



Review

## Urban Sprawl and Sustainable Urban Policies. A Review of the Cases of Lima, Mexico City and Santiago de Chile

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Received: 10 September 2019; Accepted: 15 October 2019; Published: 21 October 2019



Abstract: In recent decades, urban processes have experienced deep transformations. One of them has been the growing importance of urban sprawl. This article reviews its main features and the policies related to the paradigm of sustainability in three Latin American Megalopolises: Mexico City, Lima, and Santiago de Chile. For this purpose, we have carried out an extensive compilation of the existing academic literature. Urban sprawl in those cities cannot be understood without considering the rising housing needs of popular classes, usually addressed through the sequence settlement-parceling-building-urbanization. Simultaneously high-income groups tend to create separated and gated commodities and there is increasing spatial mobility of the middle classes. Those processes tend to generate highly segregated and increasingly patched metropolitan areas. Sustainability is framed on models of urban governance based on ecological modernization. In this context, three main sustainable policies are analyzed: water supply, green areas provision, and transport. Conclusions stress: (1) Deep changes experienced and the path-dependent element observed in the social construction of sustainability (2) Consolidation of a model of socially segregated and ecologically differentiated urban polycentrism (3) Relevance of the different megalopolises as niches of experimentation and innovation in the construction of specific forms of sustainable transition.

Keywords: urban sprawl; urban governance; environmental governance; bio-social construction; Latin America; sustainable policies; sustainable transition; water supply; green areas; sustainable transport

#### 1. Introduction

In recent decades, urban processes have experienced deep transformations on a global scale, being generated by the new geography of urbanization. This geography shows a set of novel and sometimes partially contradictory features. One of them is the growing importance of urban sprawl processes, which nowadays, are observed not only in European and North American contexts but also affect Asia, Africa or Latin America [1–4]. Another distinctive element is the growing concern for sustainability, expressed in different ways. Thus, there are a multiplicity of public sustainable agendas and programs centered on the urban [5,6]. Besides, there is an important academic interest to the topic, centered among other elements on the definition of alternative models of urban sustainable transition [7,8]. Finally, there is a growing economic impact of sustainable actions, because the search for models of sustainable urban growth, associated with the maintenance of certain standards of living is an increasingly important element in competition among cities for ventures and investments [9].

Additionally, in different cities and territorial contexts, the starting conditions, the existing institutional structures, as well as the ways of understanding the concept of sustainability and its associated policies are very different [7,8]. Thus, it is recognized the relevance of historical path Sustainability **2019**, 11, 5835 2 of 22

dependencies in the processes of biosocial construction of sustainability [10,11]. In this context, the aim of this article is to analyse the dynamics of urban sprawl as well as the ways in which the sustainability of some of the main megacities of Latin America (Mexico City, Lima, and Santiago de Chile) have been socially constructed in the recent past, focusing on different explanatory elements, both specific to Latin American cities and generalizable to other spaces.

This purpose is especially noteworthy since sustainable transitions are especially complicated in emerging economies, in which is more difficult to reconcile strictly environmental issues with other economic and social aspects, such as poverty reduction [12,13]. This article intends to contribute to the existing literature on urban sprawl and social construction of sustainability, providing an adapted analysis of the main transformations which are present in some of the main megalopolis in Latin America. In this sense, there are few analyses on this subject in the Latin American case [14]. In this sense, the main innovation of this article is to provide an panoramic perspective about aspects that have either been discussed in much more general terms (that is, without entering into the analysis of specific cases), or analysed in more depth focusing on narrowly defined research topics such as the characteristics of urban sprawl, modifications in transport systems, etc. Thus, the general vision provided in this article allows reflecting about the existing processes of construction of urban sustainability in Latin America and its limits.

For this purpose, this article will be based on the review of different academic contributions about the Latin American city in general and the cases of Mexico, Lima, and Santiago de Chile in particular. We must emphasize that this is not an exhaustive review. The review has focused on the most cited articles about Latin America in the following areas: urban sprawl, sustainable urban transitions, urban ecological modernization, water supply, provision of green areas and sustainable transport policies. Special emphasis has been placed on whether these articles are fully or partially referred to the cities under analysis. Among them, we have selected those that more evidently show the background dynamics of the processes of the social construction of sustainability. In any case, urban sustainability policies cannot be fully examined because of the inherent limitations of space of an academic article. In this sense, the analysis will be limited to three specific policies: water supply, presence of green areas and transport policies.

This article will be ordered as follows. In the following point, the origin and evolution of the concept of urban sprawl will be summarized, as well as its growing link with specific urban sustainable policies. In the third point, special mention will be made of the evolution of urban sprawl processes in Latin America, with special reference to the cities of Lima, Mexico, and Santiago de Chile. In the fourth point, the sustainability policies applied in those cities will be analyzed. In the fifth point, some preliminary conclusions will be presented.

#### 2. Sustainable Urban Sprawl. Theoretical Developments

Urban sprawl is a process that was already noticeable in North American cities in the early 1950s, leading to a profound transformation in the structure of population settlements and the location of economic activities. It was born, therefore, associated with an intense process of suburbanization that implied not only the physical expansion of the city and the increase of the peoples' mobility but also new forms of segregation and social-spatial differentiation [15]. Thus, the city is configured as a translation, or even as a metaphor, of the prevalent socio-spatial and micro-power relations. [16].

From the 1970s onwards, phenomena similar to those observed in English speaking contexts began to be experienced in many other spatial environments. This is parallel with the general implementation of urban neoliberal policies, or using the words of David Harvey [17] with the transition from "managerialism" to "entrepreneurialism". In this context, the widespread urban sprawl phenomena are associated with the definition of new concepts such as exopolis or post-suburbia [18,19]. Thus, there could be observed a profusion of urban sprawl phenomena that adopt different forms and features, resulting in the emergence of a new geography of urbanization on a planetary scale [20]. For instance, Mediterranean cities are traditionally be considered as compact cities, that is, as a manifestation of

as a model of urbanization opposed to the massive occupation of space. However, urban sprawl phenomena can be nowadays observed in large areas of the Mediterranean coast [21,22], in some of the major cities of specific Mediterranean countries [23,24], but also some mid-range cities [25]. In this sense, it is possible to assert the emergence of "variegated" forms of urban sprawl.

To understand the different forms of urban sprawl it is important to consider its main causes. Among them, the following could be mentioned (Figure 1):

- 1. Changes in the role of cities from producers of goods to communication nodes. In recent years, the role of many cities (especially in developed counties) has shifted from being eminently places of production to basing their activity on their role of the node for people, goods and information. This has resulted in an important request for spaces in the form of ports, airports, hotels, various accommodations, congress centers, logistics centers, etc. [26].
- 2. Space requirements because of the growing informational nature of the economic organization. This would be related to the above, since the exchange and processing of information are related, on the one hand, to the existence of a wide network of advanced service suppliers and, on the other hand, to the presence of headquarters of transnational companies [27].
- 3. Space demands for the development of new forms of consumption. The new model of social organization is associated with the development of new forms of consumption that include, for instance, the development of shopping centers, cinemas, large franchise chains, etc. [28].
- 4. Effects of increased motorized mobility. The growing construction of urban roads, and in particular high-capacity roads, also has a significant cost in terms of space [29].
- 5. All this can be seen as partial manifestations of a broader phenomenon which is the growing processes of capital switch-off, that is, capital transfers from the primary circuit of accumulation (consisting of the production and consumption of goods and services) to the secondary circuit (composed of activities linked to construction and real estate development). In this sense, the existence of increasing amounts of capital "in search of investment" has engendered active and creative processes of generation of new urban environments [30,31].
- 6. Increasing social competence and fighting for distinction. The activation of the secondary circuit has been associated with the capacity of obtaining important financial rents through real estate investment. This, in turn, has generated strong pressures over the traditional settlements of some populations in the context of growing social competition [32]. In this way, the possibility of inhabiting a dwelling in certain environments has acquired growing positional features increasingly becoming elements of social distinction [33]. All those processes are associated to the creation of distinctive neighborhoods in peripheral locations, as well as the expulsion of a population from relatively central zones, due to the pressures of new economic activities or groups of settlers.
- 7. Population increases. We must not forget the population increases as a possible cause of urban sprawl. It can have different origins: vegetative growth of the urban population, internal rural-urban migrations or international migrations. In this sense, the strong concentration of economic activities in the so-called global cities is usually accompanied by important migratory phenomena that affect different social groups, such as, for example, the so-called creative classes [34].
- 8. Overflows of poverty and social exclusion. Both in the global cities of developed countries and the megacities of developing countries, there is a strong social segmentation that often takes the form of poverty and social exclusion. This, especially in the case of developing countries, takes the form of an overflow of urban informality, which thus tends to the development of various forms of slums and substandard housing.

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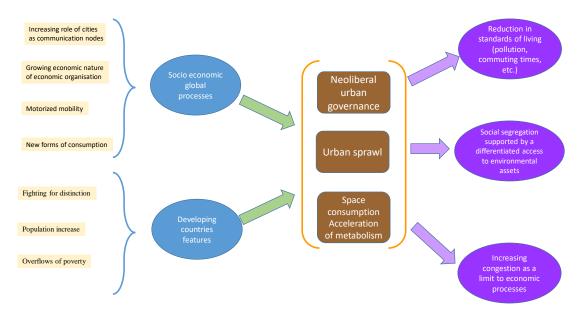


Figure 1. Schematic representation of the environmental effects of the processes of urban sprawl.

Another crucial element in considering how urban sprawl dynamics are modeled is the growing concern for sustainability. To some extent, urban sprawl and sustainability (at least understood in its strongest version) are antithetical concepts. Urban sprawl implies an accelerated consumption of spaces and an increase in transport needs (and, therefore, in energy consumption) which makes it incompatible with the more openly environmentalist approaches to the concept of sustainability [35]. Moreover, the neoliberal forms of urban governance based on the concept of "entrepreneurialism" do not consider the possibility of totally containing the expansive dynamics because they are promoted, mainly by private actors with the capacity of obtaining profits and generating economic activity [20]. However, even in this context, sustainability has played an important role in the accompaniment of certain urban growth dynamics [5]. In this sense, public policies, but also the dominant patterns of capital accumulation, have paid special attention to the sustainable transition. This approach has the virtue of jointly considering the accumulation of capital and the challenges associated with a sustainable transformation of the dominant forms of production, habitability, and consumption [36].

