

In Search of Equitable Resilience: Unravelling the Links between Urban Resilience Planning and Social Equity

*Original*

In Search of Equitable Resilience: Unravelling the Links between Urban Resilience Planning and Social Equity / Mohabat Doost, Danial; Brunetta, Grazia; Caldarice, Ombretta. - In: SUSTAINABILITY. - ISSN 2071-1050. - ELETTRONICO. - 15:18(2023), pp. 1-15. [10.3390/su151813818]

*Availability:*

This version is available at: 11583/2982225 since: 2023-12-01T15:41:41Z

*Publisher:*

MDPI

*Published*

DOI:10.3390/su151813818

*Terms of use:*

This article is made available under terms and conditions as specified in the corresponding bibliographic description in the repository

*Publisher copyright*

(Article begins on next page)

## Article

# In Search of Equitable Resilience: Unravelling the Links between Urban Resilience Planning and Social Equity

Danial Mohabat Doost, Grazia Brunetta  and Ombretta Caldarice \* 

Responsible Risk Resilience Centre (R3C), Politecnico di Torino, Interuniversity Department of Regional and Urban Studies and Planning, Viale Mattioli, 39, 10125 Torino, TO, Italy; danial.mohabat@polito.it (D.M.D.); grazia.brunetta@polito.it (G.B.)

\* Correspondence: ombretta.caldarice@polito.it; Tel.: +39-011-0907433

**Abstract:** Building resilient cities is becoming increasingly vital due to the rise in urban challenges such as climate change, socioeconomic disparities, and pandemics. While the concept of resilience is gaining popularity, many scholars argue that existing resilience plans do not adequately address social equity issues. Therefore, this study investigates the incorporation of equity into resilience planning by conducting a case study analysis of ten European resilience strategies. The employed methodology is summative content analysis, and the approach is inductive. For each resilience strategy, the incorporation of three equity dimensions—distributional, procedural, and recognitional—is examined. The results show significant variation in addressing equity dimensions across the case studies. Although some plans do not effectively address equity, others integrate it more comprehensively and successfully. Thus, we argue that resilience planning can potentially contribute to social equity issues, although currently, this contribution is not sufficient. We recommend a number of strategies by which future resilience planning can enhance its contribution. These are: promoting structural transformations, considering the political processes of resilience building, adopting participatory approaches to co-create resilience plans, fostering trust and accountability between citizens and governing bodies, favouring a systemic view, and prioritising the upstream inequality factors for building capacity.



**Citation:** Mohabat Doost, D.; Brunetta, G.; Caldarice, O. In Search of Equitable Resilience: Unravelling the Links between Urban Resilience Planning and Social Equity. *Sustainability* **2023**, *15*, 13818. <https://doi.org/10.3390/su151813818>

Academic Editors: Luigi Aldieri and John Fien

Received: 28 June 2023

Revised: 31 August 2023

Accepted: 14 September 2023

Published: 16 September 2023



**Copyright:** © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

**Keywords:** social equity; equitable resilience; resilience planning; European cities

## 1. Introduction

The significant rise in the number and severity of environmental and socioeconomic challenges in cities highlights the need for immediate adaptation and mitigation actions. Without a forward-thinking vision, cities become vulnerable to disasters, which adversely affects residents' quality of life [1]. In this respect, it is widely agreed that cities must adapt to changing conditions. Many cities have started to provide policies and strategies to follow a sustainable and resilient path. However, uneven distribution of the benefits, opportunities, and possible burdens of sustainable development and resilience policies is a major problem, and many authors refer to social sustainability as the forgotten pillar of sustainable development. This becomes even more evident when talking about resilience to urban shocks and pressures. Both natural and human-made disasters create additional difficulties for the most vulnerable individuals, who often live in poor conditions. Such risks and uncertainties can trap low-income citizens in a cycle of poverty and vulnerability, resulting in the loss of lives, possessions, and socioeconomic activities. Natural and human-made disasters also restrict people's ability to cope with future threats. Even though marginalised people contribute minimally to climate change, they are often the least likely to benefit from any adaptation and mitigation actions. These marginalised groups lack the political power to influence planning decisions to meet their needs. In addition, they do not have adequate economic resources and technical capacity to take risk-reducing measures on a large scale [2].

There are many reasons why equity issues are essential to resilience. Achieving urban resilience requires rapid changes, especially in response to climate-change-related challenges, which are urgent. For example, the 2030 Agenda calls on nations “to take the bold and transformative steps which are urgently needed to shift the world onto a sustainable and resilient path” [3]. Rapid transition requires social and political acceptance. When policies are just and communities are cohesive, people are more likely to accept transition policies. As the Nobel Prize-winning economist and public intellectual Paul Krugman [4] argues, increasing inequality in the world leads to a “destructive, self-perpetrating spiral of social polarisation and growing social divisions”. Neglecting the fairness of public policies can result in profound economic and social tensions, which cause opposition to necessary changes [5]. The Committee for Development Policy (CDP) finds inequality “at the heart of resistance to change”, adding that influential groups will resist changes when they threaten their interests. Highly unequal societies are more likely to experience resistance to change since powerful groups can control institutions and use private solutions to protect themselves [6].

In addition, it is now well established from various studies [7–10] that the impacts of climate change will worsen poverty and inequality, and a growing number of people are not willing to accept and support the unfair policies of change. Besides, lower-class poor urban communities are the least likely to benefit from any initiatives of adaptation and mitigation in cities, while they contribute only minimally to greenhouse gas emissions [2]. Therefore, convincing them to support the resilience-building initiatives is not easy. In other words, people are more likely to approve and support resilience-oriented policies if they are just and equitable. In this context, incorporating social equity into resilience planning is not just about morals; it is a practical strategy. It speeds up resilience-building initiatives by making them more acceptable to people.

Furthermore, inequality is associated with unsustainable growth since deprived populations are less likely to fully realise their potential because of the lack of financial resources [11]. Contrary to what was classically assumed by economists, equity and growth are not rivals. According to a special report by The Economist [12], inequality has increased to a point where it is detrimental to growth. Inequality leaves the most vulnerable behind and creates obstacles to the sustainable and resilient development of whole communities.

Social equity issues do not only concern the distribution of resources. They also include the processes of decision-making, governance, and the construction and functioning of public administration. For example, as suggested by Dušek and Jiří [13], efforts regarding the digitalisation of the public administration (e-Government) can bring about transparency and openness, quality and reliability, economic potential, and improvement of the relationship between citizens and public administration. However, realising society’s potential goes beyond mere technologies and infrastructures, as it requires significant social change and development, which might also involve political transformations [14]. These dimensions will be further explained in the next paragraph.

