A Connected Community Approach to Building Community Resilience

Subjects: Urban Studies | Environmental Studies | Development Studies

Contributor: Blake Poland, Anne Gloger, Garrett T Morgan

Urban resilience research is recognizing the need to complement a mainstream preoccupation with "hard" infrastructure (electrical grid, storm sewers, etc.) with attention to the "soft" (social) infrastructure issues that include the increased visibility of and role for civil society, moving from (top-down, paternalistic) government to (participatory) governance. Analyses of past shock events invariably point to the need for more concerted efforts in building effective governance and networked relations between civil society groupings and formal institutions before, during, and after crisis. However, the literature contains little advice on how to go about this. A Connected Communities Approach is advanced that offers the missing guidance, and it's key features are explained.

resilience

community resilience

community development

public health

connected communities approach

emergency preparedness

governance

1. Introduction

Resilience is a key feature of healthy, vibrant cities [1][2][3][4][5][6][7]. Despite the recent exponential increase in scholarship on resilience, critical gaps remain in our understanding of what, why, and for whom resilience manifests in our communities [8]. While much attention has been paid to resilience at the individual, organizational, and institutional levels, the need to build community resilience in the face of climate change and extreme weather is becoming more widely acknowledged [9][10][11][12], alongside more recent attention to resilience in the face of pandemics [13][14][15].

Community resilience foregrounds the role of communities in responding, recovering, adapting, and transforming before, during, and after crises. To build resilient communities, the dominant institutional approach tends to favour top-down initiatives led by professionals trained in emergency preparedness and response. However, historic and recent community-led responses have brought to light the need for communities themselves to be key actors in both short- and long-term resilience strategies [10]. This need is underscored by retrospective analyses of emergency response and recovery in post-Katrina New Orleans [16], the aftermath of Hurricane Sandy [17][18], and extreme weather events in the Appalachians [19] and High River, Alberta [20]. Such events demonstrate the critical role of grassroots efforts in the immediate aftermath and longer-term recovery of communities post-emergency, as well as the ways in which formal response systems (once they do activate) can neglect or run roughshod over grassroots community work and squander critical opportunities for more constructive collaboration.

-

2. Framing Resilience as Social Infrastructure

In practice, building urban resilience is often conflated with conventional forms of emergency preparedness that prioritize individual, household, and city-wide physical infrastructure, such as energy grids, stormwater management systems, and other civic and private sector assets, while ignoring equally essential dimensions of social infrastructure [21][22]. Thus, we maintain that it is important to explore how varied actors in a diversity of sectors and contexts can (re)conceptualize and (re)operationalize resilience [23]. Our emphasis here is on the often-overlooked social dimensions of community infrastructure that are increasingly recognized as essential to urban resilience [2][7][12][15][24][25][26][27][28][29][30][31][32][33][34][35].

Socio-ecological resilience emerged from the understanding that social and ecological systems are explicitly intertwined and must be considered together, rather than as separate distinct entities [36]. Within the broader field of social-ecological resilience, attention to dimensions of social resilience has explored how people collectively shape resilience [37][25][26][38], including the role of institutions [27]. Recent hurricane events in the United States and Puerto Rico (Katrina, Irma, and Harvey) [28][39], extreme weather in Appalachia [19], and Superstorm Sandy in the Greater New York City area [29][40][41] have drawn attention to the crucial role that racialized and low-income communities struggling with decades of disinvestment, poverty, racism, inequality, and other systemic and chronic stressors have played in responding to and recovering from shocks in the midst of ongoing chronic stressors, and how formal response systems often further exacerbate pre-existing inequities [16][37][42][43].

Social capital has been identified as a foundation for community resilience equal in importance to material and financial resources [7][19][28]. More recently, asset-based community resilience has been part of a broader shift towards equity, with the goal to address the inequitable impacts of shocks and stressors faced by communities that have been historically marginalized [21]. In this context, concerns have been raised about the ways in which discourses of resilience, couched in a language of celebrating community capacity and empowerment, can and have been used to download responsibility from the state to communities, who are expected to respond with volunteerism, mutual aid, collective goodwill, and the mobilization of community assets [21][41][44][45][46][47][48][49][50]. although others claim that, from a postmodern perspective, the diversification and extension of engaged stakeholders holds the potential to upend existing narratives and power relations [51]. The downloading of responsibilities is especially pernicious in the context of the current neoliberal political environment of fiscal constraints and austerity, which often undercut the very capacities and components of communities and individuals which have been shown to support resilience [52][53]. Such appeals conveniently sidestep discussion of the systemic drivers of inequity that undermine community resilience and that exacerbate inequity and environmental injustice, as well as chronic disinvestment in racialized and low-income neighbourhoods. They also deflect attention from the egregious lack of connection of formal emergency response systems to the voices, needs, and aspirations of marginalized communities, as well as the expertise and capacities inherent in community systems of informal care and kinship. In our view, these represent tragic failures of opportunity for the co-production of effective responses to shocks and stressors that could combine the best of what both communities and formal systems have to offer.

