Journal of Humanities and Social Sciences Studies

ISSN: 2663-7197 DOI: 10.32996/jhsss

Journal Homepage: www.al-kindipublisher.com/index.php/jhsss



RESEARCH ARTICLE

Rethinking Urban Planning in a Post-Pandemic World: Reverse Globalization, Resilient Cities, and the Case of New York City

Yinggi Zhu

Department of Architecture and Civil Engineering, City University of Hong Kong, Hong Kong, China

Corresponding Author: Yingqi Zhu, E-mail: yingqizhu5-c@my.cityu.edu.hk

ABSTRACT

This study examines the intersection of reverse globalization and resilient city theory in shaping innovative urban planning responses in the aftermath of the COVID-19 pandemic, with a primary focus on New York City as a case study. The study seeks to analyze how NYC's adaptive initiatives, such as the Open Streets program, modular supportive housing developments, and upscaling urban agriculture, helped improve local autonomy, flexibility, and community resilience. Through a critical assessment of the interventions, the research examines how decentralized, neighborhood-scale solutions and participatory governance systems can respond to systemic urban vulnerabilities and promote long-term sustainability. Positioned in the framework of transformative resilience and the emerging movement to localized systems, the research delineates central planning lessons of general use for other world cities. Specific focus is given to the applicability of these findings to quickly urbanizing parts of the world like Chengdu, Shenzhen, and Shanghai, where localized versions of NYC's approach could shape future planning reforms. The research concludes by promoting human-centered design, adaptable policy frameworks, and readiness-oriented urban governance as critical pillars for constructing cities that can survive future crises.

KEYWORDS

Reverse Globalization, Resilient City Theory, Adaptive Urban Planning, New York City, Localized Urban Systems

ARTICLE INFORMATION

ACCEPTED: 19 July 2025 **PUBLISHED:** 03 August 2025 **DOI:** 10.32996/jhsss.2025.7.8.1x

1. Introduction

The COVID-19 health crisis, a century-once occurrence of global health, has deeply impacted the functioning of urban systems globally. Cities, as hotbeds of concentrated people and economic activity, were among the most severely affected by the pandemic (Amirzadeh et al., 2023). Public health systems were overwhelmed, supply chains were broken, public transport networks were channels of transmission, and social inequality was exacerbated (Carraminana et al., 2024). Urban systems' resilience was revealed, and scholars, policymakers, and planners were forced to deal with well-entrenched urban development paradigms (Almulhim, 2025). Urban resilience as a specialist topic in planning literature is now an imperative at center stage (Kochskämper et al., 2025). The crisis has set the necessity for cities to be smart, efficient, and adaptable, inclusive, and resilient to compound stresses into sharp focus (Oteng-Ababio et al., 2024). The global urban planning agenda has thus been compelled to change from growth models that were expansionist to embracing ones focused on sustainability, equity, and local decision-making.

With this, reverse globalization has gained prominence as a response and counter to the vulnerabilities that the pandemic laid bare. Reverse globalization is the concept of moving back away from extremely networked global systems and back to autarky, local manufacturing, and decentralized control (Kim, 2024). The breakdown of global value chains, international travel controls, and the varying global response to the health crisis have all contributed to driving this ideological transformation (Abbas et al., 2025). Urban centers are now grappling with localizing essential services, creating resilient infrastructure, and breaking interdependence on global systems, as well as reimagining urban citizenship to promote community-level participation and preparedness (Díez-González et al., 2024). Urban planning will then need to provide space for these transformations by reframing spatial, economic, and social arrangements to enable autonomous and resilient local systems without diminishing global awareness

Copyright: © 2025 the Author(s). This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) 4.0 license (https://creativecommons.org/licenses/by/4.0/). Published by Al-Kindi Centre for Research and Development, London, United Kingdom.

(Almulhim, 2025). This transformation challenges the current paradigm of globalization, which has organized city spaces over the past forty years, and calls for a paradigm shift.