International institutions have also emphasised the importance of equity concerning resilience and sustainability. As the United Nations (U.N.) Secretary-General suggests “a just transition is critical” and cannot be an “afterthought” since the transitions we need are global [15]. The Leave No One Behind (LNOB) promise is another example of an international policy that links equity, sustainability, and resilience [16]. LNOB is one of the six Guiding Principles of the United Nations Sustainable Development Cooperation Framework. It is a “transformative promise” to reduce inequality and vulnerabilities and combat discrimination, considering their root causes. Despite all these international efforts, many scholars claim that efforts to make communities resilient have failed to address social equity in practice. Therefore, as a first step, this study reviews such debates in the following paragraphs.

There is substantial evidence that becoming truly resilient is impossible unless equity is at the frontline of the planned transformations. However, some studies suggest that resilience planning and social equity are not conceptually compatible. For example,

MacKinnon and Derickson [17] argue that “the ecological concept of resilience is conservative when applied to social relations”. Here, conservatism refers to policies advocating bouncing back, returning to normality, and conserving the status quo instead of promoting change toward more socially equitable cities. Conservative resilience policies in the study of MacKinnon and Derickson [17] intend to reduce state power and promote values such as self-reliance, volunteering, and community activities. For example, they criticise the ‘Big Society’ agenda since it encourages the “responsibilisation” of individuals in risk management. Accordingly, conservative resilience becomes increasingly linked to security strategies emphasising cities’ safety as places to conduct business. However, progressive social change requires the transformation of established systems. In this respect, they claim that the inherent conservatism of resilience planning stops radical and systematic transformations, “normalises the uneven effects” of current policies, depoliticises the issue, and neglects the structural inequalities. Therefore, they refuse resilience as a helpful concept since it “establishes social structures, which are often shaped by unequal power relations and injustice”, as already suggested by other authors, including Harvey [18] and Swynedouw and Heynen [19]. Furthermore, to fill the gap between theory and practice, they suggest the concept of “resourcefulness”. They promote it as an alternative for resilience to inspire progressive, anti-capitalist, and socially equitable politics and movements [17].

In the same vein, Bonds [20] suggests that “rather than seeking to recuperate resilience, we should refuse it”. She supports planning approaches that emphasise structural change rather than adoption. She refuses the promotion of resilience because urban resilience programs are guided by “racialised securitisation and safety ideas that expand carcerality in favour of capital accumulation”. According to Bonds, resilience planning uses a “technocratic, risk-focused strategy” that has nothing to do with establishing a more equitable city. Accordingly, she claims resilience has neoliberal roots and promotes returning to normality rather than fundamental change. She also suggests that “we should refuse resilience and other planning approaches that confirm and reinforce racial hierarchies and legitimate the racialised control of space”.

Other authors are more optimistic about the issue and do not reject all notions of resilience as fundamentally conservative and unjust [21–25]. Among those, Davoudi [22] tries to clarify the compatibility of resilience and equity by unpacking the multiple meanings of the term resilience. She believes that if resilience is defined as bouncing back, it will tie to “conservative” political values. She suggests that an alternative definition of resilience can save the concept from this conservatism. She provides three different definitions for resilience, which are engineering, ecological, and evolutionary resilience. According to her, evolutionary resilience is the most suitable definition regarding social issues. The role of evolutionary resilience in planning is “being prepared for innovative transformation at times of change and in the face of inherent uncertainty” [26]. Consequently, she [27] believes that if an “evolutionary conception” of resilience—instead of engineering resilience—“is adopted, it may encompass more radical transformations”, which is necessary for addressing structural issues like social equity.

More specifically, Meerow et al. [28] perform a “systematic, cross-sectional” analysis of how equity is included in resilience plans. They determine the degree to which resilience plans in North American cities make equity a primary focus. They claim that such a study helps understand whether resilience planning can promote equity issues. To the best of our knowledge, no study yet investigates the incorporation mentioned above in the European context. The current research aims to fill this gap as its primary objective. Our specific goal is to examine how European cities address equity concerns in their resilience strategies. We also try to identify patterns within the content of successful case studies that lead to effectively addressing equity concerns. By uncovering these patterns, we aim to develop recommendations and guidelines for future resilience planning that prioritise and strengthen the vital aspect of equity.

In order to reach these objectives, this study uses a sample of ten resilience strategies selected from E.U. and U.K. cities, all drafted under the same 100 Resilient Cities (100RC)

initiative pioneered by the Rockefeller Foundation [29]. Using these documents, we investigate and compare the presence of equity concerns to uncover possibilities for enhancing their integration. This research aims to answer several questions. The overarching question involves the academic discussion on the topic:

- Is resilience planning inherently capable of addressing the issues of social equity and justice?

The more specific questions of this study are:

- Do the existing European resilience strategies sufficiently address equity issues within their content?
- How are social equity issues incorporated into different European resilience plans?
- How can the incorporation of social equity in resilience planning be fostered?
- How equitable resilience can be defined from a planning perspective.

## 2. Materials and Methods

Case study analysis is the strategy of this research, and the applied methodology is inductive content analysis. When it comes to practical methods for social research, content analysis is the widely recognised technique for analysing texts [30]. It fundamentally consists of a coding procedure to standardise textual raw data [31]. This research takes advantage of the summative approach, in which different steps include counting the keywords and crucial content, comparing them, and interpreting their latent meanings. Typically, the first step in the summative method is identifying and quantifying specific words or materials in the text to determine the contextual use of the terms or content [32]. This study goes beyond only a quantitative analysis of word frequencies. In other words, latent content analysis is also performed to interpret and discover the underlying meanings of the content [33].