Calls for both more and better community engagement are welcome, but we argue that "engagement" is itself a bureaucratic concept and orientation: communities themselves are less interested in "engagement" per se than in addressing community needs. We believe that formal systems and institutions need to support the visions, goals, lived experiences, and on-the-ground expertise of communities, including a willingness to critically interrogate systems of privilege, structural racism, and procedural (in)justice embedded in institutional practices and policies. To be clear, re-centring community does not imply that communities speak with one voice or are inherently wise beyond measure. We acknowledge the concept and operationalization of community has long been contested [54], and can take on communitarian, utilitarian, libertarian, or "geo-anarchist" flavours [55]. Community as an object of interest is often defined by professionals in order to enable "community work" [56], whereas it is arguably the felt sense of community that matters most from the perspective of those implicated [57]. For our purposes, community is spatially anchored in neighbourhoods and also reflective of not only shared values (though we are wary of assumptions that community "speaks with one voice") but also shared history by virtue of processes of marginalization. We prefer a nuanced understanding of community action to totalizing discourses that proclaim it as a priori virtuous (empowering) or problematic (complicit with neoliberal downloading of responsibility from the state to civil society). Rather, it is about recognizing the wisdom of procedural approaches that enable co-production (of resilience, sustainability, social justice) in ways that respect and build upon the local knowledge and expertise, relationships, needs, and aspirations of communities [45]. This is, fundamentally, a relational view of community resilience building and development that understands that investments in the quality of the social fabric, and linking/bridging social capital, are as essential as investments in physical infrastructure [58][59][60].

3. Building Resilience: Re-Centring Community

To centre the lived realities and expertise of communities, especially Black, Indigenous, and other People of Colour (BIPOC) communities that have been marginalized by current systems of power, new models of decision-making must simultaneously support, resource, and bring together both top-down and bottom-up approaches. In the current resilience literature, such models are limited and fail to address broader questions of equity and procedural justice.

While emerging frameworks for building community-centred resilience call for iterative citizen engagement processes, the stand-alone nature of these processes often fails to integrate existing networks, relationships, and neighbourhood development efforts. While citizens often want to be deeply involved in resilience-building work [61] [62], new, co-created structures, spaces, and processes are desired rather than the "community consultation" spaces typically created by formal institutions [45]. The overarching challenge is not simply short-term mobilization, but the long-term institutionalization of locally driven resilience-building efforts. While emerging frameworks for building community resilience call for iterative citizen engagement, these are often stand-alone processes that are not always well integrated into other community development efforts [63][64][65]. Although communities are central to preparing for, responding to, and recovering from extreme events, insufficient attention has been paid to the power dynamics between community, state, and NGO actors, especially during the immediate response phase of an extreme event [25][66][67][68]. Without considerations of equity, resilience-building efforts may reinforce, rather than

reduce, existing vulnerabilities and marginalizations [69]. Fisher and Buckner [67] argue that mainstream models of service delivery in marginalized urban communities focus on achieving pre-defined outcomes rather than on elevating the ideas, plans, and strategies of the community, building local capacity and providing the requisite social infrastructure to promote and support leadership within the community.

To bring about long-term structural change, beyond responding to short-term shocks, long-term social, economic, and political inequality stressors need to be addressed. This point has been the cornerstone of the Toronto Resilience Strategy [45][70]. In this vein, Olsson et al. [71] proposed a framework of adaptive governance built upon shared management and responsibility between residents, community organizations, and government agencies.

However, the challenge of engagement is how to translate local voices into institutional change. This process is largely dependent on whether communities' lived experience, local expertise, and context are the focal point for inclusive planning, response, and recovery efforts, or whether communities are seen simply as the beneficiary of institutionally led planning and action. At issue are forms of urban governance that emphasize co-production with a wide range of stakeholders (especially affected communities) [72][73][74][75][76] the nature of relational networks that facilitate participatory governance [31][35][77], and the broader local socio-political cultures in which particular arrangements are shaped and embedded [51]. In order for a community to truly be resilient, it is often the formal systems and responses that need to adapt to local contexts.