During these global changes, New York City presents a compelling case for scrutiny. Being one of the most networked, cosmopolitan, and economically powerful cities in the world, NYC was confronted with unprecedented challenges during the peak of the pandemic (Chang & Park, 2025). But it was also a location of policy experimentation and urban adaptability. From the launch of Open Streets to the rapid proliferation of outdoor eating and the reorganization of healthcare delivery systems, New York exposed the fragilities and possibilities immanent in modern urban configurations (Dougherty & Jain, 2023). Lessons from NYC teach us the vital lessons about how a highly integrated city in the world may transition towards localized and adaptive resolutions in intricate governance structures and socio-spatial disparities (Ijiga et al., 2024). NYC's multicultural population and complicated city life also place it on good terms as an effective example of how adaptable and open planning can buffer cities against external shocks.

The purpose of this research, therefore, is to analyze how New York City has reframed its urban planning agenda to counter the COVID-19 pandemic, with specific reference to the principles of reverse globalization and the theme of a resilient city. This research seeks to advance the new literature on post-pandemic urbanism by formulating planning approaches that empower local autonomy, environmental integrity, and social justice. Additionally, the study intends to evaluate the implications of NYC's post-pandemic transformation on global urban planning practices as a whole. As cities continue to face compounding crises from pandemics to climate emergencies watching how urban systems are able to adjust is increasingly significant By probing NYC's response in depth, the research positions itself within the larger endeavor to create cities that are not merely resilient to future disruption but also just, livable, and equitable.

To inform this inquiry, the research is framed by three core research questions. First, it inquires: How did New York City respond to post-pandemic urban challenges? This query aims to reveal the specific strategies, initiatives, and policy reforms implemented in various urban areas, including transportation, housing, public health, and community mobilization. Secondly, the study examines the alignment of NYC planning strategies with the theoretical frameworks of reverse globalization and resilient cities. By superimposing empirical observations on theoretical models, the research aims to establish a connection between conceptual ideas and practical applications. Third, the study asks: What can other cities, especially those in the Global South and North, learn from NYC's experience in remaking urban systems after the pandemic? This comparative aspect aims to enhance the practical contribution of the study by identifying transferable insights and providing context-specific recommendations.

In the end, this study suggests that there is a need to reimagine urban planning in a more uncertain, complex, and interconnected world. The pandemic has acted as both disruption and trigger, halting usual patterns yet opening up new possibilities of imagining urban futures (Caprotti et al., 2022). By critically analyzing the evolving planning context of New York City, the research identifies tensions, horizons of possibility, and innovations typical of post-pandemic urbanism. It requires an urban paradigm transcending the conventional growth metrics and instead being resilience-led, relational, and regenerative. In the process, the study not only lends itself to intellectual scholarship but also offers a practical agenda for urban players keen on constructing cities that are resilient during times of crisis but responsive to the needs of their populations.

2. Theoretical Framework: Resilient City Theory

The resilient city is rooted in disaster recovery and urban systems thinking, emerging as a critical framework due to rising global uncertainties and urban vulnerabilities. The initial idea focused on a city's ability to withstand shocks whether environmental, economic, or social and recover to its original state with minimal interruption (Vale & Campanella, 2005). But as urban problems increased in complexity and scope, the concept of resilience also changed. In drawing from systems ecology and urban planning, researchers established the theory of resilience as flexibility and adaptability. (Ahern, 2011) proposed fundamental principles such as diversity, modularity, and redundancy that underscore the merits of interdependent yet independent urban subsystems. Diversity is to blame for making the city immune to reliance on one solution or infrastructure. In contrast, modularity allows every unit of the urban system to operate individually in case of localized failure. Redundancy, conversely, guarantees the availability of a backup system which can substitute the main system in case it fails. All these factors combined enable a city to function under duress while preventing cascading failures.

