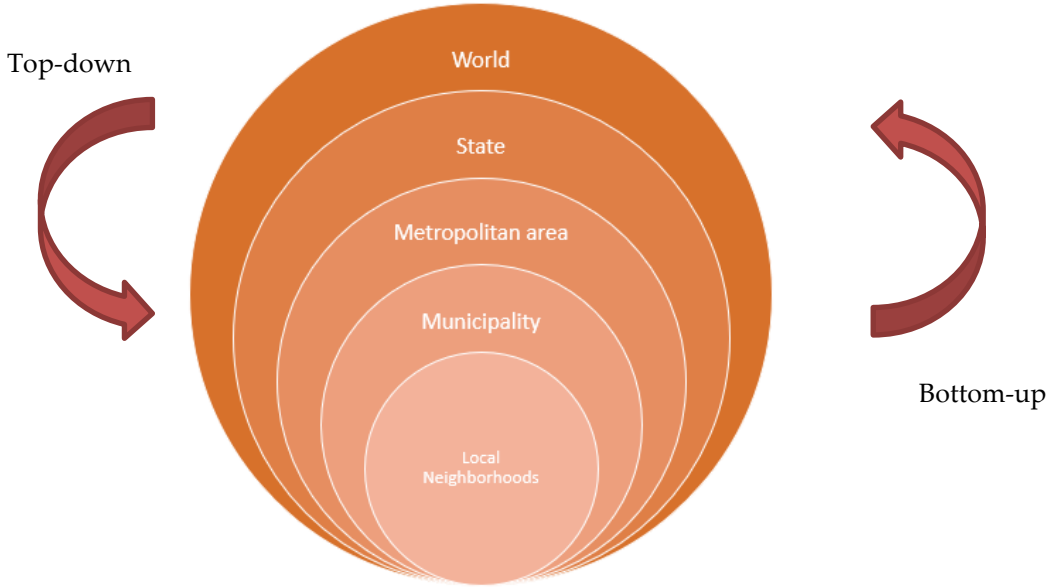

Figure 3. Articulation between authorities. Source: own elaboration.

If we consider a metropolitan area for the transformation of its municipalities and their local communities under the umbrella of the actual state, then the following is suggested: transformational plans are needed for a continuous top-down/bottom-up interaction and engagement for enabling both the local communities and the actual decision-makers to articulate (and translate) the needs for future transformations and to sensibilize each parties for their proper dimensions [32,41,56,68,69]. "The new political organization could, for instance, take the form of a confederation of autonomous groups (at regional, national, continental and world levels) aiming at the democratic transformation of their respective communities" [56].

Hence, in order to transform a particular neighborhood within specific municipality of a metropolitan area, it needs to be communicated and interrelated with the wider region. This is inevitable for providing the most efficient, sustainable, and socially and economic profitable transformations possible.

4. Conclusions and Further Remarks

Recognizing an interdependence between bottom-up and top-down dynamics for enhancing active and fruitful change, science becomes of crucial importance. Environmental public anthropology has pathed a way to approach such matters, as research aims to cope with inequalities within the socio-environmental context. Investigators must engage with change and open up to a diversity of partners for establishing a bridge to the governance of common goods. As environmental anthropology is understood as a political-scientific area, it is most suitable for envisioning a future of change, as it is committed to the recognition of participation from bottom-up for establishing a strong engagement with top-down dynamics. Research and transformational plans for safeguarding our future have to centralize the focus on the basic needs of people, embedded within the all-encompassing capabilities of the larger realm at stake (decision-makers within the framework of the state, and beyond). Local necessities have to be translated to policy- and decision-makers, deeply considering the rich diversity of ecologies of knowledge, of individual story-telling, and of diatopical hermeneutics [69,70].

Transformational plans are urged to be incorporated everywhere, and a negotiation of new (transformational) methodologies has to be implemented, as all communities and stake holders are responsible to engage with active learning entities for establishing transformation at large [41]. We propose that the framework of the SDGs should be localized, meaning that a shift has to be carried out within territorial politics so that a new

roadmap can be advanced (e.g., a monitoring of the SDGs at a subnational level, guided through appropriate counselors and bottom-up actors).

Hence, what has to be strongly acknowledged and incorporated by policy makers is the needs of different social contexts, as much as the relocation of economic priorities within political decision-making processes. If we do not urgently start to actively think about, and engage with, the future, we will fail to safeguard our planet. Stakeholders and politicians have to continuously be urged for drastic change, pinpointing the need of large participation in active change. Adjustments must be made, and bottom-up engagement is needed: transformational plans have to be implemented everywhere.