For this study, we apply purposive (or non-random) sampling since the inductive content analysis requires a deep analysis of a relatively small sample size. The selection of the samples follows four main criteria: target of the study, accessibility, homogeneity, and impact of documents. All cases are resilience strategies of cities that are part of the Resilient Cities Network (RCN), built on the legacy of the 100 Resilient Cities (100RC) initiative [29]. European member cities of the 100RC or RCN are Athens, Barcelona, Belfast, Belgrade, Bristol, Glasgow, Greater Manchester, Lisbon, London, Milan, Paris, Rome, Rotterdam, The Hague, Thessaloniki, and Vejle. It is important to note that some of these member cities have not yet published an accountable version of their resilience strategy in the format of 100RC or RCN. In more detail, the initial list also includes, as an example, the resilience action plans of Barcelona and Lisbon. However, they are eliminated from the final sample since they are resilience action plans to manage climate change with a particular focus on the urban water cycle. Therefore, they are not comprehensive resilience strategies like the selected documents. Both plans are based on a template provided by the “RESCCUE” Project [34]. In addition, the plan of Belfast is not selected as a case study since it is a draft for consultation. So far, among these members, ten cities have an elaborated and submitted version of their resilience strategies, all in the same format of the 100RC or, subsequently, RCN. These cities are Athens [35], Bristol [36], Glasgow [37], London [38], Paris [39], Rome [40], Rotterdam [41], The Hague [42], Greater Manchester [43], and Thessaloniki [44], presented in Figure 1.

To apply the coding process, it is first necessary to review the main research aims and questions. As mentioned earlier, this study intends to clarify the role of planning for incorporating equity into resilience. Two specific questions are raised: How is social equity incorporated within European resilience plans? What are the emerging patterns of plans that succeed (or fail) to sufficiently address the issue of social equity? Each of these two questions leads to a specific stage of coding.





**Figure 1.** Case studies selected from European member cities of the 100RC or RCN—elaborated by the authors.

Initially—based on the first question—we explore relevant patterns and trends related to the issue of equity within the resilience plans. To clarify, Figure 2 shows the word cloud of the most emergent themes when we analyse the whole content of all ten documents, while Figure 3 shows the most emergent words regarding the social equity issues in the documents.



**Figure 2.** Word cloud of the most emergent themes when analysing the whole content of all ten documents—elaborated by the authors.



**Figure 3.** Word cloud of the most emergent themes when analysing the codes extracted regarding the social equity issues in all ten documents—elaborated by the authors.

This study explores three main dimensions of social equity: distributional, procedural, and recognitional. In political theory, for decades, justice was only applied to distributional relationships [45–47]. This view defines justice as the fair distribution of social goods. However, more recent theorists [47–51] challenge this traditional idea and articulate justice as a balance of more interlinked elements. Schlosberg [48,49] claims that justice, “in political practice, is articulated and understood as a balance of numerous interlinked elements of distribution, recognition, participation, and capability”. In other words, he tries to provide a more comprehensive understanding of justice by addressing the importance of individual and community recognition, participation, and functioning. The current study adopts this multi-dimensional definition of justice. This view on justice and equity argues that—in addition to the distributive dimension—it is also necessary to address the processes that might lead to maldistribution, respect, and recognition, which are “necessary preconditions to any theory of procedural justice” [50].

Accordingly, justice is composed of distributional, procedural, and recognitional dimensions, which are investigated within the resilience strategies in this study. The first two dimensions (distributional and procedural) are coded simultaneously, while recognitional justice is separately coded. Figure 4 displays the most frequently used terms related to each equity dimension across all ten documents.

The next level of coding is extracting the emerging patterns of plans that are either more or less successful in addressing social equity. In other words, we examine if some approaches help the plans improve equity incorporation. Various relevant topics emerge, such as the potential link between the adopted definition of resilience and the incorporation of equity, the impact of holistic stakeholder engagement on procedural justice, and the influence of considering related themes like social capital.

All the coding and analysis processes are performed inside Nvivo 12, “a qualitative data analysis application that allows to collect, organise, analyse, and visualise unstructured or semi-structured data” [51]. The following chapters present the results from the case study analysis, providing detailed information about each of the codes mentioned earlier. These results come from a deep analysis of 2350 codes (sentences and phrases relevant to the contribution of equity issues) extracted from the ten documents.



**Figure 4.** Word cloud of the most emergent themes extracted from the study’s coding effort regarding the three dimensions of equity—elaborated by the authors.

### 3. Results

In this section, we first analyse each equity dimension separately and compare the plans to identify the differences in their contribution to each dimension. Afterwards, we give a general overview of all equity dimensions addressed in each resilience strategy.

#### 3.1. Distributional Dimension of Equity in Resilience Strategies

Regarding the distributional dimension, we find several themes during the coding process. These themes refer to resources, opportunities, benefits, and burdens that must be equitably distributed among people. They include: housing, employment, poverty, health, income, food, shelter, energy, public infrastructure (such as transportation), urban public space accessibility, neighbourhood facilities, quality of urban life, urban green space, tourism and entertainment, arts and culture, basic needs of the people, supervised training and community empowerment, educational services, the banking system, debt, equitable investment opportunities, online networks and open data availability, distribution of challenges and burdens of resilience building, and emergency aid.

Among the ten cases, the resilience strategy of Glasgow incorporates distributional equity into the whole content more than the others. This contribution is also considerable in The Hague, Bristol, London, Athens, and Paris strategies. Greater Manchester ranks last among the case studies.

Each plan approaches the distributional equity distinctively. Each case has its own focus areas and identifies different social goods to be distributed fairly between citizens. Table 1 presents these differences. Each row represents a city, and each column stands for a theme related to distributional equity. If the theme is addressed in a city, the cell is filled green; otherwise, it is left blank.

As Figure 1 shows, there are common themes among all the resilience strategies. For example, affordable housing is a common concern in most cases. The other themes that emerge more considerably than the others are income disparity, job and employment, food security, and health. On the other hand, some issues appear only in a single case. For example, the challenges regarding the debt issue are only cited in the strategy of the Hague, while tourism and entertainment are only present in the case of Rome.

Turning to each city (the columns of Table 1), the variety of emergent concepts is wide. As an example, the strategy of Athens covers most of the themes. In addition, this plan considers some novel issues, such as equitable investment processes, immigrants’ jobs, child poverty, and the right to urban public spaces. On the other hand, in the case of Greater Manchester, both the extent and the variety of topics are limited.



**Table 1.** The main focuses of each resilience plan addressing the issue of distributional equity (The highlighted green refers to the themes that are addressed in the plans)—elaborated by the authors.