It should be noted that some of the actions included in the sustainable urban transition scheme have a high degree of compatibility with the neoliberal form of urban governance. In this sense, the solution to some of the environmental problems is associated with the existence of strong levels of innovation (sometimes also social) [37]. This has not only a social component, related to entrepreneurship but also a technological dimension. Thus, Socio-Technical Studies is at the heart of these approaches [38].

Also, these forms of innovation must be able to break many of the historical path dependencies associated with unsustainable forms of resource exploitation [39]. Especially, the generation of new activities linked to the bio-economy and the circular economy is understood as the result of the appearance of a set of agents, with the capacity not only to promote individually but also to collectively disseminate certain types of innovations [40,41]. The emergence of these innovation clusters is critical, as they tend to act as niches, able of generating more general transformations in broader environments [42].

Moreover, many of the proposed environmental solutions are associated with the execution of macro projects [43]. Besides, the implementation of this kind of actions, in fields as transport, for instance, can prevent the loss of quality of life as a result of environmental problems such as congestion, pollution, etc. This may imply, in certain cases, the capacity to generate dynamics of distinction that can be economically valued.

In any case, the transition to urban sustainability is particularly complex in emerging economies, as it means occasionally overcoming the Western post-war development model [44]. In this sense,

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many of the actions to be developed must necessarily have a certain level of specificity, generating variegated geographies of sustainable transitions [12]. Most analyses of sustainable urban transitions in emerging environments have been referred to transformations in Asia [45] or Africa [46]. However, there are few studies in the context of Latin America [14].

### 3. Urban Sprawl in Latin America. The cases of Mexico, Lima, and Santiago

Today's Latin American cities, like any other urban reality, must be understood as the result of the overlapping of different rounds of capital accumulation [15]. Thus, although the Latin American city has a historical link with the Mediterranean city, the different rounds of capital accumulation existing during the nineteenth and twentieth centuries had profoundly transformed its structure [47].

Thus, in the 1970s Latin America was already a highly urbanized reality. Thus, according to UNPD (2002) [48], in 1980 urbanization reached 65% of the population. Therefore, there was not a too high margin for an increase in the participation of the cities in the total population. In other words, large rural-urban migrations (with notable exceptions in certain countries) had already occurred. However, the demographic growth of most Latin American countries in recent years, without being explosive, has been intense. Thus, Chile went from a population of 15.2 million in 2000 to one of 17.7 million in 2015. This represented an increase of 16%. In the case of Peru, in the same years, it went from 29.1 million to 31.3 million, an increase of 7.5%. Mexico went from 101.7 million to 125.8 million, that is, its population increased by 23.7%. In this sense, the main Latin American cities have been subjected to a persistent although not particularly acute demographic pressure mainly derived not so much from rural-urban migrations but their vegetative growth.

Another outstanding feature of the dominant urban fabric in Latin America are the great differences between the largest metropolitan areas of the different countries (which usually coincides with the capital) and the rest of the cities. This phenomenon has received different names, but possibly one of the most recurrent is that of urban primacy [49]. Also, the economic dynamics that began in the 1980s favored export activities, based on the majority of cases on the exploitation of natural resources. In this way, an extractivist growth model was progressively established, which was accompanied by a general reprimarization of economic activity [50–52]. In this context, it could be considered the possibility of an increase in the importance of mid-ranking cities, located near the places where natural resources are located [49] (p. 20).

However, none of this happened. The phenomenon of urban primacy has broadly remained, albeit with strong differences between countries. Also, the dynamics of capital accumulation, together with the existing demographic growth have given rise to relevant phenomena of urban sprawl in the main capitals of the subcontinent. In this sense, according to Inostroza (2017), some of the main Latin American capitals (specifically Bogotá, Lima, and Santiago de Chile) expand at a rate of 20 m<sup>2</sup> per minute, which implies a strong consumption of space in the medium term [53]. Thus, the very dynamics of economic growth have generated processes of accumulation in the secondary circuit that have meant a growing occupation of spaces for a series of new commercial, logistical and service activities, with the consequent transfers of the population [49,54,55].

It is also an expansion with a relatively low level of planning since, in the neoliberal governance model, the search for economic profitability and public-private confluence prevails, excluding any type of intervention that could affect the basic elements of the real estate and financial interests at stake [56]. This focus on "entrepreneurialism" has been especially marked in most of the great megalopolis of the sub-continent [57]. Another fundamental element to take into account is the high levels of social inequality that have existed since colonial times. However, they have been maintained over time and have even been strengthened by the consolidation of the neoliberal governance model since the 1970s, although it also shows a slight decrease in the first decade of this century [58]. This inequality is also associated with relatively high levels of poverty, although it is noteworthy that the volume of poverty has decreased in most Latin American countries, in some quite markedly, such as Chile [59].

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The processes of urban sprawl will necessarily reflect these facts (Figure 2). On the one hand, it is associated with a certain spread of poverty. This usually takes the form of informality and is related with the expansion of slums that receive various names: "favelas" (Brazil), "campamentos" (Chile), "villas miseria" (Argentina) or "barriadas" (Peru). Therefore, one of the distinctive elements of urban sprawl in Latin America, particularly until the early 1990s, is its strong component of informality [53]. Thus, invasions and occupations of land for the development of neighborhoods is a phenomenon that goes back at least to the early 1930s.

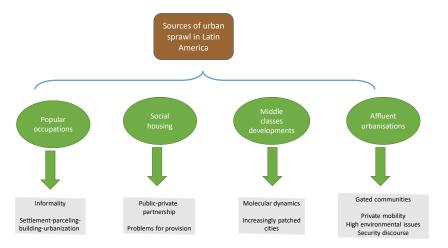


Figure 2. Sources of urban sprawl in Latin America.

Its history and extent explain why the way it has been managed in the recent past has been very different. Santiago de Chile could represent an extreme form. Starting in the 1970s, under the military dictatorship, a systematic elimination and displacement of the population from the areas of substandard housing was carried out. Thus, the entire eastern sector of the city, which is inhabited by the affluent classes, became free of substandard housing areas [60]. The "campamentos" were first displaced to more remote areas and subsequently progressively eliminated based on the construction of social housing, relying on public-private partnership models. In this way, an intense urbanization process took place based on construction at appraised prices and with funding facilities for access [61]. This frequently led to the construction of large quantities of dwellings, often of small size and low quality, located in largely peripheral locations. This model was expanded and generalized after the democratic transition so that the form taken by the sprawl processes was profoundly modified by public housing policies [62]. In this sense, the development of this public policy has led to the practical disappearance of the "campamentos".

In other cases, urban sprawl processes have taken different forms. For example, in the case of Lima, many of these informal settlements ("barriadas") have suffered a progressive improvement as a result of the activity of their inhabitants and the implementation of specific urban policies. A different type of neighborhood has thus tended to be developed, based on low and mostly self-construction houses based on the sequence: settlement-parceling-building-urbanization [63,64]. In these cases, we have assisted in the consolidation of large spaces originally "occupied" as slums that have undergone processes of continuous upgrading of buildings and facilities. Nevertheless, in any case, these areas have a very different morphology both to the middle and upper classes neighborhoods and to those generated as a result of the massive construction of social housing [65]. For instance, this model of "degraded" city would correspond to large areas of northern Lima or southern Lima [66]. In this context, the policies implemented in Lima since the 1990s were oriented in two main directions. On the one hand, they promoted the recognition and institutionalization of the stock of existing buildings. In this sense, massive policies of legalization of settlements were undertaken, which in Lima alone in the 1990s implied the recognition of more than 1 million property titles [67]. On the other hand,

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they focused on the generation of infrastructure and equipment necessary to adapt and improve the actually existing neighborhoods [66]. In other words, the plans and programs for the improvement of living conditions supported by the authorities have often started from the acknowledgment of these informal settlements as preferential sites of an intervention [68]. In any case, nowadays, Lima cannot be understood without considering the overall effects of the "barriadas".

"if in 1956 the barriadas of Lima accommodated 10% of the population (119,140 residents), in 1993 they contained 34.4% of the population (1.9 million residents) ... in 2004, the barriadas reached 43.4% of the metropolitan population of more than 3.5 million people". [69] (pp. 615–616)

However, this does not mean that policies for the provision of social housing through collaboration with the private sector are exclusive to Chile. They have been reproduced in many other settings. In the case of Peru, for example, "mivivienda program", established in 1993, was aimed at providing social housing for the deprived population, although ultimately, given the extent of the existing house shortages and the difficulties of a large share of the potential buyers to provide bank guarantees, it was addressed de facto to middle and lower-middle sectors, not really reaching the poorest [66].

Something similar has happened in Mexico City. The intense activity of various public agencies focused on social housing has fundamentally benefited the middle and upper-middle-income sectors [70]. In any case, in Mexico City and Lima, social housing programs have not had the "strength" to eradicate already built substandard housing neighborhoods, which have an illegal occupation as their origin. Therefore, self-construction has continued to be a relevant housing solution for the poor and, therefore, the origin of never-ending urban sprawl processes.

At the other extreme is the situation of the more affluent groups who, in many cases, also modify their settlement patterns, moving away from urban centers and contributing in a very different way to urban sprawl processes. In these cases, moreover, this is often accompanied by the creation of gated communities, discursively justified on the search for higher levels of security [71,72]. In any case, it is a less relevant phenomenon, at least quantitatively, than occupations by low-income sectors. Moreover, it cannot be said that all high-income urban sprawl follows the model of gated communities. Indeed, the saturation of traditional high-income areas, the greater connectivity associated with the construction of transport infrastructure or the search for places with good environmental living conditions have led to significant levels of sprawl in high-income segments. This can be seen, for example, in Santiago, but also Lima or Mexico [73]. As a result, more complex settlement patterns have been progressively consolidated, generating segmented cities based on patched spatial models [4].