4. Community-Based Organizations and Community-Centred Resilience

Community-based organizations (CBOs) have been advanced as a way forward in fostering effective community/institutional relationships [78][79][80] but in our view fall short in several key respects. While organizations that are physically located in communities can and do play critical roles in fostering local resilience [19][81], the actual roles they play are many and varied. There is a danger in assuming that just because the organization is located in a community, their mandate and funding includes the kinds of connector roles called for in creating community-centred resilience.

CBOs have been recognized for their potential to act as a "strategic link between community members and government" [79] (p. 329), or a "bridge between universal plans and specific needs" [80] (p. 34), but this analysis is not without its challenges. CBOs are often defined as non-governmental organizations that function to address the needs of the local community [66][79]. CBO is often used as an "umbrella term" to capture the immense diversity of service, relief, and civic organizations [66][68]. The risk is that any "organization", "group", "committee", or "association" is described as a CBO in the literature as long as it is located within the community. Such conceptual ambiguity can prevent the effective identification of characteristics or conditions that contribute to building the right social infrastructure to foster community-centred resilience, including successful, authentic, and intentional relationships between community players and institutions engaged in preparing for, responding in, recovering from, and bouncing forward after major shock events.

In order to make the focus on CBO useful in the discussion of community-centred resilience, distinctions can be made between various types of organizations (**Table 1**). While in practice, some organizations take on more than one of these identities, exploring their focus, structure, and purpose can go a long way in understanding the ecosystem of players involved in mitigating and addressing ongoing stressors and shocks at the community level.

Table 1. A typology of community organizations by structure and role in community-centred resilience [58][82].

Type of Community Organization	Examples	Governance Structure	Role in Community-Centred Resilience	
Community- basedorganizations with governance and decision making that rests outside of the community	Public libraries; public health departments; disaster relief organizations such as the Red Cross	Includes any organization with multiple branches and centralized decision- making	Can act as a conduit between larger systems and communities; often have large community-based facilities that can be leveraged for planning and responding activities; often have reduced autonomy in facilitating community driven decision making, planning, and action	
Social service organizations	Foodbanks; employment centres; immigration services; legal aid; counselling centres	Governance can be either local or centralized elsewhere; mandates primarily focus on addressing individual needs	Play critical roles in helping individuals with needs caused by chronic stressors and major shocks are typically focused on the individual/professional relationship rather than on facilitating collective action	
Interest focused organizations	Arts organizations; recreational sports leagues; after-school programs	Governance can be either local or centralized elsewhere; mandates primarily focus on convening around shared interests including drama, music, or sports groups	These groups can play specific and even surprising roles in the event of an extreme shock, but are not usually designed to facilitate community-wide processes	
Grassroots organizations	Mutual aid networks; peer to peer support groups; residents' and neighbourhood associations	May or may not have formalized structures; deeply rooted in communities; usually have a purpose/focus on either service delivery, community development, or advocacy	Critical players in community- centred resilience; they often hold knowledge and relationship with community members that formal institutions cannot	
Community development organizations	Community Development Corporations	Governance and decision making is firmly in the community with significant grassroots and resident	These organizations are critical in ensuring the resilience efforts are truly community centred. Planning and execution of	

Type of Community Organization	Examples	Governance Structure	Role in Community-Centred Resilience	
		participation. The purpose of these organizations is to foster processes and build local capacity to generate community-led solutions to local issues.	strategies are based on local context, lived experience, and local knowledge. May or may not hold or foster relationships with formalized structures outside of the community.	
Community backbone organizations (local integrators or intermediaries)	East Scarborough Storefront (Toronto)	Like community development organizations described above, these organizations have community driven governance and decision making structures. The primary purpose of these organizations is to facilitate connections, strategy and action, between and among the various players engaged in community-building work	These organizations are ideally suited to bridging grassroots, civil society actors and more formalized organizations, institutions, and governments; facilitate processes that allow the various actors to collectively, plan for, respond to, recover from, and bounce forward after major shock events.	tiple roles ne kind of ordinates ommunity

backbone organization or integrator, plays a prominent role in a Connected Community Approach.

5. A Connected Community Approach

To address the search for an equitable model for the governance of community-centred resilience, a Connected Communities Approach (CCA) is a novel solution for connecting communities and formal institutions. Unlike many other community interventions, the goal of a CCA is centred around strengthening the social fabric of marginalized communities rather than aiming at a specific predetermined outcome. A CCA is particularly relevant to discussions of community-centred resilience, as it fosters community-led, collaborative responses to systemic stressors, thereby developing the relationships and networks that support a community-centred approach to responding to, recovering from, and bouncing forward after major shock events [117,118].