If transformation continues to be enacted exclusively in economical attractive zones (as, for instance, often the case with 15-minute city implementations), or if transit is a mere financial interest (visible in examples of transit oriented development); and if the articulation between authorities is not considered in its real importance, the compelling plan for a sustainable future of our planet continues to stand on the edge of the cliff (if not entirely fails to be realized). If we do not immediately raise attention and awareness (and more importantly, change our actions) about and towards a resourceful and rich cooperation between bottom-up and top-down, we fear that the contribution of compactivity models for recovering our planet remain a romantic narrative of theoretical exploration. Our ecological responsibility is more requested than ever, and the focus point needs to be shifted to the world's cities.

Excessive consumption, irreparable waste production, and global socio-economic imbalances have to be approached through concerted solutions, understanding the importance of cooperation between local communities, multifunctional neighborhoods, municipalities, metropolitan areas, the state, and beyond. With this work, we plead for the pressing need of governing authorities and communities for the implementation of transformation on a 'longue-durée', enabling spatial equity, environmental sustainability and responsible leadership of decision-makers. We need to continue raising critical questions on how to trigger drastic transformation at large. Who is the clientele of urban planners and policy makers? Are social actors included in decision-making processes? Where are spatial boundaries drawn, can a polycentric vision be realized? Alternatively, is gentrification the goal of state actors, to push their own economic interests forward? Can compactivity models contribute to strive for transformation, or is it just another profit-making strategy by the wealthiest of the world? These and more need to be grasped in further studies, critically reflecting upon how to most responsibly approach our future yet to come.

Author Contributions: Conceptualization, N.L. and P.C.S.; methodology, N.L. and P.C.S.; validation, N.L., P.C.S., R.C.D. and D.G.V.; formal analysis, N.L., P.C.S., R.C.D. and D.G.V.; investigation, N.L., P.C.S., R.C.D. and D.G.V.; writing—original draft preparation, N.L. and P.C.S.; writing—review and editing, N.L., P.C.S., R.C.D. and D.G.V.; visualization, N.L., P.C.S., R.C.D. and D.G.V. All authors have read and agreed to the published version of the manuscript.

Funding: Nadine Lobner, FCT doctoral fellow (BD/7467/2020) of Anthropology, Universidade de Lisboa, ISCSP/CAPP.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Oliveira, G.M.; Vidal, D.G.; Ferraz, M.P. Urban Lifestyles and Consumption Patterns. In *Sustainable Cities and Communities. Encyclopedia of the UN Sustainable Development Goals; Filho, W.L., Azul, A.M., Brandli, L., Özuyar, P.G., Wall, T., Eds.; Springer Nature*: Cham, Switzerland, 2020; pp. 851–860, ISBN 978-3-319-71061-7.
2. Maia, R.L.; Vidal, D.G.; Oliveira, G.M. Ambiente e Saúde: Uma leitura comparada a partir das estatísticas dos meios rurais e urbanos. *Obra Nasce Rev. Arquit. Univ. Fernando Pessoa* **2018**, *13*, 57–69.