Themes Referring to the Distributional Dimension of Social Equity	City	Athens	Bristol	Glasgow	The Hague	Thessaloniki	Paris	Rome	London	Rotterdam	Greater Manchester
Housing and affordability											
Job and employment											
Poverty											
Health											
Income disparity											
Food security											
Shelter											
Public infrastructure (such as transportation)											
Equitable investment opportunities											
Energy poverty											
Urban public space accessibility											
Neighbourhood facilities											
Quality of urban life											
Basic needs											
Supervised training (Community empowerment)											
Banking system											
Educational gap											
Online networks and open data availability											
Distribution of challenges and burdens of resilience											
Debt											
Urban green											
Tourism and entertainment											
Arts and Culture											
Emergency aid											

### 3.2. Procedural Dimension of Equity in Resilience Strategies

The contribution of procedural justice in the analysed resilience strategies stands further apart than the distributional dimension. We find several themes related to the procedural dimension during the coding process, presented in Table 2. While the contribution of procedural equity in Athens, Thessaloniki, Glasgow, and Bristol is remarkably higher, there is no indication of procedural dimension in the resilience strategies of London and Greater Manchester. This contribution in Paris, Rotterdam, Rome, and especially The Hague is considerably lower. Furthermore, the way each plan addresses the distributional dimension is distinctive.

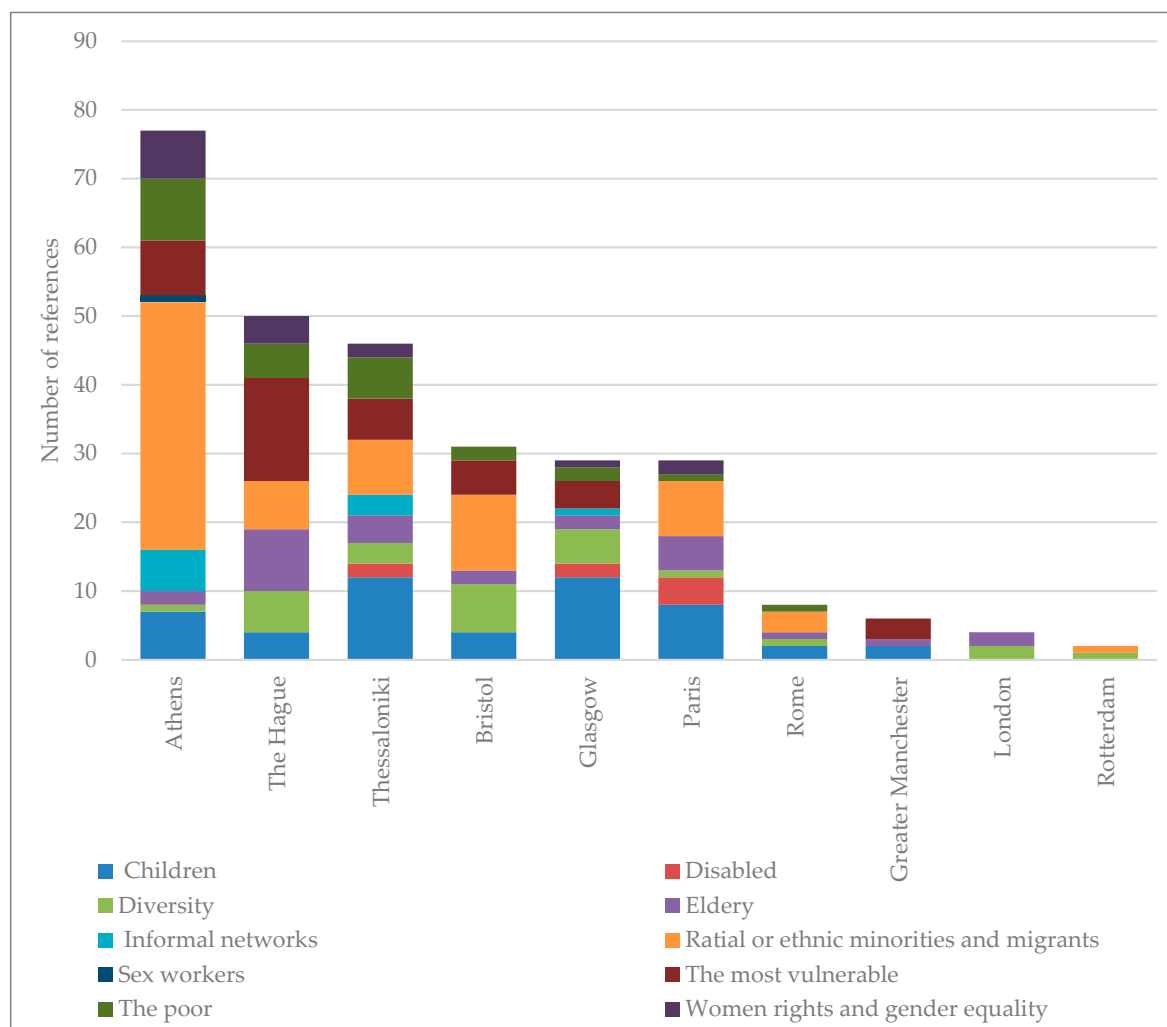
**Table 2.** The main focuses of each resilience plan addressing the issue of procedural equity (The highlighted green refers to the themes that are addressed in the plans)—elaborated by the authors.

Themes Referring to the Procedural Dimension of Social Equity	City	Athens	Thessaloniki	Glasgow	Bristol	Paris	Rome	Rotterdam	The Hague	London	Greater Manchester
Communication (citizens and policymakers)											
Citizen's participation											
Local people participation											
Feeling of connection to the decision-making process											
Citizens as stakeholders											
Co-designing of plans											
Transparency and accountability											
Encouraging collective actions											
Consideration of citizens' opinion											
e-participation											
Empower grassroots leaders											
Decentralisation of power											
Making the citizens' voices heard											
Fostering citizens awareness											
e-communication											
Marginalised groups participation											
Youth participation											
Overcoming bureaucratic barriers											
Transparent monitoring											
Open data accessibility											
Participation of the informal groups											
Participatory governance											

Similarly to the previous analysis for the distributional dimension, all codes extracted from the resilience strategies are analysed more deeply, and each document's key focuses are discovered. Table 2 presents the emerging focuses of each plan and the variety of themes for each city. First, it is evident that the procedural dimension is absent in the resilience strategies of Greater Manchester and London. The Hague's contribution to this dimension is negligible. The strategies of Rome, Rotterdam, and Paris incorporate only a limited number of themes. All three cases address communication (between citizens and policymakers) to build trust and transparency. However, they ignore some other key themes: encouraging collective actions, local people's participation, co-designing, and participatory planning and governance. On the other hand, the strategy of Athens interestingly covers most of the themes. In addition, some novel themes are mentioned only in Athens's document. Overcoming bureaucratic barriers is one of these themes, which is crucial, mainly because it is intertwined with "anti-racist training for the relevant municipal departments". In other words, this document addresses the importance of both procedural and recognitional equity. The former is addressed through overcoming the traditional barriers to citizens' participation, and the latter by recognising the specific needs of vulnerable groups. The other themes that are present only in Athens's case include participation of the informal groups, transparent monitoring, and open data accessibility. Finally, the degree of incorporation regarding the procedural dimension is considerable in the strategies of Thessaloniki, Glasgow, and Bristol, though none of them reaches that of Athens in terms of the variety of themes. Communication (between citizens and policymakers) and citizens' participation in the decision-making processes are the most emergent themes when looking at all the resilience strategies.