Upon this basis, the theory of transformative resilience was formed as a more inclusive and integrated notion. Unlike merely seeking to restore the pre-crisis quo, transformative resilience seeks to utilize crises as a spark for permanent structural transformation (Fünfgeld & McEvoy, 2012). Resilience becomes then not a static word, but rather an iterative process that creates learning, innovation, and future-oriented change. Transformative resilience exhorts cities to change their systems in directions that address previously revealed vulnerabilities, usually unearthed by crises. The COVID-19 crisis, for example, uncovered shared disparities in provision of housing, access to healthcare, and digital infrastructure, prompting demands for alterations that not only reduce present imperatives but also facilitate long-term social justice and environmental sustainability (Meerow et al., 2016). In these situations, resilience is not so much rebounding but rebounding forward, thus enhancing system conditions to make resultant disruption have fewer destablisizing impacts.

This theoretical transition to transformative resilience is a natural progression with the larger ideological transition inherent in the idea of reverse globalization. When cities are considering disconnecting from globalized regimes, resilience is a strategic act of

localization, autonomy, and sustainability. Reverse globalization promotes more regionalized economies, shorter supply chains, and decentralization of nodes each of which is most directly associated with the capacity of a city to adapt. The resilient city theory fills this gap by providing a conceptual model upon which to construct these shifts, one that is sustainable and inclusive. To this extent, both models converge in promoting urban systems that are not only resilient and redundant but also based on local resources, community engagement, and ecological consciousness. The intersection of the two frameworks provides a strong prism through which to explore how post-pandemic cities, such as New York, can reset paradigms for planning to build place-based and future-focused resilience (Almulhim, 2025). From this perspective, NYC planning reactions can be understood as pragmatic implementations of resilient city theory in a reversed pattern of globalization.

3. Reverse Globalization and Urban Vulnerability

Reverse globalization is an n-dimensional process through which economic, political, and cultural systems de-interdependence away from the cross-border integration that was the hallmark of the high point of globally integrated development, especially in the late twentieth and early twenty-first centuries (Kim, 2024). For most of its history, globalization has been praised for driving economic growth, fostering technological advancements, and promoting cross-cultural communication. However, it also led to the centralization of key assets, the exportation of core industries, and the homogenization of domestic systems (Yan & Qi, 2025). Reverse globalization thus presents a corrective trend to revitalize local resilience and self-control amid global vulnerability. This trend has been most apparent since the post-pandemic period, as the failures of hyper-globalized systems were starkly revealed (Alami, 2024). As borders closed and global supply chains fragmented, the need to localize, develop domestic infrastructure, and decentralize services grew manifold (Benabed, 2024). Urban areas, being centers of global connectivity, were most exposed and have since become central sites in the move toward reverse globalization.

Weaknesses created by globalization were most overwhelmingly revealed through the city's reliance on globally networked supply chains and centralized systems (Kollmeyer, 2025). Cities relied on transnational just-in-time delivery networks for food, medications, and staple goods, with minimal local redundancy or inventory buffering (Milberg et al., 2024). When transnational systems failed during the pandemic, cities found themselves unable to deliver basic needs in a timely or self-sufficient manner (Norring, 2024). Besides, the physical structure of the city itself high population densities, widespread use of mass transit, and highly dense housing increased health dangers and logistical challenges (Papanikos, 2025). While these types of buildings had once been praised for their efficiency and green credentials, the pandemic reframed them as sites of disease contagion and system overload (Sari et al., 2024). Thus, globalized cities were left increasingly vulnerable to cascading failures, especially within healthcare, the food system, and housing security. The event served to highlight the extent to which excessive dependence on global systems without the proper local backup mechanisms ended up exacerbating risk rather than alleviating it, thus creating a need for a realignment at a fundamental level of how urban resilience is conceptualized and monitored (Yang et al., 2025).