A CCA is a "complex interconnection of principles and practices that builds from previous community development theories" including asset-based community development, complexity theory, systems theory, and collective impact [85] (p. 4). As a set of principles and practices for community development, a CCA argues that by "intentionally focusing on and strengthening the social connections and networks between and among organizations, these networks can be a catalyst to foment community-based social and economic development" [85] (p. 3). By supporting community building from the bottom up and inside out, a CCA emphasizes the central importance of a community backbone organization as critical social infrastructure that provides an "anchoring point for social net- work structures across levels and sectors (person, to person, organization to organizations, etc.)" [85] (p. 2).

The CCA emerged over a period of intense on-the-ground community development work in East Scarborough, a marginalized inner suburban community in Toronto, On- tario [85,119]. Although it was not coined a CCA until 2014, the early iterations of CCA resulted in the co-creation of the East Scarborough Storefront [85]. Later referred to as a "community backbone organization", the East Scarborough Storefront was designed as an innovative "by the community for the community" service hub model in 2000 [119], but it soon became apparent that the implications of this facilitative praxis went beyond improving local access to services.

As The Storefront matured, it began forming networks of contributors to the community's overall wellbeing, including grassroots groups, social service organizations, architects, planners, academics, and municipal actors. Collectively, these players began to recognize the critical gap that The Storefront was filling. The Storefront was iteratively and organically weaving networks to create social infrastructure that both strengthened social fabric at a local scale, and at the same time, intentionally connected the community to public policy actors, capital investment, and social networks that are not necessarily local [120]. This was the genesis of what later became the CCA.

Unlike other community-based organizations, The Storefront's role in the community is not direct service delivery, but rather to facilitate the creation of a "community social fabric that supports people, organizations, and initiatives to thrive" [124]. In 2012, based on the evidence of The Storefront's extensive impact on the community it served, staff began the process of articulating what made their approach unique and effective in their community and to explore ways in which their work could be applied to other communities with similar results [125]. From this work, the CCA emerged.

A CCA offers an opportunity to bring together the best of planning, design, academic theory, municipal, provincial and federal strategy, social service interventions, faith community aspirations, and corporate social responsibility and ground them in the authentic goals, aspirations, and realities of grassroots groups and people who have traditionally been at the margins. Unlocking the potential of a connected community requires skill sets not often found in our community-based interventions. These include network weaving, facilitation, knowledge mobilization, and translating across multiple actors both within and outside of the community. Using a CCA to unlock the potential of communities requires an investment of time and resources in local capacity building and social infrastructure, but most of all in the facilitative role required to continually weave together the social fabric that communities need to effectively find local solutions to complex social problems [126].

The role of a community backbone organization in the context of community-centred resilience can not only facilitate local responses to shock events, but at its best can also play the vital role of two-way communication between community and government strategy and action. In their 2015 UK study of connected communities (which aligns with but is distinct from the Connected Community Approach originating in East Scarborough), Parsfield et al. [127] argue that "non-statutory duties of public services must not simply be seen as 'soft' extras, but potentially crucial points of collaboration & engagement between state and communities as well as strategic opportunities to prevent greater problems arising from social isolation" (p. 5).

One of the unique features of a CCA is that it does not exclude or seek to replace projects, programs, or other approaches in a community. Rather, it builds on these, using principles and practices that are captured in the CCA's 10 keys for uncovering and unlocking the potential of a connected community (Table 2).