Also, slums and gated communities are two extremes of a broader reality in which there are also broad sectors of the middle classes involved. For this reason, it is necessary to avoid dichotomous representations that may be very graphic but are far from reality [4,73]. In any case, a strongly fragmented, heterogeneous and segregated reality is generated in the cases of Mexico City [74], Lima [75] or Santiago [76]. The progression of such a segregated urban model goes together with the development of increasingly polycentric models of the megalopolis, again observed in Mexico [77], Lima [66] and Santiago [78]. This emergent spatial structure can be explained by several reasons. The first of them is that the extension reached by metropolitan areas—19 million in the area of influence of Mexico City [79] or 10 million in the case of Lima -makes impossible the model of the monocentric city. New commercial infrastructures, meeting places, administrative structures, etc. must be developed [66]. On the other hand, the own development of the processes of capital accumulation operates in the same direction. As a result, the presence of, for instance, commercial malls in popular districts is increasingly relevant [80,81].

Another of the fundamental features of today's Latin American megalopolis is the intensity with which financial logics have been introduced into institutional and agents' decision-making mechanisms [61]. This is a process that can be observed in many other environments and is related to different elements [82,83]. The first one is the overall form taken by capital accumulation processes, in which surpluses have tended to be generated in primary-export sectors, to be subsequently

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transferred to the secondary circuit where their valorization process has continued. This circulation has led to the development of financial instruments adapted to local real estate markets [20]. Secondly, the deregulation of financial markets and the opening to international capital movements has made some segments of housing in Latin American megalopolis the object of international investments [55]. Thirdly, the own transformation of some of the national financial systems and, in particular, the development of investment and pension funds have contributed to increasing the liquidity needed for the real estate business. The Chilean case is especially indicative in this respect [84]. Finally, the State has contributed, for example, with its social housing policies to the increase of the credit market, generating necessary guarantees for the development of mortgage markets [61]. In this sense, financing has not only affected high-income groups but also populations with lower income or even poor people [85].

# 4. Sustainable Policies in Urban Sprawl Policies in Latin America. The Cases of Mexico City, Lima, and Santiago de Chile

The strong progression of urbanization processes observed in Latin America and, especially, in the main urban agglomerations of the subcontinent has led to the implementation of some adapted policies of sustainability. These policies are marked by the more general context analyzed in the previous point. In this sense, the prevalence of a neoliberal governance model is associated with the development of sustainability policies based on the paradigm known as ecological modernization. This is based on the creation of markets linked to the management of environmental variables, the promotion of public-private partnerships, the subcontracting and the construction of megaprojects [86,87].

Nevertheless, there is, at the same time, an important tradition of reflection and practical implementation of policies associated with sustainability. These can be dated from the 1990s, with the first applications of Agenda 21 [88]. However, historically, there is also a difficulty in translating these partial orientations into broader policies that could be maintained over time. This is related to the dominant economic orientations as well as to the presence of strong social problems [88–90]. The aggravation of some environmental problems, such as climate change, does not seem to have contributed to a more systematic approach to existing problems either. This can even be observed in the case of cities especially positioned as a global node such as Santiago de Chile [91].

Sustainable urban policies have some benchmarks which, although modest from a quantitative perspective, are of great importance in symbolic terms. This would be the case of the urban management model of the city of Curitiba in Brazil [92]. Due to its importance, the Green Plan of Mexico City also can be considered a relevant example of sustainable planning. On the one hand, it deals jointly with a series of interrelated elements (soil, habitability, water, mobility, waste, etc.). On the other hand, these issues are approached with medium term logic of intervention, 15 years. Finally, a set of cross-cutting themes (financing, legal framework, etc.) are also addressed [93].

The relative underdevelopment of integrated urban sustainability plans (Figure 3) is explained by several reasons. On the one hand, given the demographic dynamics and the form of capital accumulation processes, it is impossible in practical terms to restrain urban sprawl processes. On the other hand, the existing institutionality often does not help the establishment of sustainability plans that have to act at different scales. In both Santiago and Lima, the lack of a central metropolitan authority and the division of the city into a large number of municipalities, with their specific plans and mayors, has undermined the development of policies aimed at promoting sustainability understood in a broad sense [88]. In this sense, it prevails a kind of weak approach to urban sustainability supported by ecological modernization. This institutional model is a reflection of the high levels of segmentation and social segregation currently existing in the large megalopolis of Latin America [94].

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#### Strong models of sustainable Weak models of urban urban transition ecological modernization Control of urban sprawl Promotion of the construction of infrastructures and business as usual · Limits of urban metabolism Socially biased access to environmental access Empowerment of local communities Selected and partial improvement on living conditions Management of congestion

Figure 3. Different ways of understanding sustainable urban policies.

The existence of models of environmental segregation is strongly associated with the development of socially segregated cities [95]. In other words, elements such as the presence of bodies of water, green zones or non-urbanised lands are strongly associated with the dominant structure of social classes [94]. In this context, any application of the principles of sustainability understood such principles as bio-social constructions are necessarily heterogeneous because the material characteristics of the different environments are unequivocally differentiated [94].

#### 4.1. Water Supply and Its Quality

It is necessary to consider the origins and social composition of the different urban settlements to understand not only the policies to be applied in them but also the results that can be expected from such an application. As indicated above, the lower-income areas, which are often generated based on informal settlement models, depending on the sequence settlement-parceling-building-urbanization. Therefore, the existence of problems in the supply of basic services such as water, sewerage or electricity is directly linked to their origin. Namely, to the extent that urban sprawl originates from occupation and self-construction processes, there will always be problems of basic supplies in the areas of the most recent occupation.

Furthermore, if there is an objective shortage of water resources, as may be the case in Lima, this problem is aggravated [69]. For this reason, important problems of supply, scarcity, and inequality of water remain in this city, especially affecting popular areas [69]. In any case, there is a constant effort to extend the coverage of the water utilities. Thus, according to official statistics, the percentage of the population supplied with drinking water in Lima was over 95% in 2017. This rate was much higher than in other rural areas of Peru, in which it barely exceeded 70% [96]. The improvement is particularly noteworthy being an increase of almost 20 points from 2009 to 2014 [97]. Such a dramatic change is also associated with the application of a set of repertoires associated with a model of ecological modernization.

"Using Lima as a relevant case study, it will be demonstrated below that water neoliberalization comprises a multifaceted combination of rhetorical constructions, disguised interests, technocratic rationality and, at best, circumstantial improvements". [98] (p. 266)

Also in the case of Mexico City, a significant part of its population does not have access to regular water supply and sanitation services and another group, although having access, suffers from continuous cuts. For this reason, water is considered a scarce good, although the volume of existing resources is more than sufficient to meet the needs of the existing population [99]. In any case, the pressure exerted on existing resources is particularly high tending to grow because of the evolution of the population and the transformations in water cycles [100]. For this reason, a set of changes has

been implemented since the beginning of the 1990s, which implied the institutionalization of a model of public-private partnership. The development of this institutional framework is aimed, on the one hand, at improving the management of existing resources (avoiding waste and losses) and, on the other hand, at obtaining the financial resources necessary for the maintenance and extension of the existing network, the provision of the service was outsourced to four private companies who managed different parts of the city but also competed with each other [101]. In this sense, an approach based on the control of domestic consumption has prevailed, using initiatives like a metering improvement, pricing policies or replacement of sanitary facilities [102]. In Mexico City, moreover, problems related to water quality are especially acute, to the point that it is a source of important health problems, especially in the case of children [103,104]. There is a significant level of adaptation of local populations to these eventualities, but this does not prevent its effects on health which are associated to significant financial costs contributing to perpetuate the cycle of poverty [105].

However, in the case of Santiago de Chile, until the early 1990s, it was developed an important supply policy which implies universal access to drinking water and sanitation services and was associated with the promotion of social housing [60]. Also, in recent decades there have been broad transformations in the policies on natural resource management, including water. Such policy orientations are supported on the assumption that the lack of property rights and the absence of prices that reflect the costs of supply led to uncontrolled growth in demand [106]. Therefore, it has been imposed the control of demand, promoting, for instance, resource privatization in cases such as Chile or Mexico [107,108]. This has frequently generated policies that have not always resulted in an effective increase in investments, and even, in certain circumstances, have generated dynamics that are bordering on delinquency [109]. In this sense, the absence of a public supply of water of quality explains why a growing bottled water industry has been developed. This has a wide deployment in the majority of the largest Latin American cities but it is especially relevant to the importance of the phenomenon in Mexico [110].

As climate change processes are expected to worsen water stress situations, the persistence of problems in supply as essential as water can be considered a very important limit for any sustainable model [90]. Furthermore, in such a segregated urban context, access to these basic services becomes an element that differentiates living conditions, reinforcing polarising tendencies [111].

#### 4.2. The Provision of Green Areas

Sustainability policies have also been implemented in other directions. One of them has been the creation of green areas. Again, at this point, it can be observed how the strongly segregated character of the large megalopolis of Latin America acts as a modeling element. In this sense, large green areas tend to be concentrated in high-income neighborhoods and also in some intermediate parts. Even in megalopolises with a level of planning that require the existence of green areas along with the urban network, as would be the case of Santiago de Chile there are notable differences in their endowment, size, and proximity in areas with differentiated levels of income [112]. There are also notable differences in the structure of trees and resources allocated to their maintenance [113]. Green areas' management is especially complex in semi-arid environments such as Santiago de Chile. Moreover, all those processes are exacerbated because green areas depend essentially on the municipalities, which can expend considering their revenues that, in turn, are supported by the income level of their inhabitants [113]. However, in the case of Santiago de Chile, different reports assert the existence of a general presence of green areas throughout the city, with an average endowment of 3.2 m<sup>2</sup> per inhabitant [112]. However, the analysis of official data gives much lower figures of around 1.6 m<sup>2</sup> per inhabitant in 2017 [114]. Also, there are strong differences in the provision of green areas by municipalities. Sometimes this is related to higher or lower income levels, but in other cases, it relies on other elements (Table 1 and Figure 4).