3. Üçok Hughes, M. Sustainable living in the city: The case of an urban ecovillage. In *Handbook of Engaged Sustainability*; Dhiman, S., Marques, J., Eds.; Springer: Cham, Switzerland, 2018; Volume 2–2, pp. 869–883, ISBN 9783319713120.
4. World Health Organization; UN-Habitat. *Global Report on Urban Health: Equitable Healthier Cities for Sustainable Development*; World Health Organization: Geneva, Switzerland, 2016.
5. World Urbanization Prospects: The 2018 Revision. 2019. Available online: https://population.un.org/wup/Publications/Files/WUP2018-Report.pdf (accessed on 27 October 2021).
6. United Nations. *Transforming Our World: The 2030 Agenda for Sustainable Development. Resolution Adopted by the General Assembly on 25 September 2015, A/RES/70/1*; United Nations: Geneva, Switzerland, 2015.
7. Vidal, D.G.; Barros, N.; Maia, R.L. Public and Green Spaces in the Context of Sustainable Development. In *Sustainable Cities and Communities, Encyclopedia of the UN Sustainable Development Goals*; Leal Filho, W., Azul, A.M., Brandli, L., Özuyar, P.G., Wall, T., Eds.; Springer Nature: Cham, Switzerland, 2020; pp. 479–487, ISBN 978-3-319-95718-0.
8. Furuseth, O.J. Neotraditional planning: A new strategy for building neighborhoods? *Land Use Policy* **1997**, *14*, 201–213. [CrossRef]
9. Dunlap, R.E.; Van Liere, K.D.; Mertig, A.G.; Jones, R.E. Measuring Environmental Attitudes: Measuring Endorsement of the New Ecological Paradigm: A Revised NEP Scale. *J. Soc. Issues* **2000**, *56*, 425–442. [CrossRef]
10. Hopkins, R. *The Transition Handbook: From Oil Dependency to Local Resilience*; Green Books: Cambridge, UK, 2014.
11. Groch, R. *Neotraditional Neighborhood Development: A Critical Look*; University of Rhode Island: Kingston, RI, USA, 1996.
12. Jabareen, Y.R. Sustainable urban forms: Their typologies, models, and concepts. *J. Plan. Educ. Res.* **2006**, *26*, 38–52. [CrossRef]
13. Brundtland, G.H. Our Common Future—Call for Action. *Environ. Conserv.* **1987**, *14*, 291–294. [CrossRef]
14. United Nations. United Nations Conference on Environment and Development (UNCED), Earth Summit. Available online: https://sustainabledevelopment.un.org/milestones/unced (accessed on 18 June 2020).
15. Wang, Y.; Ciais, P.; Broquet, G.; Bréon, F.M.; Oda, T.; Lespinas, F.; Meijer, Y.; Loescher, A.; Janssens-Maenhout, G.; Zheng, B.; et al. A global map of emission clumps for future monitoring of fossil fuel CO_2 emissions from space. *Earth Syst. Sci. Data* **2019**, *11*, 687–703. [CrossRef]
16. Fang, C.; Wang, S.; Li, G. Changing urban forms and carbon dioxide emissions in China: A case study of 30 provincial capital cities. *Appl. Energy* **2015**, *158*, 519–531. [CrossRef]
17. Zhang, C.; Lin, Y. Panel estimation for urbanization, energy consumption and CO_2 emissions: A regional analysis in China. *Energy Policy* **2012**, *49*, 488–498. [CrossRef]
18. Ding, C.; Cao, X.; Næss, P. Applying gradient boosting decision trees to examine non-linear effects of the built environment on driving distance in Oslo. *Transp. Res. Part A Policy Pract.* **2018**, *110*, 107–117. [CrossRef]
19. Kotharkar, R.; Bagade, A. Evaluating urban heat island in the critical local climate zones of an Indian city. *Landsc. Urban Plan.* **2018**, *169*, 92–104. [CrossRef]
20. Tan, Z.; Lau, K.K.L.; Ng, E. Urban tree design approaches for mitigating daytime urban heat island effects in a high-density urban environment. *Energy Build.* **2016**, *114*, 265–274. [CrossRef]
21. Zhou, C.; Li, S.; Wang, S. Examining the Impacts of Urban Form on Air Pollution in Developing Countries: A Case Study of China's Megacities. *Int. J. Environ. Res. Public Health* **2018**, *15*, 1565. [CrossRef]
22. Ewing, R.; Hamidi, S. Compactness versus Sprawl: A Review of Recent Evidence from the United States. *J. Plan. Lit.* **2015**, *30*, 413–432. [CrossRef]
23. Ewing, R.; Meakins, G.; Hamidi, S.; Nelson, A.C. Relationship between urban sprawl and physical activity, obesity, and morbidity—Update and refinement. *Health Place* **2014**, *26*, 118–126. [CrossRef] [PubMed]
24. Jiao, L. Urban land density function: A new method to characterize urban expansion. *Landsc. Urban Plan.* **2015**, *139*, 26–39. [CrossRef]
25. Seto, K.C.; Fragkias, M.; Güneralp, B.; Reilly, M.K. A meta-analysis of global urban land expansion. *PLoS ONE* **2011**, *6*, e23777. [CrossRef]
26. Matthews, T.; Lo, A.Y.; Byrne, J.A. Reconceptualizing green infrastructure for climate change adaptation: Barriers to adoption and drivers for uptake by spatial planners. *Landsc. Urban Plan.* **2015**, *138*, 155–163. [CrossRef]
27. Creutzig, F.; Baiocchi, G.; Bierkandt, R.; Pichler, P.P.; Seto, K.C. Global typology of urban energy use and potentials for an urbanization mitigation wedge. *Proc. Natl. Acad. Sci. USA* **2015**, *112*, 6283–6288. [CrossRef]
28. Hang, J.; Li, Y.; Sandberg, M.; Buccolieri, R.; Di Sabatino, S. The influence of building height variability on pollutant dispersion and pedestrian ventilation in idealized high-rise urban areas. *Build. Environ.* **2012**, *56*, 346–360. [CrossRef]
29. Hong, J.; Shen, Q.; Zhang, L. How do built-environment factors affect travel behavior? A spatial analysis at different geographic scales. *Transportation* **2014**, *41*, 419–440. [CrossRef]
30. Echenique, M.H.; Hargreaves, A.J.; Mitchell, G.; Namdeo, A. Growing cities sustainably. *J. Am. Plan. Assoc.* **2012**, *78*, 121–137. [CrossRef]
31. Downs, A. Smart growth: Why we discuss it more than we do it. *J. Am. Plan. Assoc.* **2005**, *71*, 367–378. [CrossRef]
32. Ogrodnik, K. Indicators of the Compact City Concept—Necessary Data and the Possibility of Application. *Archit. Civ. Eng. Environ.* **2020**, *12*, 23–36. [CrossRef]
33. Bibri, S.E.; Krogstie, J.; Kärrholm, M. Compact city planning and development: Emerging practices and strategies for achieving the goals of sustainability. *Dev. Built Environ.* **2020**, *4*, 100021. [CrossRef]