New York City was a bitter reminder of the ways in which such vulnerabilities were realized in real time. As one of the most globalized city metropolises in the world, NYC saw a rapid and acute outbreak during the initial months of the COVID-19 pandemic (Chang & Park, 2025). Urban hospitals were soon overwhelmed, revealing deep-seated weaknesses in healthcare capability, staffing gaps, and unequal distribution of medical services by socio-economic and racial demographics (Figueroa, 2023). Moreover, global and inter-state supply chain disruptions resulted in short-term food shortages and supply chain interruptions, especially in vulnerable communities already with food insecurity concerns. Housing was yet another pressure point, with density living allowing for viral spread and eviction moratoriums and rent freezes exposing the weakness of the city's housing market (Dougherty & Jain, 2023). The accumulation of these crises illustrated that, even with its infrastructural complexity and economic strength, NYC was deeply exposed to systemic shocks due to its embeddedness in global structures and dependency on centralized organizations (Parsons et al., 2023). This has already prompted demands for rethinking urban resilience in the context of reverse globalization, with pressure for investment in local food systems, decentralized health networks, and diversified housing options that reduce exposure to future global shocks.

3. Case Study: New York City's Adaptive Planning Responses

3.1 Open Streets Program

New York City's Open Streets Program was one of the first and most public examples of adaptive urban governance during the COVID-19 pandemic. Launched in April 2020 and progressively rolled out in subsequent months, the program closed specific streets to automotive traffic, allowing the use of public space for socially distanced walking, cycling, dining, and leisure activities. It reached its peak of more than 83 miles of urban roads, making it one of the United States' most ambitious initiatives of its type (Figueroa, 2023). Its original scope was well-defined: to reduce virus spread in dense neighborhoods where indoor areas were inaccessible or unsafe, and to provide fair access to fresh air, sunlight, and mobility (Agostini et al., 2025). As it developed, the program emerged as a lifeline for struggling small businesses, particularly restaurants and cafes, which utilized curbside and outdoor installations to remain financially viable. Through sanctioned Open Restaurants areas and shared community spaces, the program injected new vitality into economically depressed neighborhoods, particularly those with limited green space or those that had been subject to years of disinvestment (Guzman-Echavarria et al., 2024). Notably, Open Streets was also a starting point

for public discussion about the ownership of urban space and how that space can be more equally shared, especially in a city where contentious street use had long pitted cars against other users.

The organizational form of the Open Streets Program reflected a core shift toward decentralization, civic participation, and bottom-up empowerment values that strongly align with the Resilient City Theory (Han & An, 2025). Rather than being entirely city-controlled, the majority of the Open Streets were operated by local community organizations, business improvement districts (BIDs), resident associations, and volunteer residents. The community stewardship approach improved cultural responsiveness and sensitivity of the project, enabling street programming and design to be customized to local needs and identities (N'Goala et al., 2025). Community yoga classes, mobile clinics, cultural performances, and youth activities, for instance, were held on particular streets, which were responsive to shifting public needs. This participatory design also displayed modularity and redundancy, two key features of resilient city design, in that it allowed localized and semi-autonomous constellations of urban practice to operate even in the case of overall system failure (Ahern, 2011). At a planning level, Open Streets illustrated the latent potential for underutilized infrastructure to be rendered multifunctional and accessible, thus fostering spatial versatility, public health, and social cohesion (Oteng-Ababio et al., 2024). Therefore, the project is a motivating example of how short-term crisis-based solutions may become long-term urban design transformation, founded on resilience, community empowerment, and reverse globalization principles, focused on scale of neighborhood stewardship and resource mobilization.

3.2 Modular Housing and Reconfiguration

After the initial wave of the pandemic, New York City suffered a housing crisis that was largely amplified by structural inequalities, over-population, and ancient infrastructure. Public housing supply, especially in historically disenfranchised communities, was characterized by poor ventilation, over-occupancy, and absence of safe, private outside space conditions that facilitated the spread of the virus and widened health disparities (Shokry et al., 2025). City planners and affordable housing groups countered by adopting modular construction as the means to rapidly address these issues with scalable, sustainable, health-centered solutions. An example is the Modular Supportive Housing project in East Harlem, which applied prefabricated construction techniques to produce high-quality, energy-efficient units of housing in record time (N'Goala et al., 2025). Intended to address both emergency shelter and supportive long-term housing needs, the project illustrated how modularity can minimize on-site construction time, decrease environmental disruption, and offer adapted living environments that facilitate dignity and well-being (Alami, 2024). The modules typically possess private ventilation systems, external air access, and design features that accommodate psychological and physical health, the key considerations in the design of pandemic-resistant living environments.