References

- 1. Jackson, S.F.; Fazal, N.; Gravel, G.; Papowitz, H. Evidence for the Value of Health Promotion Interventions in Natural Disaster Management. Health Promot. Int. 2017, 32, 1057–1066.
- 2. Lerch, D. Six Foundations for Building Community Resilience. In The Community Resilience Reader; Lerch, D., Ed.; Island Press/Center for Resource Economics: Washington, DC, USA, 2017; pp. 9–43. ISBN 978-1-61091-930-2.
- 3. Newman, P.; Beatley, T.; Boyer, H. Resilient Cities: Responding to Peak Oil and Climate Change; Island Press: Washington, DC, USA, 2009; ISBN 978-1-59726-498-3.
- 4. Norris, F.H.; Stevens, S.P.; Pfefferbaum, B.; Wyche, K.F.; Pfefferbaum, R.L. Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness. Am. J. Community Psychol. 2008, 41, 127–150.
- 5. Rodin, J. The Resilience Dividend: Managing Disruption, Avoiding Disaster, and Growing Stronger in an Unpredictable World; Profile Books: London, UK, 2015; ISBN 978-1-78125-358-8.
- 6. Urban Resilience Project. Bounce Forward: Urban Resilience in the Era of Climate Change; Island Press and The Kresge Foundation: Washington, DC, USA, 2015.
- 7. Zolli, A.; Healy, A.M. Resilience: Why Things Bounce Back; Free Press: New York, NY, USA, 2014; ISBN 978-1-4516-8384-4.
- 8. Folke, C. Resilience (Republished). Ecol. Soc. 2016, 21, 44.
- 9. Chandra, A.; Williams, M.; Plough, A.; Stayton, A.; Wells, K.B.; Horta, M.; Tang, J. Getting Actionable About Community Resilience: The Los Angeles County Community Disaster Resilience Project. Am. J. Public Health 2013, 103, 1181–1189.
- 10. Ebi, K.L.; Semenza, J.C. Community-Based Adaptation to the Health Impacts of Climate Change. Am. J. Prev. Med. 2008, 35, 501–507.
- 11. Homer-Dixon, T. The Upside of Down: Catastrophe, Creativity, and the Renewal of Civilization; Vintage Canada: Toronto, ON, Canada, 2007; ISBN 978-0-676-97723-3.
- 12. Poland, B.; Dooris, M.; Haluza-Delay, R. Securing "Supportive Environments" for Health in the Face of Ecosystem Collapse: Meeting the Triple Threat with a Sociology of Creative Transformation. Health Promot. Int. 2011, 26, ii202–ii215.

- 13. Entress, R.M.; Tyler, J.; Sadiq, A. Managing Mass Fatalities during COVID-19: Lessons for Promoting Community Resilience during Global Pandemics. Public Adm. Rev. 2020, 80, 856–861.
- 14. Centre for Connected Communities. Community Building During COVID 19—Signal Boost Podcast with Ko Hosoya and Agnes Thompson; Centre for Connected Communities: Toronto, ON, Canada, 2021; Available online: https://connectedcommunities.ca/C3-2017/wp-content/uploads/2020/07/Signal-Boost-Transcript_-Episode-3_-Agnes-and-Ko.pdf (accessed on 18 August 2021).
- 15. Centre for Connected Communities. Leaning into the Lessons—Signal Boost Podcast with Issaq Ahmed and Sureya Ibrahim; Centre for Connected Communities: Toronto, ON, Canada, 2021; Available online: https://connectedcommunities.ca/resource.php?id=142 (accessed on 18 August 2021).
- 16. Morello-Frosch, R.; Brown, P.; Lyson, M.; Cohen, A.; Krupa, K. Community Voice, Vision, and Resilience in Post-Hurricane Katrina Recovery. Environ. Justice 2011, 4, 71–80.
- 17. Cutter, S.L.; Ash, K.D.; Emrich, C.T. The Geographies of Community Disaster Resilience. Glob. Environ. Chang. 2014, 29, 65–77.
- 18. Schmeltz, M.T.; González, S.K.; Fuentes, L.; Kwan, A.; Ortega-Williams, A.; Cowan, L.P. Lessons from Hurricane Sandy: A Community Response in Brooklyn, New York. J. Urban Health 2013, 90, 799–809.
- 19. LaLone, M.B. Neighbors Helping Neighbors: An Examination of the Social Capital Mobilization Process for Community Resilience to Environmental Disasters. J. Appl. Soc. Sci. 2012, 6, 209–237.
- 20. Hayes, K.; Poland, B. Addressing Mental Health in a Changing Climate: Incorporating Mental Health Indicators into Climate Change and Health Vulnerability and Adaptation Assessments. Int. J. Environ. Res. Public Health 2018, 15, 1806.
- 21. Uscher-Pines, L.; Chandra, A.; Acosta, J. The Promise and Pitfalls of Community Resilience. Disaster Med. Public Health Prep. 2013, 7, 603–606.
- 22. Murray, S.; Poland, B. Neighbourhood Climate Resilience: Lessons from the Lighthouse Project. Can. J. Public Health 2020, 111, 890–896.
- 23. Wilson, G.A. Community Resilience, Policy Corridors and the Policy Challenge. Land Use Policy 2013, 31, 298–310.
- 24. Davidson, D.J. The Applicability of the Concept of Resilience to Social Systems: Some Sources of Optimism and Nagging Doubts. Soc. Nat. Resour. 2010, 23, 1135–1149.
- 25. Aldrich, D.P.; Meyer, M.A. Social Capital and Community Resilience. Am. Behav. Sci. 2015, 59, 254–269.