34. C40 Knowledgehub. How to Build back Better with a 15-Mintue City. Available online: https://www.c40knowledgehub.org/s/article/How-to-build-back-better-with-a-15-%09minute-city?language=en_US (accessed on 20 May 2021).
35. Moreno, C.; Allam, Z.; Chabaud, D.; Gall, C.; Pratlong, F. Introducing the "15-Minute City": Sustainability, Resilience and Place Identity in Future Post-Pandemic Cities. *Smart Cities* **2021**, *4*, 93–111. [CrossRef]
36. Neuman, M. The compact city fallacy. *J. Plan. Educ. Res.* **2005**, *25*, 11–26. [CrossRef]
37. Burton, E. Measuring urban compactness in UK towns and cities. *Environ. Plan. B Plan. Des.* **2002**, *29*, 219–250. [CrossRef]
38. Burton, E.; Jenks, M.; Williams, K. *The Compact City: A Sustainable Urban Form?* Routledge: New York, NY, USA, 1996.
39. Williams, K.; Elizabeth, B.; Jenks, M. *Achieving Sustainable Urban Form*; Taylor & Francis: Boston, MA, USA, 2000.
40. Morimoto, A. *Compact City Corresponding to the Advanced Transport Systems*; Asami, Y., Higano, Y., Fukui, H., Eds.; Springer: Cham, Switzerland, 2021; pp. 277–288.
41. Seixas, P.C.; Lobner, N. Transformational Communities: A Programmatic Ambivalence as a Learning Path for the Cognitive Planet. *J. Sustain. Dev.* **2018**, *11*, 152. [CrossRef]
42. Jacobs, J. *The Death and Life of Great American Cities*; Penguin: Harmondsworth, UK, 1961.
43. Mumford, L. *The Culture of Cities*; Secker & Warburg: London, UK, 1938.
44. Barton, H.; Davis, G.; Guis, R. *Sustainable Settlements: A Guide for Planners, Designers and Developers*; University of the West of England: Bristol, UK, 1995.
45. Xue, J. Is eco-village/urban village the future of a degrowth society? An urban planner's perspective. *Ecol. Econ.* **2014**, *105*, 130–138. [CrossRef]
46. Vidal, D.G.; Maia, R.L.; Oliveira, G.M.; Pontes, M.; Barreira, E. Cities Challenges in the Contemporary Societies: Urban Sustainability and Environmental Issues. *Sociol. LINE Rev. Assoc. Port. Sociol.* **2019**, *20*, 119–138. [CrossRef]
47. C40 Knowledgehub Carlos Moreno: The 15-Minute City. Available online: https://www.c40knowledgehub.org/s/article/Carlos-Moreno-The-15-minute-%09city?language=en_US (accessed on 14 May 2021).
48. Katz, P. *The New Urbanism: Towards an Architecture of Community*; McGraw-Hill: New York, NY, USA, 1994.
49. Arbury, J. *From Urban Sprawl to Compact City—An Analysis of Urban Growth Management in Auckland*; University of Auckland: Auckland, New Zealand, 2005.
50. OECD. *Compact City Policies: A Comparative Assessment*; OECD Publishing: Paris, France, 2012.
51. Kotharkar, R.; Bahadure, P.; Sarda, N. Measuring compact urban form: A case of Nagpur city, India. *Sustainability* **2014**, *6*, 4246–4272. [CrossRef]
52. Harley, F. The Rise of the 15-Minute City. Available online: https://www.knightfrank.com/research/article/2021-03-01-the-rise-of-the-15minute-%09city (accessed on 1 March 2021).
53. Da Silva, D.C.; King, D.A.; Lemar, S. Accessibility in practice: 20-minute city as a sustainability planning goal. *Sustainability* **2020**, *12*, 129. [CrossRef]
54. Aldous, T. *Urban Villages: A Concept for Creating Mixed-Use Urban Developments on a Sustainable Scale*; Urban Villages Group: London, UK, 1992.