Other than its health and functional benefits, the modular house is also a physical representation of reverse globalization in the property sector. Prefabrication was the preferred alternative to local supply chains, minimized global material dependency, and allowed use of local workers, thereby minimizing the city's dependence on volatile global supply chains. They place a premium on circularity, minimization of materials, and design adaptability in addressing varied demands principles core to localized and resilient urbanism (Fünfgeld & McEvoy, 2012). Additionally, the reality that modular homes can be expanded rapidly and duplicated in design for different locations made it the ideal solution to addressing short-term housing and long-term urban residential requirements in a post-pandemic world (Abujder Ochoa et al., 2025). It also gave planners the capacity to integrate supportive services, such as on-site medical attention, mental health, and job training as a response to the pandemic, both its health impacts and its more general socio-spatial effects. This convergence of resilience theory and reverse globalization practice indicates a broader planning paradigm: cities will need to produce shelters that are rapidly deployable, locally rooted, and holistically conceived to advance public health, social justice, and environmental sustainability

3.3 Local Food and Urban Agriculture

The COVID-19 pandemic exposed the glaring weaknesses in New York City's food system, underscoring its excessive reliance on global supply chains and centralized distribution networks. As transportation disruptions, economic uncertainty, and panic buying spread, food insecurity exploded, especially among the low-income, the elderly, and undocumented populations (Abbas et al., 2025). Since more than 90 percent of the city's food comes from outside the state, delays and interruptions have left shelves in most neighborhoods bare, while food pantries have experienced record demand. Urban agriculture here became a practical and symbolic response, illustrating how cities might shield themselves from global shocks by resorting to local production. Programs such as GreenThumb, the largest community garden program in the United States, have increased access to land, seeds, tools, and technical support, enabling communities to cultivate their food on vacant lots and public spaces (Bittencourt et al., 2024). Simultaneously, entrepreneurial urban rooftop farms, such as Brooklyn Grange, expanded their production and delivery, supplying vegetables and herbs to neighboring restaurants, food banks, and consumers through community-supported agriculture (CSA) programs (Baydemir, 2025). Together, these initiatives marked the start of a transition toward localized food systems that would enable city dwellers to weather hard times.

The advantages of these farm reactions went far beyond subsistence. They encouraged environmental sustainability, reduced food miles, and created green economy employment opportunities in the midst of record unemployment. More importantly, they reordered the urban-rural relationship, enabling a sense of stewardship, autonomy, and resilience (Cheshmehzangi et al., 2025). Urban agriculture democratized access to food by locating production near sites of consumption, thus shortening the distances

commanded by income, geography, or mobility. This hyperlocal food security approach also appeals to the reasoning of reverse globalization, substituting distant supply chains with local, community-led ones that can operate independently in times of stress (Dui et al., 2024). As a planning action, these innovations demand the integration of food systems thinking into zoning, land use, and public health policy. Roof gardens, vertical gardens, and adaptive reuse of vacant lots are no longer just possibilities for creating resilient cities. Therefore, NYC's urban agriculture growth amidst the pandemic demonstrates how food systems have been utilized as an alternative of infrastructural resilience, entangling environmental, economic, and social resilience and shielding urban exposure to global shocks.