**Table 1.** Provision of green areas and economic level of the municipalities of the Metropolitan Area of Santiago.

Municipality	Green Areas Provision (m <sup>2</sup> Per Inhabitant)	Income Per Person 2006–2011 (Thousands of Chilean Pesos)	
Cerrillos	8.8	209	
Lo Barnechea	6.0	5879	
Vitacura	4.7	11,431	
La Granja	3.8	1498	
Santiago	3.6	4875	
Peñalolén	3.4	237	
Providencia	2.9	9667	
Cerro Navia	2.9	1413	
Recoleta	2.4	167	
Quinta Normal	2.1	1376	
Pedro Aguirre Cerda	2.1	1717	
Lo Prado	1.9	1701	
La Reina	1.6	5305	
San Joaquín	1.5	1785	
Maipú	1.3	2609	
Las Condes	1.2	953	
Macul	1.2	2041	
Estación Central	1.1	2074	
San Ramón	1.1	157	
Ñuñoa	1.1	5693	
San Miguel	1.0	339	
La Pintana	0.9	1358	
Renca	0.8	1522	
Lo Espejo	0.7	1513	
San Bernardo	0.7	1547	
Conchalí	0.6	187	
Quilicura	0.6	1915	
Puente Alto	0.4	175	
Huechuraba	0.4	2194	
El Bosque	0.3	161	
Independencia	0.2	243	
Pudahuel	0.2	1848	
La Florida	0.2	1364	
La Cisterna	0.1	235	

Source: Prepared by authors with information of [115].

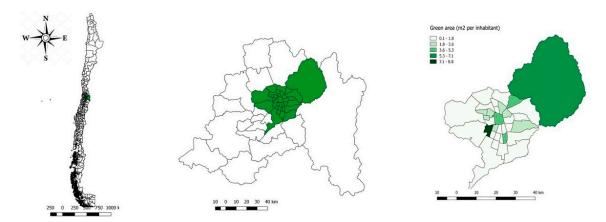


Figure 4. Provision of green areas in the municipalities of the Metropolitan Area of Santiago.

These values are very far from the recommendation of the World Health Organization (WHO) of 9 m<sup>2</sup> per inhabitant. In the case of Lima, the general provision of green areas is similar, standing at about 3 m<sup>2</sup> per inhabitant. Also, development is very unequal, with many low-income areas lacking green spaces. Thus, the main green corridor with the capacity to articulate other interior spaces is located along the coastal strip, affecting communes with higher income levels such as San Isidro or Miraflores [115] (Table 2 and Figure 5). Besides, even in consolidated zones whose origin is not found in occupations, green areas are not the product of a planned model but have been generated from lands that, for different reasons, have not been urbanized [116]. As a result, there is a marked fragmentation that implies a scarcity of large green areas that could develop complex forms of flora and fauna [113]. As Lima is also a semi-arid zone with limited access to water, the extension of green areas is linked to the closure of water cycles and the reuse of wastewater [117].

Table 2. Provision	of green are	as in the Metr	opolitan Ar	ea of Lima
Table 2. Trovision	or green are	as iii uie ivieu	odoman Ai	ea oi Liiia.

	Green Areas Provision (m <sup>2</sup> Per Inhabitant)
San Isidro	6.7
Chaclacayo	5.4
San Juan de Mirafores	4.8
San Borja	4.7
Santiago de Surco	4.2
Los Olivos	4.1
Cieneguilla	3.3
San Miguel	3.0
Santa Anita	2.5
El Agustino	2.3
Surquillo	2.3
San Luis	2.2
La Victoria	1.9
Puente Piedra	1.6
Comas	1.1
Independencia	1.0

Source: Prepared by authors with information of [118].

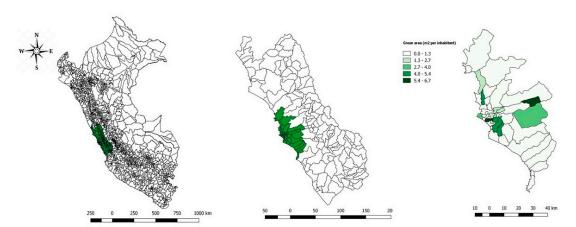


Figure 5. Provision of green areas in the Metropolitan Area of Lima.

The situation in Mexico City shows significantly better indicators than those observed in Santiago de Chile (3.2 m² per inhabitant) and Lima (3 m² per inhabitant). In this sense, for the federal district as a whole, 15.1 m² per inhabitant were reached in 2003 [119]. However, this estimation can be biased because it includes private gardens and green areas that are difficult to access (such as ravines). In any case, in line with Mexico's green plan, the city has ambitious plans on the theme of parks [89]. Besides,

the management of green zones in Mexico presents some novel features. On the one hand, there is a strong tradition of urban agriculture able to generate and maintain some natural places. These are diverse forms of agricultural production, but, above all, they are important in the urban perimeter of the city, because, in a certain sense, they counterbalance processes of urban sprawl [120]. On the other hand, there is an important movement of green roof gardens, with possibilities to articulate with the models of urban agrarian production [121].

#### 4.3. Sustainable Transport Policies

In cities with the population of the large Latin American megalopolis and with the division of functions existing within them, transport necessarily plays a fundamental role. It is essential for the development of all economic and labor activities, but also consumption, leisure, the exchange of information, etc. The daily volume of transport activities in a city like Santiago is reflected in a quotation such as the following.

"In 2006 it was estimated that a total of 17,330,585 daily trips were made in Greater Santiago (37 communes of the 1994 plan) with an average travel time of 24 minutes by car, 47 minutes by bus and 29 minutes by Metro ... The average number of trips per person has increased from 1.61 in 1991 to 2.8 trips in 2006." [122] (p. 4)

Cities in Latin America do not have a high rate of motorization compared to the rest of the world, although it is true that this rate increases systematically every year. Despite this, their large size and population mean that there are significant levels of congestion [123]. Confronted with this situation, there are two priority courses of action. The first is the expansion of the road allocated to private transport. In this case, urban toll motorway systems have been significantly developed in the main cities of Latin America, many of which are managed using electronic payment systems. These motorways are today very relevant in the management of vehicle flows in Santiago de Chile [124] and Mexico [125]. In Lima, the process is a little slower, but there are now also important concessions such as the yellow line or the Lima routes.

In contrast to this commitment to private transport for middle- and high-income groups in strongly segregated cities, there are also variegated models to promote sustainable mobility [126,127]. In this sense, three main types of action must be highlighted and simultaneously understood in the context of strongly multimodal public transport models, in which most urban journeys involve the use of different means of transport [128].

Firstly, the construction of metro networks in many Latin American cities must be stressed, and especially in the three cities on which this review focuses. The construction of the metro was very early in Mexico. The first 13 kilometers were inaugurated in 1969. The construction of the metro network accelerated in the 1980s and 1990s and then slowed down. In fact, between 2000 and 2013 only 26 kilometers of new roads were inaugurated. Considering that this year the total extension of the metro in Mexico was 226 kilometers, the lines built after 2000 represent only 11.5% of the existing network. On the other hand, despite the extension reached by metro, its capacity to guarantee the mobility of the population as a whole is relatively limited. In this sense, there are whole areas (especially in the higher income neighborhoods) where there are no metro lines [128].

Santiago's case is different. The first kilometers of line 1 were inaugurated in 1975. Since then, the network has been progressively expanded. However, its great expansion began in 2000 [129]. From that moment on, the network expands from the slightly less than 50 kilometers existing at that time to the 142 km currently existing [130]. The project is to reach 215 kilometers by 2026 [131]. Given the design of the mobility system in Santiago, it can be said that the metro plays a central role. This is reflected in the number of passengers who used its services, 685.1 million in 2017 [132]. Finally, the development of the metro in Lima is still quite incipient. In 2011 was inaugurated the first metro overland line, with an extension of 34 kilometers. Lines 2 and a branch of line 4 are currently under construction. In any case, the importance of the metro in Lima's mobility model is nowadays limited.

This role of the metro has been complemented by the growing implementation of the BRT (Bus Rapid Transit) system. These systems are based on circulation on roads exclusively for buses so that transport times are reduced to make them similar to a metro service. These systems have been developed importantly in the three cities considered and, in all of them, they have been coordinated with the metro and ordinary buses. For example, in the case of Lima, a BRT (metropolitan) line has been developed that crosses the capital from North to South and is coordinated with a set of branch buses that provide transit possibilities for passengers. In this way, it has been possible to considerably increase the area of influence of the line. In the case of Mexico, in recent years has proceeded to a strong growth of these lines (known as metrobus) that at present are 7 with an extension of 125 kilometers. In this case, the lines have been fundamentally linked to the existing metro network [133]. BRT is also an essential element of the design of the system of transport in Santiago de Chile in the framework of the *Transantiago* plan. Thus, BRT is planned in an integrated and complementary way to the metro and ordinary bus lines [129].

Finally, it is necessary to refer, albeit inevitably brief, to the existing urban bus systems in the main megalopolis analyzed, since these are currently the basis for the mobility of the majority of the population. The bus systems of the different cities have several common points. The first thing is that they arise spontaneously from private operators. In reality, the emergence of private bus systems is strongly associated with the occupations and origin of popular neighborhoods. This can be observed especially in the case of Mexico City [128] and Lima [66]. Moreover, these types of settlements are inseparable from the existence of certain mobility that allows their inhabitants to go and work in other areas. Additionally, in a context of deregulation, in the 1980s and 1990s, the authorities promoted the development of these spontaneous and self-organized bus systems, as can be seen in the case of Santiago de Chile [134] or Lima [66,135].