- 26. Maclean, K.; Cuthill, M.; Ross, H. Six Attributes of Social Resilience. J. Environ. Plan. Manag. 2014, 57, 144–156.
- 27. Adger, W.N. Social and Ecological Resilience: Are They Related? Prog. Hum. Geogr. 2000, 24, 347–364.
- 28. Leroy, J.; Amdal, J.; Vuillet, M.; Cariolet, J.-M.; Diab, Y.; Becue, V. Vulnerability and Social Resilience: Comparison of Two Neighborhoods in New Orleans after Hurricane Katrina. E3S Web Conf. 2016, 7, 08002.
- 29. Cagney, K.A.; Sterrett, D.; Benz, J.; Tompson, T. Social Resources and Community Resilience in the Wake of Superstorm Sandy. PLoS ONE 2016, 11, e0160824.
- 30. Aldrich, D.P. The Importance of Social Capital in Building Community Resilience. In Rethinking Resilience, Adaptation and Transformation in a Time of Change; Yan, W., Galloway, W., Eds.; Springer International Publishing: Berlin/Heidelberg, Germany, 2017; pp. 357–364. ISBN 978-3-319-50169-7.
- 31. Bixler, R.P.; Lieberknecht, K.; Atshan, S.; Zutz, C.P.; Richter, S.M.; Belaire, J.A. Reframing Urban Governance for Resilience Implementation: The Role of Network Closure and Other Insights from a Network Approach. Cities 2020, 103, 102726.
- 32. Ludin, S.M.; Rohaizat, M.; Arbon, P. The Association between Social Cohesion and Community Disaster Resilience: A Cross-sectional Study. Health Soc. Care Community 2019, 27, 621–631.
- 33. Patel, R.B.; Gleason, K.M. The Association between Social Cohesion and Community Resilience in Two Urban Slums of Port Au Prince, Haiti. Int. J. Disaster Risk Reduct. 2018, 27, 161–167.
- 34. Pelling, M.; High, C. Understanding Adaptation: What Can Social Capital Offer Assessments of Adaptive Capacity? Glob. Environ. Chang. 2005, 15, 308–319.
- 35. Rathwell, K.J.; Peterson, G.D. Connecting Social Networks with Ecosystem Services for Watershed Governance: A Social-Ecological Network Perspective Highlights the Critical Role of Bridging Organizations. Ecol. Soc. 2012, 17, art24.
- 36. Berkes, F.; Ross, H. Community Resilience: Toward an Integrated Approach. Soc. Nat. Resour. 2013, 26, 5–20.
- 37. Wilson, G.A. Community Resilience, Globalization, and Transitional Pathways of Decision-Making. Geoforum 2012, 43, 1218–1231.
- 38. Abramson, D.M.; Grattan, L.M.; Mayer, B.; Colten, C.E.; Arosemena, F.A.; Bedimo-Rung, A.; Lichtveld, M. The Resilience Activation Framework: A Conceptual Model of How Access to Social Resources Promotes Adaptation and Rapid Recovery in Post-Disaster Settings. J. Behav. Health Serv. Res. 2015, 42, 42–57.