### 3.3. Recognitional Dimension of Equity in Resilience Strategies

In the case of the recognitional dimension, we present a matrix (Figure 5) in which the resilience strategies are shown in the vertical axes, and the levels of recognition for each vulnerable group are represented in different colours through the horizontal axes. The groups that are considered here include those recognised as vulnerable or especially deserving of acknowledgement/respect for their values and associated rights. These groups are children, the elderly, the disabled, the deprived, sex workers, and racial and ethnic minorities/migrants. In addition, some themes are added for this part of the analysis, such as women's rights and gender equality, recognising the informal networks of people, and the importance of realising diversity as a resource rather than a limitation.



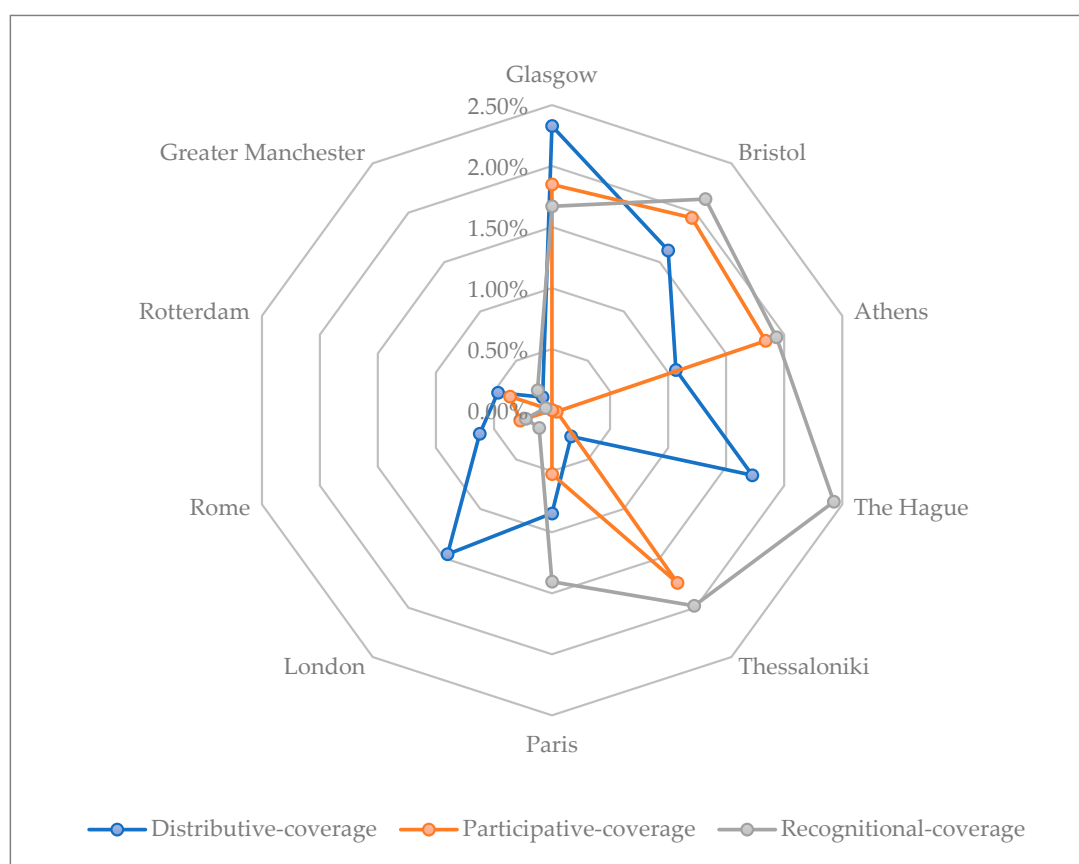
**Figure 5.** The groups and themes related to recognitional equity that have been addressed within each plan—elaborated by the authors.

As shown in Figure 5, all the case studies incorporate a measure of the recognitional dimension into their resilience plans. The resilience plan of Athens—in terms of both variety and number of appearances—includes recognitional justice in the whole content significantly more than the others. More interestingly, Athens incorporates two specific groups which are not mentioned in other plans. These groups are sex workers and informal networks of people. The Hague, Bristol, Thessaloniki, Glasgow, and Paris incorporate the recognitional dimension considerably. On the other hand, in the cases of Rome, Greater Manchester, London, and Rotterdam, the contribution is minor.

It is evident that racial and ethnic minorities and migrants are cited more than any other groups or themes within the strategies. Children, the elderly, and the poor are also considerably mentioned. The “most vulnerable” groups—as a general concept and not referring to a particular group—are also present significantly in the documents. In addition, women’s rights, gender equality, and diversity are cited several times.

### 3.4. All Dimensions of Equity Addressed in Resilience Strategies

The last set of results gives information about the number of codes and references in each resilience plan regarding every equity dimension. Figure 6 shows the contribution of either equity dimension in each plan as the percentage of coverage relative to the whole content of the document. As can be seen, Glasgow, Bristol, and Athens are the cities that address the equity issues significantly more than the others. These cities incorporate all three dimensions. Greater Manchester is the worst case, with a limited contribution of recognitional and distributive equity. The Hague and Thessaloniki contribute convincingly to the equity issues; however, there is a noticeable absence of one dimension in both cases. The Hague does not address the participative dimension significantly, and Thessaloniki does not mention the distributive dimension considerably.



**Figure 6.** Contribution of every dimension of equity as a percentage of total content within the resilience plans of all ten cases—elaborated by the authors.

In the second coding attempt, we inductively extract any other relevant themes or concepts in the plans. We focus on themes that are influential in the incorporation of equity issues. We gain valuable insights from the existing resilience plans by identifying these principal themes. These insights can help improve equity issues’ inclusion in future resilience planning. These themes are discussed in the following section.