These models also have some particularly positive elements. Thus, they offer transport services to almost everyone, they are cheap, and they control reasonably travel times [63,64]. But they also have criticisms, usually related to two elements. On the one hand, there are continuous complaints about road safety, which is associated with a large number of buses, the highly competitive practices of drivers and the state of maintenance of vehicles. The second criticism refers to its impact in terms of environmental pollution in cities such as Santiago, Lima or Mexico City with chronic problems of contamination. This last criticism is undoubtedly partial because the effect of private mobility is systematically invisibilized, is a manifestation of the unequal distribution of micro-powers and the deep socio-environmental segregation of Latin American megalopolis.

In this context, bus transport systems have undergone a major transformation in recent years in Latin America, as a result of growing regulation and public intervention. A paradigmatic case has been the Transantiago plan in Santiago de Chile, which modified practically all existing routes and routes in an attempt to create an integrated mobility model in which the metro and the BRT occupied a central position. This implied a reduction in the number of buses, as well as the existence of public subsidies to private operators. The replacement of a self-generated model by a planned one was proved to be extremely difficult and almost traumatic. *Transantiago* became to be considered the worst public policy ever implemented. With time and successive reforms, it has been possible to improve the operation of the model, which nevertheless suffers from significant levels of congestion during peak hours [129,134]. This model has been replicated, although with different levels of success and intensity in other environments. In the case of Lima, an attempt has been made to apply a model similar to Transantiago. However, the so-called Integrated Transport System has had serious problems, so that only a small part of it has been able to be implemented [135]. In the case of Mexico, certain attempts to rationalize the number of buses have also been observed, especially since the implementation of the BRT systems [136]. However, the complexity of travel in Mexico City, as well as the strong resistance and pressure capacity of bus companies, have slowed the breadth of the process [137].

#### 5. Preliminary Conclusions

In recent years, urban sprawl has completely transformed the physiognomy of cities in Latin America, generating and consolidating a model of an extensive and polycentric city. This is a process that can be considered unfinished for multiple reasons. On the one hand, the own dynamics of capital accumulation promote expansive urban dynamics. On the other hand, population growth is still a relevant phenomenon in many of the largest Latin American cities.

In this context, make sustainable what has already been built, that is to say, what actually exists is one of the great challenges of the large Latin American megalopolis such as Mexico City, Lima or Santiago de Chile. The analysis of those three cities shows that their urban agendas have several confluent features. Firstly, the three cities are not only the capitals of their respective countries but also have a clear position of urban primacy. Secondly, the three cities, but particularly Santiago de Chile and Mexico, have become key points in the network of global cities that act as nodes of human resources, information, and capital [49]. Thirdly, the three cities have experienced strong pressure from popular groups, which results in specific forms of urban sprawl with a strong component of informality. Finally, in all three cases, there is a predominance of neoliberal forms of urban governance, which is associated with the predominance of approaches of ecological modernization. As a result, there are many common priorities in their urban agendas, to the point that there is a pattern of pursuing sustainability in Latin American megalopolises.

In this context, any transition to sustainability in them is conditioned by the high existing levels of social inequality and residential segregation. In this context, poor neighborhoods, which often arise from the dynamics of settlement-parceling-building-urbanization, still have a wide margin for changing their physiognomy and improving their provision of services [63,64]. Many of these transformations can be framed within the framework of sustainable transition, especially concerning improvements in water and electricity supplies, the provision of green areas or transport systems [138,139]. These transition dynamics could be applied to other aspects such as the use of new energy sources, waste management, etc. In all these fields, some of these experiences may be considered as niches of sustainability at a neighborhood level.

By contrast, the neighborhoods in which the highest income social groups live tend to have not only a different physiognomy but also distinct environmental conditions [94]. In these areas, they can be observed some sustainability policies similar to those of developed countries albeit necessarily to a limited extent [140]. Also, the logic of ecological modernization and the megaproject tends to allocate greater financial resources to those with higher capacity to pay. Thus, progress is being made towards the consolidation of a socially segregated and ecologically differentiated urban polycentrism [95].

However, without denying the above, sustainability policies also tend to be implemented in all the urban areas studied, affecting central aspects such as the provision of water or public transport systems. However, it should be noted that this is a kind of intervention founded on a rather weak version of the concept of sustainability, which, in terms of policies, is translated into a business-friendly ecologically modernization strategy. This approach is far away from the policies implemented in other cities, particularly in Europe, but also in some Latin American cities such as Curitiba [5,13,92,140]. In this context of a weak approach to urban sustainability, the confluence and importance of different scales of action can be seen [8]. In this last sense, the different urban areas analyzed (Mexico City, Lima, and Santiago de Chile) can be considered as different niches of experimentation of innovations related to certain forms of sustainable transitions, although this has to be understood in a very partial way. In other words, the application of certain urban sustainability policies in a framework of neoliberal governance has created a set of experiences that have generated a collection of repertoires that are orienting similar policies in other cities. In this sense, it can be asserted that Mexico City or Santiago de Chile have historically acted as niches of experimentation of different innovations related to sustainability. Thus, until the early 1990s, it can be said that Mexico City had a certain leadership in aspects such as the development of a public transport system. However, from this date, Santiago de Chile has reached a greater prominence. In this sense, its leadership in areas such as public housing, water supply,

the provision of green areas or the construction of public transport systems, especially subway lines, should be highlighted. For example, the restructuring of the transport system (with the *Transantiago* plan) and the metro construction policy are reflected in Lima, although many of these efforts have not yet been completed. Public housing policies in Chile, which rely on public-private partnership, have also been replicated in other countries, although with very disparate results. However, the case of Santiago de Chile also presents important passives such as the privatization of water resources or the strong commitment to the construction of paid urban highways. Despite this, it can be said that Santiago de Chile is acting de facto as an innovation niche for many of the policies subsequently applied in other Latin American cities.

In this sense, Santiago de Chile can be considered as an example of the (very partial) transition model to the sustainability that actually exists in Latin America, marked by the existence of strong levels of social or, rather, socio-environmental inequality. In any case, the orientations derived from the commitment to ecological modernization and neoliberal governance do not seem to be able to radically attack many of the observable dynamics of environmental degradation that are the object of more ambitious policies in some cities located in environments with a higher level of economic development [140].

**Author Contributions:** D.C.-H. and R.A.-C. have both developed the conceptualization, methodology, validation an and compilation of the academic literature revised in this article. D.C.-H. has focused more on the cases of Lima and Santiago de Chile and has written the first original draft. R.A.-C. has focused more on the case of Mexico City. She has also revised and edited the first draft insisting on the comparison of the tree cases which are analysed.

Funding: This research received no external funding.

**Acknowledgments:** We are grateful for the comments of three anonymous reviewers.

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

#### References

- 1. Nechyba, T.J.; Walsh, R.P. Urban Sprawl. J. Econ. Perspect. 2004, 18, 177–200. [CrossRef]
- 2. Deng, F.F.; Huang, Y. Uneven Land Reform and Urban Sprawl in China: The Case of Beijing. *Prog. Plan.* **2004**, *61*, 211–236. [CrossRef]
- 3. Cobbinah, P.B.; Aboagye, H.N. A Ghanaian Twist to Urban Sprawl. *Land Use Policy* **2017**, *61*, 231–241. [CrossRef]
- 4. Inostroza, L.; Baur, R.; Csaplovics, E. Urban Sprawl and Fragmentation in Latin America: A Dynamic Quantification and Characterization of Spatial Patterns. *J. Environ. Manag.* **2013**, *115*, 87–97. [CrossRef] [PubMed]
- 5. McCormick, K.; Anderberg, S.; Coenen, L.; Neij, L. Advancing Sustainable Urban Transformation. *J. Clean Prod.* **2013**, *50*, 1–11. [CrossRef]
- 6. Marcotullio, P.J. *Towards Sustainable Cities: East. Asian, North. American and European Perspectives on Managing Urban Regions,* 1st ed.; Routledge: London, UK, 2017.
- 7. Fastenrath, S.; Braun, B. Lost in Transition? Directions for AnEconomic Geography of Urban Sustainability Transitions. *Sustainability* **2018**, *10*, 2434. [CrossRef]
- 8. Næss, P.; Vogel, N. Sustainable Urban Development and the Multi-Level Transition Perspective. *Environ.Innov. Soc. Transit.* **2012**, *4*, 36–50. [CrossRef]
- 9. Esmaeilpoorarabi, N.; Yigitcanlar, T.; Guaralda, M. Place Quality and Urban Competitiveness Symbiosis? A Position Paper. *Int. J. Knowl.-Based Dev.* **2016**, 7, 4–21. [CrossRef]
- 10. Boschma, R.A.; Frenken, K. Why is Economic Geography not An Evolutionary Science? Towards an Evolutionary Economic Geography. *J. Econ. Geogr.* **2006**, *6*, 273–302. [CrossRef]
- 11. Uyarra, E. What is Evolutionary about 'Regional Systems of Innovation'? Implications for Regional Policy. *J. Evol. Econ.* **2010**, *20*, 115–137. [CrossRef]
- 12. Hansen, U.E.; Nygaard, I.; Romijn, H.; Wieczorek, A.; Kamp, L.M.; Klerkx, L. Sustainability Transitions in Developing Countries: Stocktaking, New Contributions and A Research Agenda. *Environ. Sci. Policy* **2018**, *84*, 198–203. [CrossRef]

13. Ramos-Mejía, M.; Franco-Garcia, M.L.; Jauregui-Becker, J.M. Sustainability Transitions in the Developing World: Challenges of Socio-Technical Transformations Unfolding in Contexts of Poverty. *Environ. Sci. Policy* **2018**, *84*, 217–223. [CrossRef]