- 39. Lichtveld, M. Disasters Through the Lens of Disparities: Elevate Community Resilience as an Essential Public Health Service. Am. J. Public Health 2018, 108, 28–30.
- 40. Acosta, J.D.; Burgette, L.; Chandra, A.; Eisenman, D.P.; Gonzalez, I.; Varda, D.; Xenakis, L. How Community and Public Health Partnerships Contribute to Disaster Recovery and Resilience. Disaster Med. Public Health Prep. 2018, 12, 635–643.
- 41. Hoffman, L.M. From Sustainability to Resilience: Why Locality Matters. In Research in Urban Sociology; Holt, W.G., Ed.; Emerald Group Publishing Limited: Bingley, UK, 2014; Volume 14, pp. 341–357. ISBN 978-1-78441-058-2.
- 42. Sonn, C.C.; Fisher, A.T. Sense of Community: Community Resilient Responses to Oppression and Change. J. Community Psychol. 1998, 26, 457–472.
- 43. Geronimus, A.T. To Mitigate, Resist, or Undo: Addressing Structural Influences on the Health of Urban Populations. Am. J. Public Health 2000, 90, 867–872.
- 44. Fainstein, S.S. Resilience and Justice: Planning for New York City. Urban Geogr. 2018, 39, 1268–1275.
- 45. Fitzgibbons, J.; Mitchell, C.L. Just Urban Futures? Exploring Equity in "100 Resilient Cities.". World Dev. 2019, 122, 648–659.
- 46. Shaw, K. The Rise of the Resilient Local Authority? Local Gov. Stud. 2012, 38, 281–300.
- 47. Duffield, M. Challenging Environments: Danger, Resilience and the Aid Industry. Secur. Dialogue 2012, 43, 475–492.
- 48. Evans, B.; Reid, J. Dangerously Exposed: The Life and Death of the Resilient Subject. Resilience 2013, 1, 83–98.
- 49. Joseph, J. Resilience as Embedded Neoliberalism: A Governmentality Approach. Resilience 2013, 1, 38–52.
- 50. MacKinnon, D.; Derickson, K.D. From Resilience to Resourcefulness: A Critique of Resilience Policy and Activism. Prog. Hum. Geogr. 2013, 37, 253–270.
- 51. Jon, I.; Reghezza-Zitt, M. Late Modernity to Postmodern? The Rise of Global Resilience and Its Progressive Potentials for Local Disaster Planning (Seattle and Paris). Plan. Theory Pract. 2020, 21, 94–122.
- 52. Welsh, M. Resilience and Responsibility: Governing Uncertainty in a Complex World: Resilience and Responsibility. Geogr. J. 2014, 180, 15–26.
- 53. Graham, L.; Debucquoy, W.; Anguelovski, I. The Influence of Urban Development Dynamics on Community Resilience Practice in New York City after Superstorm Sandy: Experiences from the Lower East Side and the Rockaways. Glob. Environ. Chang. 2016, 40, 112–124.

- 54. Hillery, G.A. Definitions of Community Areas of Agreement. Rural Sociol. 1955, 20, 111–123.
- 55. Tricarico, L. Community Action: Value or Instrument? An Ethics and Planning Critical Review. J. Archit. Urban. 2017, 41, 221–233.
- 56. Jewkes, R.; Murcott, A. Meanings of Community. Soc. Sci. Med. 1996, 43, 555–563.
- 57. McMillan, D.W.; Chavis, D.M. Sense of Community: A Definition and Theory. J. Community Psychol. 1986, 14, 6–23.
- 58. Centre for Connected Communities. A Community Backbone Organization's Theory of Change; Centre for Connected Communities: Toronto, ON, Canada, 2019; Available online: https://connectedcommunities.ca/resource.php?id=2 (accessed on 18 August 2021).
- 59. Gloger, A.; Cerda-Llanos, E.; Iveniuk, J.; Modlinska, E. The Connected Community Approach: A Theoretical Framework; Centre for Connected Communities: Toronto, ON, Canada, 2019; Available online: https://connectedcommunities.ca/files/1/C3-CCA-TheoreticalFramework-Final.pdf (accessed on 18 August 2021).
- 60. West, S.; Haider, L.J.; Stålhammar, S.; Woroniecki, S. A Relational Turn for Sustainability Science? Relational Thinking, Leverage Points and Transformations. Ecosyst. People 2020, 16, 304–325.
- 61. O'Sullivan, T.L.; Kuziemsky, C.E.; Toal-Sullivan, D.; Corneil, W. Unraveling the Complexities of Disaster Management: A Framework for Critical Social Infrastructure to Promote Population Health and Resilience. Soc. Sci. Med. 2013, 93, 238–246.
- 62. Morgan, G.T.; Poland, B.; Gloger, A.; Jackson, S.F.; Luca, S.; Lach, N.; Rolston, I.A. A Connected Community Resilience to COVID-19 in the City of Toronto. Glob. Health Promot. 2021.
- 63. Aldunce, P.; Beilin, R.; Handmer, J.; Howden, M. Stakeholder Participation in Building Resilience to Disasters in a Changing Climate. Environ. Hazards 2016, 15, 58–73.
- 64. Archer, D. Building Urban Climate Resilience through Community-Driven Approaches to Development: Experiences from Asia. Int. J. Clim. Change Strateg. Manag. 2016, 8, 654–669.
- 65. Goldstein, B.E. (Ed.) Collaborative Resilience; The MIT Press: Cambridge, MA, USA, 2012; ISBN 978-0-262-51645-7.
- 66. Chi, G.C.; Williams, M.; Chandra, A.; Plough, A.; Eisenman, D. Partnerships for Community Resilience: Perspectives from the Los Angeles County Community Disaster Resilience Project. Public Health 2015, 129, 1297–1300.
- 67. Fisher, P.; Buckner, L. Time for "Resilience": Community Mediators Working with Marginalised Young People Offer a Novel Approach. Int. J. Sociol. Soc. Policy 2018, 38, 794–808.