#### 4. Discussion: Toward Equitable Resilience

This paper explores the relationship between urban resilience and social equity by performing an empirical study on a sample of ten European resilience strategies. In summary, resilience plans address social equity issues differently regarding the extent of incorporation and their comprehensiveness. Glasgow, Bristol, and Athens significantly contribute to equity issues and cover all three equity dimensions (distributional, participative, and recognitional). Some plans—such as the resilience strategy of the Hague—fail to address a specific dimension of equity (participative) while they cover other dimensions convincingly. And finally, some others—like the resilience strategy of Greater Manchester—fail to address equity adequately. The second round of this study investigates the patterns existing in the contents of resilience strategies that influence the incorporation of social equity issues in the documents. According to this investigation, some important themes are identified, which leads us to conclude that equitable resilience promotes structural transformations, is collective rather than individual, considers political processes, is co-created in a participatory process, fosters trust and accountability of formal institutions, favours a systemic view, and finally, prioritises the upstream inequality challenges to overcome. The following paragraphs explain each of these characteristics of our conception of equitable resilience.

It is first suggested that promoting resilience requires more than just recovering from shocks. It involves seeking out transformative opportunities that arise from change. Issues of equity are deeply rooted in structural factors. When resilience planning solely focuses on recovery measures without considering the need for structural changes, it fails to address the underlying inequalities in communities. Therefore, it risks prioritising technological solutions over addressing systemic disparities. This issue is pivotal in this research since it is also interconnected to the other themes that influence the inclusion of equity issues in resilience plans.

For example, acknowledging the need for structural transformations helps avoid the resilience concept's depoliticization. In this sense, depoliticization means considering politics separate from concepts like vulnerability, adaptation, and mitigation, thus ignoring the political and structural factors that contribute to putting people at risk. To avoid such an approach, it is necessary to investigate the underlying causes of existing social inequalities within political processes and decisions. By doing so, we can also address the historical limitations that hinder the incorporation of social equity in planning practices. From the case studies of this research, a great example is the strategy drafted by Athens, which criticises the austerity measures imposed by political bodies in the document, since these measures have exacerbated challenges such as declining incomes, increasing personal debt, and high real estate taxes [35]. The document highlights that the most vulnerable populations are the ones most negatively affected by the austerity measures.

*“The economic recession (including a 60% municipal budget cut since 2011), has exacerbated the problem: our roads, pavements, parks, playgrounds, facades, garbage bins, etc., are openly showing their deterioration, their age and scars” [35].*

Closely linked to the abovementioned themes, resilience strategies could favour a systemic view. Thus, rather than merely analysing how a city as an entire system may be resilient, it is suggested to determine how, for whom, and by whom this resilience is built. In addition, a systemic view of resilience helps us to view the root causes of inequalities as integral parts of a larger interconnected system. This also helps to avoid the individualistic approach to resilience, which risks reinforcing the neoliberal notion of “self-reliance” and disregarding individuals who may not meet the standard of being “resilient enough” [24]. The socioeconomically disadvantaged groups are less likely to be self-reliant in case of urban pressures. An example of the individualistic approach to resilience is seen in the case study of Rotterdam, where resilience becomes excessively focused on individual capacities. The emphasis is on enhancing personal skills and promoting behavioural changes for a healthier lifestyle to become more resilient. This tends to prioritise self-reliance rather than building equitable community resilience [41].



*“We will focus on the health of the individual citizen, implementing a suite of tools and actions focused on specific groups and problems” [41].*

Promoting transparency and accountability and overcoming the lack of trust is also essential from an equity perspective. Transparency and accountability enhance the participatory dimension of equity. As an example, the resilience strategy of Athens acknowledges mistrust as one of the four chronic stresses undermining the city’s resilience. The document emphasises the importance of addressing this issue to foster a more resilient and inclusive urban environment.

*“For Athens to be resilient, it needs to build trust” [35].*

Another correlated theme is drafting the resilience strategy itself through a participative approach, which could enhance the fairness of the processes, leading to more equitable outcomes. In this respect, this study discovers that—despite addressing stakeholder engagement as a valuable tool to facilitate resilience building—some plans exclude the citizens and the most vulnerable groups from the process. This exclusion leads to a lack of procedural equity.

Moreover, in all the examined case studies, several stresses and shocks were identified as the most critical challenges for building resilience. It is strongly advised to recognise existing inequalities as one of these challenges for promoting equitable resilience. Despite coming from an unsuccessful case study (Greater Manchester) in addressing equity issues, the subsequent example shows how this matter can be effectively expressed within a resilience plan:

*“Greater Manchester, just like other places across the world, has experienced significant challenges. From the plague of 1645 to the Manchester Arena attack in 2017, many of the shocks we have faced have destroyed lives. Similarly, chronic stresses including deprivation, ageing infrastructure and poor air quality continue to undermine the fabric of our society and magnify the impacts of the emergencies we experience” [43].*

Finally, our study suggests prioritising “upstream” factors of inequality like economic disparities, poverty, housing affordability, etc., which impact “downstream” disparities like health and education. To put it differently, upstream factors of inequality refer to those rooted in the underlying structural characteristics that create unequal relations. These upstream causes of inequality can create downstream challenges. Some of these downstream challenges are education, employment, healthcare access, and availability of urban services like transportation, green areas, etc. This recommendation is mainly adopted from the resilience plan of Bristol:

*“The principle of moving upstream can be applied more broadly to thinking about preventing or averting difficulties in people’s lives before they become a problem to solve. Bristol has been piloting and developing an approach to early intervention in troubled families which have yielded impressive results” [36].*

Overall, by examining the European case studies of resilience strategies, this study confirms that—despite not being currently associated sufficiently—resilience planning is inherently capable of addressing the issues of social equity and justice issues. As suggested by Meerow et al., we agree that equity is not limited to the distribution of resources [28]. Their study in North American cities showed a limited contribution of other equity dimensions to resilience strategies. In contrast, the results of our research in the European context show that some cities—for example, Athens, Thessaloniki, and Bristol—significantly address systemic inequality, uneven politics of urban development, and the importance of both procedural and recognitional dimensions of equity.

This research’s central contribution is strengthening the linkages between the Sustainable Development Goals (SDGs) of the 2030 Agenda [52], which emphasise resilience and social equity. The efforts are also meant to contribute to the “Leave No One Behind” (LNOB) policy of the United Nations Sustainable Development Cooperation Framework [16] and the “Just Transition” initiative advocated by the United Nations (U.N.) Secretary-General [15].