- 14. Romero-Lankao, P.; Gnatz, D.M. Exploring Urban Transformations in Latin America. *Curr. Opin. Environ. Sustain.* **2013**, *5*, 358–367. [CrossRef]
- 15. Harvey, D. The Urbanization of Capital; John Hopkins Press: Baltimore, MD, USA, 1985.
- 16. Harvey, D. The Condition of Postmodernity; Blackwell: Oxford, UK, 1989; Volume 14.
- 17. Harvey, D. From Managerialism to Entrepreneurialism: The Transformation in Urban Governance in Late Capitalism. *Geogr. Ann. B* **1989**, *71*, 3–17. [CrossRef]
- 18. Soja, E. The Third Space: Journeys to L.A. and Other Real-and-Imagined Places; Blackwell: Oxford, UK, 1996.
- Teaford, J. Post-Suburbia: Government and Politics in the Edge Cities; Johns Hopkins University Press: Baltimore, MD, USA, 1997.
- 20. Delgadillo, V. Ciudad de México, Quince años de Desarrollo Urbano Intensivo: La Gentrificación Percibida. *Rev. INVI* **2016**, *31*, 101–129. [CrossRef]
- 21. Davis, C.; Schaub, T. A Transboundary Study of Urban Sprawl in the Pacific Coast Region of North America: The Benefits of Multiple Measurement Methods. *Int. J. Appl. Earth Obs.* **2005**, *7*, 268–283. [CrossRef]
- 22. Sayas, J.P. Urban Sprawl in the Periurban Coastal Zones of Athens. Greek Rev. Soc. Res. 2006, 121, 71–104.
- 23. Bae, C.H.C. UrbanSprawl in Western Europe and the United States; Routledge: London, UK, 2017.
- 24. De Santiago, E. Madrid 'ciudad única'(II). La Explosión Urbana en la Región Madrileña y sus Efectos Colaterales. *Urban* **2011**, *13*, 138–164.
- 25. Coq-Huelva, D. Crecimiento Suburbano Difuso y sin fin en el Área Metropolitana de Sevilla Entre 1980 y 2010. Algunos Elementos Explicativos. *Scr. N.* **2012**, *XVI*. [CrossRef]
- 26. Sassen, S. The Global City; Princeton University Press: New York, NY, USA, 1991.
- 27. Castells, M. The Information Age: Economy, Society and Culture. Volume 1. The Rise of the Network Society; Blackwell: Oxford, UK, 1996.
- 28. Al, S. (Ed.) *Mall City, Hong Kong's Dreamworlds of Consumption;* Hong Kong University Press: Hong Kong, China, 2016.
- 29. García-Palomares, J.C. Urban Sprawl and Travel to Work: The Case of the Metropolitan Area of Madrid. *J. Transp. Geogr.* **2010**, *18*, 197–213. [CrossRef]
- 30. Christophers, B. Revisiting the Urbanization of Capital. *Ann. Assoc. Am. Geogr.* **2011**, *101*, 1347–1364. [CrossRef]
- 31. Harvey, D. Rebel Cities: From the Right to the City to the Urban. Revolution; Verso: New York, NY, USA, 2012.
- 32. Oxley, M.; Elsinga, M.; Haffner, M.; Van Der Heijden, H. Competition and Social Housing in Europe. *Econ. Aff.* **2008**, *28*, 31–36. [CrossRef]
- 33. Bourdieu, P. La Distinción: Criterios y Bases Sociales del Gusto; Taurus: Madrid, Spain, 2006.
- 34. Florida, R. Cities and the Creative Class. *City Community* **2003**, 2, 3–19. [CrossRef]
- 35. Kuhlman, T.; Farrington, J. What is Sustainability? Sustainability 2010, 2, 3436–3448. [CrossRef]
- 36. Markard, J.; Raven, R.; Truffer, B. Sustainability Transitions: An Emerging Field of Research and its Prospects. *Res. Policy* **2012**, *41*, 955–967. [CrossRef]
- 37. Smith, A.; Voß, J.P.; Grin, J. Innovation Studies and Sustainability Transitions: The Allure of the Multi-Level Perspective and its Challenges. *Res. Policy* **2010**, *39*, 435–448. [CrossRef]
- 38. Bulkeley, H.; Broto, V.C.; Hodson, M.; Marvin, S. *Cities and Low Carbon Transitions*; Routledge: Abingdon, UK, 2011.
- 39. Åhman, M.; Nilsson, L.J. Path Dependency and the Future of Advanced Vehicles and Biofuels. *Util. Policy* **2008**, *16*, 80–89. [CrossRef]
- 40. Purkus, A.; Hagemann, N.; Bedtke, N.; Gawel, E. Towards A Sustainable Innovation System for the German Wood-Based Bioeconomy: Implications for Policy Design. *J. Clean. Prod.* **2018**, *172*, 3955–3968. [CrossRef]
- 41. Safarzyńska, K.; van den Bergh, J.C. Demand-Supply Coevolution with Multiple Increasing Returns: Policy Analysis for Unlocking and System Transitions. *Technol. Forecast. Soc. Chang.* **2010**, 77, 297–317. [CrossRef]
- 42. Smith, A.; Raven, R. What is Protective Space? Reconsidering Niches in Transitions to Sustainability. *Res. Policy* **2012**, *41*, 1025–1036. [CrossRef]

43. Zeybek, H.; Kaynak, M. Role of Mega Projects in Sustainable Urban Transport in Developing Countries: The Case of Istanbul Marmaray Project. In Proceedings of the Conference Codatu XIII: Sustainable Development Challenges of Transport in Cities of the Developing World: Doing What Works, Ho Chi Minh City, Vietnam, 12–14 November 2008.

- 44. Wieczorek, A.J. Sustainability Transitions in Developing Countries: Major Insights and Their Implications for Research and Policy. *Environ. Sci. Policy* **2018**, *84*, 204–216. [CrossRef]
- 45. Berkhout, F.G.H.; Angel, D.; Wieczorek, A.J. Sustainability Transitions in Developing Asia: Are Alternative Development Pathways Likely? *Technol. Forecast. Soc. Chang.* **2009**, *76*, 215–217. [CrossRef]
- 46. Baker, L. Renewable Energy in South Africa's Minerals-Energy Complex: A 'Low Carbon' Transition? *Rev. Afr. Polit. Econ.* **2015**, 42, 245–261. [CrossRef]
- 47. CEPEUH La Ciudad Hispanoamericana: El Sueño de un Orden; Ministerio de Obras Públicas y Urbanismo: Madrid, Spain, 1997.
- 48. UNPD. World Urbanization Prospects. The 2001 Revision. Data Tables and Highlights; United Nations: New York, NY, USA, 2002.
- 49. Parnreiter, C. Tendencias de Desarrollo en las Metrópolis Latinoamericanas en la era de la Globalización: LosCasos de Ciudad de México y Santiago de Chile. *EURE (Santiago)* **2005**, *31*, 5–28. [CrossRef]
- 50. Cortés, A. La Reprimarización del Modelo de Desarrollo Chileno. Oikos 2012, 11, 63-86.
- 51. Bonilla, R. Apertura y Reprimarización de la Economía Colombiana. Un Paraíso de Corto Plazo. *Rev. Nueva Soc.* **2011**, *231*, 46–65.
- 52. Slipak, A. Las Relaciones Entre China y América Latina en la Discusión Sobre el Modelo de Desarrollo de la Región: Hacia EconomíasReprimarizadas. *Iberoam. Glob.* **2012**, *5*, 2–130.
- 53. Inostroza, L. Informal Urban Development in Latin American Urban Peripheries. Spatial Assessment in Bogotá, Lima and Santiago de Chile. *Landsc. Urban Plan.* **2017**, *165*, 267–279. [CrossRef]
- 54. Garza, G. Concentración Financiera en la Ciudad de México (1960–2001). *EURE (Santiago)* **2005**, *31*, 29–46. [CrossRef]
- 55. Parnreiter, C. Formación de la Ciudad Global, Economía Inmobiliaria y Transnacionalización de Espacios Urbanos: El Caso de Ciudad de México. *EURE (Santiago)* **2011**, *37*, 5–24. [CrossRef]
- 56. Harvey, D. Neoliberalism as Creative Destruction. Ann. Am. Acad. Political Soc. Sci. 2007, 610, 21–44. [CrossRef]
- 57. Hidalgo, R.; Janoschka, M. (Eds.) *La Ciudad Neoliberal: Gentrificación y Exclusión en Santiago de Chile, Buenos Aires, Ciudad de México y Madrid;* Pontificia Universidad Católica de Chile y Universidad Autónoma de Madrid: Santiago de Chile, Chile y Madrid, Spain, 2014.
- 58. Gasparini, L.; Lustig, N. *The Rise and Fall of Income Inequality in Latin America (No. 118)*; Tulane Economics Working Paper Series, Working Paper 1110; Tuslane University: New Orleans, LA, USA, February 2011.
- 59. Battiston, D.; Cruces, G.; Lopez-Calva, L.F.; Lugo, M.A.; Santos, M.E. Income and Beyond: Multidimensional Poverty in Six Latin American Countries. *Soc. Indic. Res.* **2013**, *112*, 291–314. [CrossRef]
- 60. Pflieger, G. Historia de la Universalización del Acceso al Agua y Alcantarillado en Santiago de Chile (1970–1995). EURE (Santiago) 2008, 34, 131–152. [CrossRef]
- 61. Cattaneo, R. La Fabrique de la Ville: Promoteurs Immobiliers et Financiarisation de la Filière du Logement à Santiago du Chili. Ph.D. Dissertation, Université Paris 8, París, France, 2012. Available online: https://www.theses.fr/2012PA083527 (accessed on 27 September 2019).
- 62. Hidalgo, R. ¿Se Acabó el Suelo en la Gran Ciudad?: Las Nuevas Periferias Metropolitanas de la Vivienda Social en Santiago de Chile. *EURE (Santiago)* **2007**, *33*, 57–75.
- 63. Sakay, C.; Sanoni, P.; DEng, T.H. Rural to Urban Squatter Settlements: The MicroModel of Generational Self-Help Housing in Lima-Peru. *Procedia Eng.* **2011**, 21, 473–480. [CrossRef]
- 64. Sáez Giráldez, E.; Roch Peña, F. Laboratorio de Urbanismo Emergente: Una Mirada Sobre Los Barrios Informales de Latinoamérica. In *Actas del SB10mad. Edificación sostenible, Revitalización y Rehabilitación de barrios*; Madrid, Spain, 2010. Available online: http://oa.upm.es/8895/1/INVE\_MEM\_2010\_83306.pdf (accessed on 27 September 2019).
- 65. Ramírez-Corzo, D. La Construcción del Espacio en las Nuevas Barriadas: Objetos Fragmentados/Acciones Dislocadas. Estudio Etnográfico en los Barrios de Lomo de Corvina en Villa El Salvador, Lima. *Bulletin de l'Institut Français d'études Andines* **2017**, 46, 431–452. [CrossRef]

66. Sáez Giráldez, E. La Ciudad Progresiva. Una Lectura de los Asentamientos Humanos de Lima. Ph.D. Thesis, Universidad Politécnica de Madrid, Madrid, Spain, 2015. Available online: http://oa.upm.es/39172/1/ELIA\_ SAEZ\_GIRALDEZ\_01.pdf (accessed on 27 September 2019).