4. Analysis and Discussion

4.1 Urban Planning and Design Implications

The COVID-19 pandemic stimulated a reconsideration of city planning strategies, with specific focus on the importance of adaptable, place-based, and people-focused design. The impact of efforts such as the Open Streets Program in New York City has demonstrated that intervention at the neighborhood scale can both address short-term public health challenges and long-term city challenges, such as unequal open space access (Ascione et al., 2025). The main lessons learned through these interventions are highlighted below. These efforts enabled innovative, adaptive repurposing of the existing infrastructure, transforming caroriented streets into multifunctional public spaces that could be rapidly reorganized to meet evolving requirements (Cannon et al., 2024). This responsiveness departs from the lockstep, top-down planning techniques of the past and suggests a future trend towards more modular and adaptive city design. Furthermore, by focusing interventions at the neighborhood level, planners can target solutions to each community's specific demographic, spatial, and socioeconomic profile, resulting in more context-sensitive and equitable outcomes.

Transitory programs that were originally conceived as crisis measures are increasingly being seen as models for lasting policy and planning change. The deployment of outdoor dining infrastructure, mixed-use zoning flexibility, and the rapid rollout of pandemic-modular homes demonstrated the value of swift governance and regulatory experimentation (Zhang & Shang, 2023). They have sparked larger debates over zoning reform, particularly regarding the need to loosen strict land-use designations that hinder the creation of mixed-use urban spaces (Pan et al., 2024). Urban planners now embrace adaptive use zoning, which promotes the coexistence of residential, commercial, and agricultural uses, thereby enhancing a neighborhood's ability to sustain itself during disruptions. The shift of such measures into medium- and long-term policy instruments shows that there is growing agreement that urban planning must become more iterative and anticipatory, not reactive and static, amid perpetual global uncertainties like pandemics and climate change.

Furthermore, the restructuring of city spaces as a result of the pandemic has demonstrated the need to integrate health, mobility, ecology, and equity into the built environment. For instance, re-designing streets and manufacturing modular housing were not only infrastructural measures but also socio-spatial initiatives that had direct influence on how human beings experience and relate to their milieus (Kochskämper et al., 2025). This integrated planning approach has rekindled the focus on the "15-minute city" concept, where everything needed is within cycling and walking distance and reduces the need for long travel times and use of large transit (Almulhim, 2025). The responsive planning in New York City, therefore, presents how temporary crises have the ability to trigger overdue change in the urban pattern, ultimately leading to more resilient, livable, and sustainable cities.

4.2 Resident/Community Impact

The pandemic also revealed the untapped potential of neighborhoods as co-producers of urban resilience, and residents as the focal point of creating and sustaining neighborhood planning responses. Open Streets and community garden initiatives gave people power through control and ownership of neighborhoods and everyday spaces. These interventions enabled residents to reclaim public space for communities, developing neighborhood identity, social cohesion, and civic pride (Amirzadeh et al., 2023). Bottom-up management of street repair, programming, and urban agriculture at the neighborhood scale provided windows of sustained involvement, with interventions responsive and attuned to needs on the ground, rather than those imposed from above. This democratization of decision-making not only improved management of public space during the pandemic but also set the foundations for a more participatory model of urban governance.

The provision of public space and access to fresh fruits and vegetables was significantly improved where public participation was strong and local government advocacy was consistent. For example, GreenThumb garden residents who participated in gardening reported not just increased food access but also improved mental well-being, as the green spaces were important places for socializing and emotional recovery during lockdown (Gereffi, 2020). Similarly, the expansion of Open Streets also created safe spaces for outdoor play, particularly in neighborhoods with limited park provision. The democratization of public space thus undermined the longstanding spatially skewed allocation of urban amenities, symbolizing a shift toward more equitable spatial justice. Furthermore, these shifts made it clear that access to resources stood central to resilience practice, especially in cities with extreme spatial and socio-economic disparities.