Hopefully, this study's recommendations could provide insights, especially for scholars, planners, and policymakers, to create more equitable processes and outcomes through future resilience planning.

**Author Contributions:** Conceptualisation: D.M.D.; Methodology: G.B., O.C. and D.M.D.; Software: D.M.D.; Validation: D.M.D.; Formal analysis: D.M.D.; Investigation: D.M.D.; Data curation: D.M.D.; Writing—original draft preparation: D.M.D.; Writing—review and editing: D.M.D.; Visualisation: D.M.D.; Supervision: G.B., O.C. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** Not applicable.

**Data Availability Statement:** Data is contained within the article.

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

## References

1. Srebalová, M.; Peráček, T. Effective Public Administration as a Tool for Building Smart Cities: The Experience of the Slovak Republic. *Law* **2022**, *11*, 67. [CrossRef]
2. Dodman, D.; Archer, D.; Mayr, M. *Addressing the Most Vulnerable First—Pro-Poor Climate Action in Informal Settlements*; UN-HABITAT: Nairobi, Kenya, 2018; Volume 46.
3. UN DESA. *Addis Ababa Action Agenda of the Third International Conference on Financing for Development*; UN DESA: Rome, Italy, 2015.
4. Byrne, J. *The Occupy Handbook*; Hachette UK: London, UK, 2012; ISBN 978-0316220217.
5. Powers, M. Energy Transition: Reforming Social Metabolism. In *Research Handbook on Global Climate Constitutionalism*; Edward Elgar Publishing Ltd.: Cheltenham, UK, 2019; pp. 246–276. ISBN 9781788115810.
6. United Nations CDP (committee for Development Policy). Leaving No One Behind. 2018. Available online: [https://sustainabledevelopment.un.org/content/documents/2754713\\_July\\_PM\\_2\\_Leaving\\_no\\_one\\_behind\\_Summary\\_from\\_UN\\_Committee\\_for\\_Development\\_Policy.pdf](https://sustainabledevelopment.un.org/content/documents/2754713_July_PM_2_Leaving_no_one_behind_Summary_from_UN_Committee_for_Development_Policy.pdf) (accessed on 5 June 2023).
7. Jerneck, A.; Olsson, L. Adaptation and the Poor: Development, Resilience and Transition. *Clim. Policy* **2008**, *8*, 170–182. [CrossRef]
8. Hallegatte, S.; Rozenberg, J. Climate Change through a Poverty Lens. *Nat. Clim. Chang.* **2017**, *7*, 250–256. [CrossRef]
9. Roy, M.; Shemdoe, R.; Hulme, D.; Mwageni, N.; Gough, A. Climate Change and Declining Levels of Green Structures: Life in Informal Settlements of Dar Es Salaam, Tanzania. *Landsc. Urban Plan.* **2018**, *180*, 282–293. [CrossRef]
10. Shukla, P.R.; Skea, J.; Slade, R.; Al Khourdajie, A.; van Diemen, R.; McCollum, D.; Pathak, M.; Some, S.; Vyas, P.; Fradera, R.; et al. (Eds.) IPCC Summary for Policymakers. In *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*; Cambridge University Press: Cambridge, UK; New York, NY, USA, 2022; Volume 9781107025, pp. 1–30, ISBN 978-1-107-66182-0.
11. Berg, A.G.; Ostry, J.D. Inequality and Unsustainable Growth: Two Sides of the Same Coin? *IMF Econ. Rev.* **2017**, *65*, 792–815. [CrossRef]
12. Minton Beddoes, Z. For Richer, for Poorer—The Economist Special Report. Available online: [https://www.economist.com/special-report/2012/10/11/for-richer-for-poorer?utm\\_medium=cpc.adword.pd&utm\\_source=google&ppccampaignID=18151738051&ppcadID=&utm\\_campaign=a.22brand\\_pmax&utm\\_content=conversion.direct-response.anonymous&gclid=Cj0KCQjwj\\_ajBhCqARIsAA37s0xZr8922FUZGJfSidgG1x5l6piSXGcJHiojSU0ez3WMWbKTeh\\_GtUaAldqEALw\\_wcB&gclsrc=aw.ds](https://www.economist.com/special-report/2012/10/11/for-richer-for-poorer?utm_medium=cpc.adword.pd&utm_source=google&ppccampaignID=18151738051&ppcadID=&utm_campaign=a.22brand_pmax&utm_content=conversion.direct-response.anonymous&gclid=Cj0KCQjwj_ajBhCqARIsAA37s0xZr8922FUZGJfSidgG1x5l6piSXGcJHiojSU0ez3WMWbKTeh_GtUaAldqEALw_wcB&gclsrc=aw.ds) (accessed on 5 June 2023).
13. Dušek, J. Data Boxes as a Part of the Strategic Concept of Computerization of Public Administration in the Czech Republic. *Adm. Sci.* **2023**, *13*, 154. [CrossRef]
14. Mutambik, I.; Lee, J.; Almuqrin, A.; Zhang, J.Z. Transitioning to Smart Cities in Gulf Cooperation Council Countries: The Role of Leadership and Organisational Culture. *Sustainability* **2023**, *15*, 10490. [CrossRef]
15. United Nations Secretary-General. Deputy Secretary-General's Remarks at "People and Climate. Just Transition in Practice". Available online: <https://www.un.org/sg/en/content/dsg/statement/2020-12-02/deputy-secretary-generals-remarks-people-and-climate-just-transition-practice> (accessed on 29 June 2022).
16. UNSDG | Leave No One behind. Available online: <https://unsdg.un.org/2030-agenda/universal-values/leave-no-one-behind> (accessed on 4 July 2022).
17. MacKinnon, D.; Derickson, K.D. From Resilience to Resourcefulness: A Critique of Resilience Policy and Activism. *Prog. Hum. Geogr.* **2013**, *37*, 253–270. [CrossRef]
18. Harvey, D. *Justice, Nature, and the Geography of Difference*; Wiley-Blackwell: Hoboken, NJ, USA, 1996; ISBN 978-1-557-86681-3.
19. Swyngedouw, E.; Heynen, N.C. Urban Political Ecology, Justice and the Politics of Scale. *Antipode* **2003**, *35*, 898–918. [CrossRef]
20. Bonds, A. Refusing Resilience: The Racialization of Risk and Resilience. *Urban Geogr.* **2018**, *39*, 1285–1291. [CrossRef]
21. Fitzgibbons, J.; Mitchell, C.L. Just Urban Futures? Exploring Equity in "100 Resilient Cities". *World Dev.* **2019**, *122*, 648–659. [CrossRef]