- 67. Acuña, P. Las Barriadas. La Tarea Actual del Urbanismo y los Planes de Vivienda en el Perú. July 2012. Available online: www.urbanoperu.com/Las-barriadas-la-tarea-actual-del-urbanismo-y-los-planes-de-vivienda-en-el-peru (accessed on 27 September 2019).
- 68. Hordijk, M.; Baud, I. Inclusive Adaptation: Linking Participatory Learning and Knowledge Management to Urban Resilience. In *Resilient Cities: Cities and Adaptation to Climate Change Proceedings of the Global Forum* 2010; Springer: Dordrecht, The Netherlands, 2011; pp. 111–121.
- 69. Ioris, A.A.R. The Geography of Multiple Scarcities: Urban Development and Water Problems in Lima, Peru. *Geoforum* **2012**, 43, 612–622. [CrossRef]
- 70. Aguilera, A. Mercados Fallidos: La Crisis de la Producción Privada de Vivienda Social en México. In *Red Latinoamericana de Investigadores sobre Teoría Urbana*; 2016. Available online: http://www.relateur.org/Uploads/Alfonso%20Valenzuela.pdf (accessed on 27 September 2019).
- 71. Coy, M.; Pöhler, M. Gated Communities in Latin American Megacities: Case Studies in Brazil and Argentina. *Environ. Plan. B* **2002**, *29*, 355–370. [CrossRef]
- 72. Borsdorf, A.; Hidalgo, R.; Sánchez, R. A New Model of Urban Development in Latin America: The Gated Communities and Fenced Cities in the Metropolitan Areas of Santiago de Chile and Valparaíso. *Cities* **2007**, 24, 365–378. [CrossRef]
- 73. Ortiz, J.; Escolano, S. Movilidad Residencial del Sector de Renta Alta del Gran Santiago (Chile): Hacia el Aumento de la Complejidad de los Patrones Socioespaciales de Segregación. *EURE (Santiago)* **2013**, 39, 77–96. [CrossRef]
- 74. Monkkonen, P. La Segregación Residencial en el México Urbano: Niveles y Patrones. *EURE(Santiago)* **2012**, 38, 125–146. [CrossRef]
- 75. Peters, P.A.; Skop, E.H. Socio-Spatial Segregation in Metropolitan Lima, Peru. *J. Lat. Am. Geogr.* **2007**, *6*, 149–171. [CrossRef]
- 76. Sabatini, F.; Wormald, G.; Sierralta, C.; Peters, P.A. Residential Segregation in Santiago: Scale-Related Effects and Trends, 1992–2002. In *Urban Segregation and Governance in the Americas*; Roberts, B.R., Wilson, R.H., Eds.; Palgrave Macmillan: New York, NY, USA, 2009; pp. 121–143.
- 77. Muñiz, I.; Sánchez, V.; Garcia-López, M.A. Estructura Espacial y Densidad de Población en la ZMVM 1995–2010: Evolución de unSistema urbano Policéntrico. *EURE (Santiago)* **2015**, *41*, 75–102. [CrossRef]
- 78. Truffello, R.; Hidalgo, R. Policentrismo en el Área Metropolitana de Santiago de Chile: Reestructuración Comercial, Movilidad y Tipificación de Subcentros. *EURE(Santiago)* **2015**, *41*, 49–73. [CrossRef]
- 79. Isunza, G.; Méndez, B. Desarrollo Inmobiliario y Gobiernos Locales en la Periferia de la Ciudad de México. *EURE (Santiago)* **2011**, 37, 107–129. [CrossRef]
- 80. Cabrera, G.R. El Boom de las Plazas Comerciales en la Ciudad de México. Master's Thesis, Centro de Investigación y Docencia Económicas, Ciudad de México, Mexico, 2017. Available online: http://hdl.handle.net/11651/1707 (accessed on 27 September 2019).
- 81. Gasca-Zamora, J. Centros Comerciales de la Ciudad de México: El Ascenso de los Negocios Inmobiliarios Orientados al Consumo. *EURE (Santiago)* **2017**, *43*, 73–96. [CrossRef]
- 82. Aalbers, M.B. The Variegated Financialization of Housing. Int. J. Urban Reg. 2017, 41, 542–554. [CrossRef]
- 83. Langley, P. *The Everyday Life of Global Finance: Saving and Borrowing in America*; Oxford University Press: Oxford, UK, 2008.
- 84. Cattaneo, R.A. Los Fondos de Inversión Inmobiliaria y la Producción Privada de Vivienda en Santiago de Chile: ¿Un Nuevo Paso Hacia la Financiarización de la Ciudad? *EURE (Santiago)* **2011**, *37*, 5–22. [CrossRef]
- 85. Soederberg, S. Subprime Housing Goes South: Constructing Securitized Mortgages for the Poor in Mexico. *Antipode* **2015**, *47*, 481–499. [CrossRef]
- 86. Mol, A.P.J. Ecological Modernization as A Social Theory of Environmental Reform. In *Handbook of Environmental Sociology*; Redcliffe, D., Woodgate, G., Eds.; Routledge: London, UK, 2013; pp. 63–76.
- 87. York, R.; Rosa, E.; Dietz, T. Ecological Modernization Theory: Theoretical and Empirical Challenges. In *Handbook of Environmental Sociology*; Redcliffe, D., Woodgate, G., Eds.; Routledge: London, UK, 2013; pp. 77–90.
- 88. Barton, J. Sustentabilidad Urbana Como Planificación Estratégica. EURE (Santiago) 2006, 3, 27–45. [CrossRef]

Sustainability **2019**, 11, 5835 20 of 22

89. Sosa-Rodriguez, F.S. From Federal to City Mitigation and Adaptation: Climate Change Policy in Mexico City. *Mitig. Adapt. Strateg. Glob. Chang.* **2014**, *19*, 969–996. [CrossRef]

- 90. Schaller, S.; Jean-Baptiste, N.; Lehmann, P. Oportunidades y Obstáculos Para la Adaptación Urbana Frente al Cambio Climático en América Latina: Casos de la Ciudad de México, Lima y Santiago de Chile. *EURE (Santiago)* **2016**, 42, 257–278. [CrossRef]
- 91. Barton, J.R. Climate Change Adaptive Capacity in Santiago de Chile: Creating a Governance Regime for Sustainability Planning. *Int. J. Urban Reg.* **2013**, *37*, 1916–1933. [CrossRef]
- 92. Irazábal, C. City Making and Urban Governance in the Americas: Curitiba and Portland; Routledge: London, UK. 2017.
- 93. Chelleri, L.; Schuetze, T.; Salvati, L. Integrating Resilience with Urban Sustainability in Neglected Neighborhoods: Challenges and Opportunities of Transitioning to Decentralized Water Management in Mexico City. *Habitat Int.* **2015**, *48*, 122–130. [CrossRef]
- 94. Avelar, S.; Zah, R.; Tavares-Corrêa, C. Linking Socioeconomic Classes and Land Cover Data in Lima, Peru: Assessment Through the Application of Remote Sensing and GIS. *Int. J. Appl. Earth Obs. Geoinf.* **2009**, 11, 27–37. [CrossRef]
- 95. Romero, H.; Vásquez, A.; Fuentes, C.; Salgado, M.; Schmidt, A.; Banzhaf, E. Assessing Urban Environmental Segregation (UES). The Case of Santiago de Chile. *Ecol. Indic.* **2012**, *23*, 76–87. [CrossRef]
- 96. INEI. Formas de Acceso al Agua y al Saneamiento Básico. 2018. Available online: https://www.inei.gob.pe/media/MenuRecursivo/boletines/boletin\_agua\_y\_saneamiento.pdf (accessed on 27 September 2019).
- 97. Schütze, M.; Seidel, J.; Chamorro, A.; León, C. Integrated Modelling of AMegacity Water System–The Application of A Transdisciplinary Approach to the Lima Metropolitan Area. *J. Hydrol.* **2019**, 573, 983–993.
- 98. Ioris, A.A.R. The Neoliberalization of Water in Lima, Peru. Political Geogr. 2012, 31, 266–278. [CrossRef]
- 99. Castro, J.E. Urban Water and the Politics of Citizenship: The Case of the Mexico City Metropolitan Area During the 1980s and 1990s. *Environ. Plan. A* **2004**, *36*, 327–346. [CrossRef]
- 100. Tortajada, C. Water Management in Mexico City Metropolitan Area. *Int. J. Water Resour. Dev.* **2006**, 22, 353–376. [CrossRef]
- 101. Marañón, B. In Collaboration with the Third World Centre for Water Management. Private-Sector Participation in the Management of Potable Water in Mexico City, 1992–2002. *Int. J. Water Resour. Dev.* **2005**, *21*, 165–179. [CrossRef]
- 102. Adler, I. Domestic Water Demand Management: Implications for Mexico City. *Int. J. Urban Sustain. Dev.* **2011**, *3*, 93–105. [CrossRef]
- 103. Cifuentes, E.; Rodriguez, S. Urban Sprawl, Water Insecurity, and Enteric Diseases in Children from Mexico City. *EcoHealth* **2005**, *2*, 70–75. [CrossRef]
- 104. Guerrero, T.; Rives, C.; Rodríguez, A.; Saldívar, Y.; Cervantes, V. El Agua en la Ciudad de México. *Ciencias* **2009**, *94*, 16–23.
- 105. Eakin, H.; Lerner, A.M.; Manuel-Navarrete, D.; Aguilar, B.H.; Martínez-Canedo, A.; Tellman, B.; Charli-Joseph, L.; Fernández Álvarez, R.; Bohórquez-Tapia, L. Adapting to Risk and Perpetuating Poverty: Household's Strategiesfor Managing Flood Risk and Water Scarcity in Mexico City. *Environ. Sci. Policy* 2016, 66, 324–333. [CrossRef]
- 106. Rosegrant, M.W.; Binswanger, H.P. Markets in Tradable Water Rights: Potential for Efficiency Gains in Developing Country Water Resource Allocation. *World Dev.* **1994**, 22, 1613–1625. [CrossRef]
- 107. Bauer, C.J. Bringing Water Markets Down to Earth: The Political Economy of Water Rights in Chile, 1976–1995. *World Dev.* **1997**, 25, 639–656. [CrossRef]
- 108. Garduño, H. Lessons from Implementing Water Rights in Mexico. In *Water Rights Reform: Lessons for Institutional Design*; Bruns, B.R., Ringler, C., Meinzen-Dick, R.S., Eds.; International Food Policy Research Institute: Washington, DC, USA, 2005; pp. 85–112.
- 109. Reis, N. Coyotes, Concessions and Construction Companies: Illegal Water Markets and Legally Constructed Water Scarcity in Central Mexico. *Water Altern.* **2014**, *7*, 542–560.
- 110. Pacheco-Vega, R. Agua Embotellada en México: De la Privatización del Suministro a la Mercantilización de los Recursos Hídricos. *Espiral (Guadalajara)* **2015**, 22, 221–263. [CrossRef]
- 111. Reis, N. Finance Capital and the Water Crisis: Insights from Mexico. *Globalizations* **2017**, *14*, 976–990. [CrossRef]