- 68. Hayward, B.M. Rethinking Resilience: Reflections on the Earthquakes in Christchurch, New Zealand, 2010 and 2011. Ecol. Soc. 2013, 18, art37.
- 69. Chelleri, L.; Waters, J.J.; Olazabal, M.; Minucci, G. Resilience Trade-Offs: Addressing Multiple Scales and Temporal Aspects of Urban Resilience. Environ. Urban. 2015, 27, 181–198.
- 70. City of Toronto. Toronto's First Resilience Strategy; City of Toronto: Toronto, ON, Canada, 2019; Available online: https://www.toronto.ca/ext/digital_comm/pdfs/resilience-office/toronto-resilience-strategy.pdf (accessed on 18 August 2021).
- 71. Olsson, P.; Folke, C.; Berkes, F. Adaptive Comanagement for Building Resilience in Social-Ecological Systems. Environ. Manag. 2004, 34.
- 72. Chambers, J.M.; Wyborn, C.; Ryan, M.E.; Reid, R.S.; Riechers, M.; Serban, A.; Bennett, N.J.; Cvitanovic, C.; Fernández-Giménez, M.E.; Galvin, K.A.; et al. Six Modes of Co-Production for Sustainability. Nat. Sustain. 2021.
- 73. Miller, C.A.; Wyborn, C. Co-Production in Global Sustainability: Histories and Theories. Environ. Sci. Policy 2020, 113, 88–95.
- 74. Norström, A.V.; Cvitanovic, C.; Löf, M.F.; West, S.; Wyborn, C.; Balvanera, P.; Bednarek, A.T.; Bennett, E.M.; Biggs, R.; de Bremond, A.; et al. Principles for Knowledge Co-Production in Sustainability Research. Nat. Sustain. 2020, 3, 182–190.
- 75. Perry, B.; Patel, Z.; Bretzer, Y.N.; Polk, M. Organising for Co-Production: Local Interaction Platforms for Urban Sustainability. Polit. Gov. 2018, 6, 189–198.
- 76. Vincent, K.; Carter, S.; Steynor, A.; Visman, E.; Wågsæther, K.L. Addressing Power Imbalances in Co-Production. Nat. Clim. Chang. 2020, 10, 877–878.
- 77. Therrien, M.; Normandin, J. From Policy Challenge to Implementation Strategy: Enabling Strategies for Network Governance of Urban Resilience. Risk Hazards Crisis Public Policy 2020, 11, 320–341.
- 78. Chen, J.; Chen, T.H.Y.; Vertinsky, I.; Yumagulova, L.; Park, C. Public-Private Partnerships for the Development of Disaster Resilient Communities: Public-Private Partnerships for Resilient Communities. J. Contingen. Crisis Manag. 2013, 21, 130–143.
- 79. Drennan, L.; Morrissey, L. Resilience Policy in Practice—Surveying the Role of Community Based Organisations in Local Disaster Management. Local Gov. Stud. 2019, 45, 328–349.
- 80. Koch, H.; Franco, Z.E.; O'Sullivan, T.; DeFino, M.C.; Ahmed, S. Community Views of the Federal Emergency Management Agency's "Whole Community" Strategy in a Complex US City: Re-Envisioning Societal Resilience. Technol. Forecast. Soc. Chang. 2017, 121, 31–38.
- 81. Pollock, M.J.; Wennerstrom, A.; True, G.; Everett, A.; Sugarman, O.; Haywood, C.; Johnson, A.; Meyers, D.; Sato, J.; Wells, K.B.; et al. Preparedness and Community Resilience in Disaster-

- Prone Areas: Cross-Sectoral Collaborations in South Louisiana, 2018. Am. J. Public Health 2019, 109, S309–S315.
- 82. Chandrasekhar, D.; Rothfeder, R.; Xiao, Y.; Finn, D. What Drives Household Recovery after Disasters? A Case Study of New York City after 2012 Hurricane Sandy. J. Environ. Plan. Manag. 2019, 62, 1249–1268.

Retrieved from https://encyclopedia.pub/entry/history/show/35941