22. Davoudi, S. Just Resilience. *City Community* **2018**, *17*, 3–7. [\[CrossRef\]](#)
23. Fainstein, S. Resilience and Justice. *Int. J. Urban Reg. Res.* **2015**, *39*, 157–167. [\[CrossRef\]](#)
24. Brunetta, G.; Ceravolo, R.; Barbieri, C.A.; Borghini, A.; de Carlo, F.; Mela, A.; Beltramo, S.; Longhi, A.; De Lucia, G.; Ferraris, S.; et al. Territorial Resilience: Toward a Proactive Meaning for Spatial Planning. *Sustainability* **2019**, *11*, 2286. [\[CrossRef\]](#)
25. Doost, D.M.; Buffa, A.; Brunetta, G.; Salata, S.; Mutani, G. Mainstreaming Energetic Resilience by Morphological Assessment in Ordinary Land Use Planning. The Case Study of Moncalieri, Turin (Italy). *Sustainability* **2020**, *12*, 4443. [\[CrossRef\]](#)
26. Davoudi, S.; Shaw, K.; Haider, L.J.; Quinlan, A.E.; Peterson, G.D.; Wilkinson, C.; Fünfgeld, H.; McEvoy, D.; Porter, L. Resilience: A Bridging Concept or a Dead End? “Reframing” Resilience: Challenges for Planning Theory and Practice Interacting Traps: Resilience Assessment of a Pasture Management System in Northern Afghanistan Urban Resilience: What Does It Mean in Planning: A Cautionary Note. *Plan. Theory Pract.* **2012**, *13*, 299–333. [\[CrossRef\]](#)
27. Davoudi, S.; Brooks, E.; Mehmood, A. Evolutionary Resilience and Strategies for Climate Adaptation. *Plan. Pract. Res.* **2013**, *28*, 307–322. [\[CrossRef\]](#)
28. Meerow, S.; Pajouhesh, P.; Miller, T.R. Social Equity in Urban Resilience Planning. *Local Environ.* **2019**, *24*, 793–808. [\[CrossRef\]](#)
29. 100 Resilient Cities—The Rockefeller Foundation. Available online: <https://www.rockefellerfoundation.org/100-resilient-cities/> (accessed on 25 May 2021).
30. Titscher, S.; Meyer, M.; Wodak, R.; Vetter, E. *Methods of Text and Discourse Analysis: In Search of Meaning*; SAGE: London, UK, 2000; ISBN 1446232840, 9781446232842.
31. Babbie, E.R. *The Practice of Social Research*; Cengage Learning: Boston, MA, USA, 2010; ISBN 1133050077, 9781133050070.
32. Hsieh, H.F.; Shannon, S.E. Three Approaches to Qualitative Content Analysis. *Qual. Health Res.* **2005**, *15*, 1277–1288. [\[CrossRef\]](#)
33. Kondracki, N.L.; Wellman, N.S.; Amundson, D.R. Content Analysis: Review of Methods and Their Applications in Nutrition Education. *J. Nutr. Educ. Behav.* **2002**, *34*, 224–230. [\[CrossRef\]](#)
34. Web Page: Home—RESCCUE: RESCCUE. Available online: <https://toolkit.resccue.eu/> (accessed on 7 July 2022).
35. City of Athens. Redefining the City: Athens Resilience Strategy for 2030. In *100 Resilient Cities*; The Rockefeller Foundation: New York, NY, USA, 2017; p. 226.
36. Bristol City. Bristol City. Bristol Resilience Strategy. In *100 Resilient Cities*; The Rockefeller Foundation: New York, NY, USA, 2016.
37. Glasgow City. Council Our Resilient Glasgow. In *100 Resilient Cities*; The Rockefeller Foundation: New York, NY, USA, 2016.
38. Greater London Authority. London City Resilience Strategy 2020. In *100 Resilient Cities*; The Rockefeller Foundation: New York, NY, USA, 2020; p. 99.
39. City of Paris. Resilience Strategy Paris. In *100 Resilient Cities*; The Rockefeller Foundation: New York, NY, USA, 2017; p. 125.
40. City of Rome. Rome Resilience Strategy. In *100 Resilient Cities*; The Rockefeller Foundation: New York, NY, USA, 2020.
41. Gemeente Rotterdam. Rotterdam. Rotterdam Resilience Strategy. In *100 Resilient Cities*; The Rockefeller Foundation: New York, NY, USA, 2016; pp. 1–126.
42. City of The Hague. The Hague Resilience Strategy. In *100 Resilient Cities*; The Rockefeller Foundation: New York, NY, USA, 2019.
43. Greater Manchester Resilience Forum. Greater Manchester Resilience Strategy 2020–2030. In *100 Resilient Cities*; The Rockefeller Foundation: New York, NY, USA, 2021.
44. City of Thessaloniki. Resilient Thessaloniki a Strategy for 2030. In *100 Resilient Cities*; The Rockefeller Foundation: New York, NY, USA, 2020.
45. Rawls, J. A Theory of Justice. In *Essays and Reviews: 1959–2002*; Oxford University Press: Oxford, UK, 1971; ISBN 9781400848393.
46. Barry, B. Sustainable and Intergenerational Justice. In *Fairness and Futurity: Essays on Environmental Sustainability and Social Justice*; Andrew, D., Ed.; Oxford University Press: Oxford, UK, 1999.
47. Walzer, M. Spheres of Justice: A Defence of Pluralism and Equality. *Philosophy* **1983**, *59*, 413–415.
48. Schlosberg, D. *Defining Environmental Justice: Theories, Movements, and Nature*; Oxford University Press: Oxford, UK, 2009; ISBN 0199286299, 9780199286294.
49. Schlosberg, D. Reconceiving Environmental Justice: Global Movements and Political Theories. *Environ. Politics* **2004**, *13*, 517–540. [\[CrossRef\]](#)
50. Miller, D. *Principles of Social Justice*; Harvard University Press: Cambridge, MA, USA, 2001; ISBN 9780674007147.
51. McNiff, K. What Is Qualitative Research?—Lumivero. Available online: <https://lumivero.com/resources/what-is-qualitative-research/> (accessed on 5 June 2023).
52. General Assembly. *Report of the General Assembly of the United Nations Transforming Our World: The 2030 Agenda for Sustainable Development*; Division for Sustainable Development Goals: New York, NY, USA, 2015.

**Disclaimer/Publisher’s Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.