Sustainability **2019**, 11, 5835 21 of 22

112. Reyes Päcke, S.; Figueroa Aldunce, I.M. Distribución, Superficie y Accesibilidad de las áreas Verdes en Santiago de Chile. *EURE (Santiago)* **2010**, *36*, 89–110. [CrossRef]

- 113. Escobedo, F.J.; Nowak, D.J.; Wagner, J.E.; De la Maza, C.L.; Rodríguez, M.; Crane, D.E.; Hernández, J. The Socioeconomics and Management of Santiago de Chile's Public Urban Forests. *Urban For. Urban Green.* **2006**, *4*, 105–114. [CrossRef]
- 114. Prepared by The Authors on the Basis of the SINIM Database. Available online: http://datos.sinim.gov.cl/datos\_municipales.php (accessed on 27 September 2019).
- 115. Peña Guillen, V. Configuración Espacial de las áreas Verdes Públicas en el ámbito Distrital Adyacente a la Costa Verde, Lima. *Anales Científicos* **2015**, *76*, 52–58. [CrossRef]
- 116. Peña Guillén, V. El Paisaje Como Patrimonio Edificado: Una Reflexión Hacia el Planeamiento Urbano. *Devenir* **2014**, *1*, 59–70. [CrossRef]
- 117. Castro, C.; Merzthal, G.; van Veenhuizen, R. Integrated Urban Water Management in Lima, Peru: Building Capacity for Treatment and Reuse of Wastewater for Green Spaces and Urban Agriculture. A Review of the SWITch Lima Project, 2010. Available online: http://www.switchurbanwater.eu/outputs/pdfs/W6-2\_CLIM\_RPT\_SWITCH\_City\_Paper\_-\_Lima.pdf (accessed on 27 September 2019).
- 118. Instituto Metropolitano de Planificación. Inventario de áreas Verdes A Nivel Metropolitano. 2010. Available online: http://www.urbanistasperu.org/imp/inventariodeareasverdes/PDF/Inventario%20de% 20Areas%20Verdes%20a%20nivel%20Metropolitano.pdf (accessed on 27 September 2019).
- 119. Meza, M.C.; Moncada, J.O. Las áreas Verdes de la Ciudad de México. Un Reto Actual. *Scr. N.* **2010**, *331*. [CrossRef]
- 120. Torres, P.; Rodriguez, L.M.; García, B.I. Mexico City: The Integration of Urban Agriculture to Contain Urban Sprawl. In *Growing Cities, Growing Food: Urban Agriculture on the Policy Agenda*; Bakker, N., Dubbeling, M., Gündel, S., Sabel-Koschella, U., Zeeuw, H., Eds.; Deutsche Stiftung für Entwicklung: Feldafing, Germany, 2000; pp. 363–390.
- 121. Dieleman, H. Urban Agriculture in Mexico City; Balancing Between Ecological, Economic, Social and Symbolic Value. *J. Clean. Prod.* **2017**, *163*, 156–163. [CrossRef]
- 122. Figueroa, O.F.; Rodríguez, C.M. Urban Transport, Urban Expansion and Institutions and Governance in Santiago, Chile. *Case Study Prepared for Global Report on Human Settlements*, 2013. Available online: https://pdfs.semanticscholar.org/7593/6375c032d1bd98b105b5b2fe61b02600bce8.pdf (accessed on 27 September 2019).
- 123. Mahendra, A. Vehicle Restrictions in Four Latin American Cities: Is Congestion Pricing Possible? *Transport. Rev.* **2008**, *28*, 105–133. [CrossRef]
- 124. Greene, M.; Mora, R. Las Autopistas Urbanas Concesionadas: Una Nueva Forma de Segregación. *ARQ* **2005**, 60, 56–58. [CrossRef]
- 125. Morales, J.C. Movilización Ciudadana Frente al Proyecto de la "Autopista Urbana Oriente" en la Ciudad de México. *CUHSO Cultura-Hombre-Sociedad* **2014**, 24, 117–134. [CrossRef]
- 126. Lizárraga, C. Movilidad Urbana Sostenible: Un Reto Para las Ciudades del Siglo XXI. *Economía Sociedad y Territorio* **2006**, 22, 283–321. [CrossRef]
- 127. Hidalgo, D.; Huizenga, C. Implementation of Sustainable Urban Transport in Latin America. *Res. Transp. Econ.* **2013**, 40, 66–77. [CrossRef]
- 128. Guerra, E.S. The New Suburbs: Evolving Travel Behaviour, the Built Environment, and Subway Investment in Mexico City. Ph.D. Dissertation, University of California, Berkeley, CA, USA, 2013. Available online: <a href="https://escholarship.org/uc/item/88t7k9p5">https://escholarship.org/uc/item/88t7k9p5</a> (accessed on 9 August 2019).
- 129. Muñoz, J.C.; Batarce, M.; Hidalgo, D. Transantiago, Five Years After its Launch. *Res. Transp. Econ.* **2014**, *48*, 184–193. [CrossRef]
- 130. Emol.nacional. Available online: https://www.emol.com/noticias/Nacional/2016/10/07/825440/Metro-completa-142-km-de-red-con-lineas-3-y-6-y-se-convierte-en-el-25-mas-extenso-del-mundo.html (accessed on 9 August 2019).
- 131. Emol.nacional. Available online: https://www.emol.com/noticias/Nacional/2019/01/23/935251/Llegar-a-215-kilometros-en-2026-Los-desafios-de-Metro-tras-la-inauguracion-de-la-Linea-3.html (accessed on 9 August 2019).
- 132. La Tercera. Available online: https://www.latercera.com/pulso/noticia/metro-santiago-transporto-6851-millones-pasajeros-2017/184473/ (accessed on 9 August 2019).
- 133. Cervero, R. Bus Rapid Transit (BRT): An Efficient and Competitive Mode of Public Transport; Working Paper 2013-01; UC Berkeley IURD: Berkeley, CA, USA, 2013; pp. 1–45.

Sustainability **2019**, 11, 5835 22 of 22

134. Figueroa, O. Four Decades of Changing Transport Policy in Santiago, Chile. *Res. Transp. Econ.* **2013**, 40, 87–95. [CrossRef]

- 135. Poole Fuller, E. ¿Hacia Una Movilidad Sustentable? Desafíos de las Políticas de Reordenamiento del Transporte Público en Latinoamérica. El Caso de Lima. *Letras Verdes* **2017**, *21*, 4–31. [CrossRef]
- 136. Flores Dewey, O.A. Expanding Transportation Planning Capacity in Cities of the Global South: Public-Private Collaboration and Conflict in Chile and Mexico. Ph.D. Dissertation, Massachusetts Institute of Technology, Cambridge, MA, USA, 2013.
- 137. López Dodero, A. Planning Public Transport Improvements in Mexico: Analysis of the Influence of Private Bus Operators in the Planning Process. Ph.D. Thesis, University of Waterloo, Waterloo, ON, Canada, 2013.
- 138. Hordijk, M. A Dream of Green and Water: Community Based Formulation of A Local Agenda 21 in Peri-Urban Lima. *Environ. Urban* 1999, 11, 11–30. [CrossRef]
- 139. Aguilar, A.G.; Santos, C. Informal Settlements' Needs and Environmental Conservation in Mexico City: An Unsolved Challenge for Land-Use Policy. *Land Use Policy* **2011**, *28*, 649–662. [CrossRef]
- 140. Ehnert, F.; Frantzeskaki, N.; Barnes, J.; Borgström, S.; Gorissen, L.; Kern, F.; Strenchock, L.; Egermann, M. The Acceleration of Urban Sustainability Transitions: A Comparison of Brighton, Budapest, Dresden, Genk, and Stockholm. *Sustainability* **2018**, *10*, 612. [CrossRef]



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