55. Biddulph, M.; Franklin, B.; Tait, M. *The Urban Village: A Real or Imagined Contribution to Sustainable Development?* Department of City and Regional Planning, Cardiff University: Cardiff, UK, 2002.
56. Homs, C. Localism and the City: The example of "urban villages. *Int. J. Incl. Democr.* **2007**, *3*, 1–8.
57. Martínez-Alier, J.; Pascual, U.; Vivien, F.D.; Zaccai, E. Sustainable de-growth: Mapping the context, criticisms and future prospects of an emergent paradigm. *Ecol. Econ.* **2010**, *69*, 1741–1747. [CrossRef]
58. Smith, M.E. *Moving towards a Greener Future: An Investigation of How Transit-Oriented Development Has the Potential to Redefine Cities Around Sustainability*; Scripps Senior Theses: Claremont, CA, USA, 2015.
59. Calthorpe Associates. *Transit-Oriented Development Design Guidelines*; Land Guidance System: San Diego, CA, USA, 1992.
60. Appleyard, B.; Ferrell, C.E.; Taecker, M. Transit corridor livability: Realizing the potential of transportation and land use integration. *Transp. Res. Rec.* **2017**, *2671*, 20–30. [CrossRef]
61. Lardier, H. The Compact City: A New Urban Model? Available online: https://easyelectriclife.groupe.renault.com/en/outlook/cities-%09planning/understanding-compact-cities-new-urban-model/ (accessed on 22 September 2021).
62. Seixas, P.C.; Dias, R.C.; Baptista, L.M.; Lobner, N. Transit Corridor Livability as a means to a City of Proximity. Proof of concept and place-based conditions for a participatory project in Cascais. *Urban. Inf.* **2021**, *297*, 46–52.
63. Tricarico, L.; De Vidovich, L. Proximity and post-COVID-19 urban development: Reflections from Milan, Italy. *J. Urban Manag.* **2021**, *10*, 302–310. [CrossRef]
64. Van den Bosch, S.; Rotmans, J. *Deepening, Broadening and Scaling up: A Framework for Steering Transition Experiments*; Knowledge Centre for Sustainable System Innovations and Transitions (KCT): Rotterdam, The Netherlands, 2008.
65. Lam, D.P.M.; Martín-López, B.; Wiek, A.; Bennett, E.M.; Frantzeskaki, N.; Horcea-Milcu, A.I.; Lang, D.J. Scaling the impact of sustainability initiatives: A typology of amplification processes. *Urban Transform.* **2020**, *2*, 3. [CrossRef]
66. Gorissen, L.; Spira, F.; Meynaerts, E.; Valkering, P.; Frantzeskaki, N. Moving towards systemic change? Investigating acceleration dynamics of urban sustainability transitions in the Belgian City of Genk. *J. Clean. Prod.* **2018**, *173*, 171–185. [CrossRef]
67. Lambin, E.F.; Kim, H.; Leape, J.; Lee, K. Scaling up Solutions for a Sustainability Transition. *One Earth* **2020**, *3*, 89–96. [CrossRef]
68. Seixas, P.C.; Dias, R.C.; Pereira, P. Uma cidade boa para viver: Planejamento cultural e ciência cidadã no desenvolvimento urbano sustentável. *Obra Nasce Rev. Arquit. da Univ. Fernando Pessoa* **2017**, *12*, 9–25.

69. Seixas, P.C. Worlds of Translation and Contact Zones in Timor-Leste. In *Translation, Society and Politics in Timor-Leste*; Seixas, P.C., Ed.; Universidade Fernando Pessoa: Porto, Portugal, 2010.
70. Krenak, A. *Ideias Para Adiar o Fim do Mundo*; Companhia das Letras: São Paulo, Brazil, 2019.