What emerges from these people-centered interventions is that it is seen to increase the movement towards bottom-up and participatory planning. Residents are no longer passive consumers of state-driven urban policy; today, they are active agents in planning and envisioning their neighborhood. This is achieved through digital engagement mechanisms, local planning councils,

and community-based activism, which have gained greater prominence in the post-pandemic period (Neves, 2024). By engaging communities in the decision-making process, equipping them with resources and power to initiate change, urban planning becomes more democratic, responsive, and sustainable. This manner, therefore, showcases New York City's action in reaction to the pandemic as a demonstration of the potentiality of community innovation as part of official planning frameworks becoming entrenched and contributing towards more resilient and equitable cities.

4.3 Theoretical Synthesis

The urban responses witnessed in New York City both at the time of and following the pandemic reflect a peculiar blend of reverse globalization and resilience transformation. The transformation of the city toward local food economies, modular design of housing, and decentralized public spaces aligns with the focus on reverse globalization, where systems are decoupled from global flows and regional self-reliance is established. These reactions, initially in a reactive state, have become proactive moves that increase the capacity of urban systems to recover and grow after dislocation. Resilience is no longer being imagined as a matter of restoration to the initial state, but rather as a process of reorganization of the system that uses crises as a chance for innovation and reconstruction (Fünfgeld & McEvoy, 2012. Reverse globalization, thus, provides a window for attaining operationalization of resilience with service, production, and governance localization.

Locally organized systems, when purposefully created and equitably managed, have the potential to yield more resilient and integrated urban environments that can support complex and cascading threats. Modular housing in East Harlem, for example, showed how quickly deployable, locally produced units could achieve housing stability without depending on conventional, time-consuming construction methods (Kochskämper et al., 2025). In like manner, rooftop agriculture and community gardens provided a legitimate response to urban hunger through production near the consumption point and citizen engagement in control of their own food system. These instances suggest localization is not an equation with isolation but an experiment in embedded resilience where systems are sensitive to local context but reactive to large-scale change. Synthesis of these ideas potentially enables planners and policymakers to identify local solutions within a wide resilience agenda and thereby strengthen systems that are place-based but scalable (Amirzadeh et al., 2023).

Moreover, the integration is also supporting the overall purpose of urban social justice and sustainability. Through strategic integration of inclusivity and adaptability in urban system management and design, cities are able to avoid growing disparities through resilience efforts based on prioritizing root inequalities (Ascione et al., 2025). The New York City experience proves how neighborhood-level interventions, based on community-driven participation and localized empowerment, can nudge resilience planning towards justice. Through participatory governance, ecological renewal, or urban planning transformation, these movements imbue an integrated appreciation of resilience, moving beyond technical remedy and acknowledging the imperative of structural transformation (Cannon et al., 2024). At its essence, the co-assembly of the logics of reverse globalization and transformative resilience constitutes a fascinating theoretical framework for imagining post-pandemic city futures as praxisfriendly, resilient, and eco-compatible.

5. Global Relevance and Comparative Lessons Analysis and Discussion

New York City's Post-Pandemic Planning Responses hold particular international significance, especially for other rapidly developing nations like China, where urban resilience is becoming a top priority. Chinese cities, like Shenzhen, Chengdu, and Shanghai, have already started experimenting with local planning models, like the 15-minute city model, which prioritizes spatial closeness to main services, walkability, and minimizing motorized transportation use (Almulhim, 2025). These advancements reflect some of NYC's efforts, such as the focus on pedestrian-friendly environments and locally based accessibility of resources. In Chengdu, for instance, local units are redesigned to include daily needs within walking distance, while rooftop gardens in cities like Shanghai refigure food systems at the city center. Shenzhen too is working on smart urban agriculture through vertical farming and digitalized local supply chains. These initiatives illustrate a twin track towards resilient, decentralized urban systems, and in doing so, prove that although contexts vary, the underlying principles of localization, adaptability, and sustainability can be applied universally to design post-crisis urban futures.

One of the differences, however, is the governance models that support these urban changes. New York's experience was heavily influenced by a bottom-up dynamic in which community-based organizations, local stakeholders, and civil society directly contributed to implementing and maintaining programs such as Open Streets and community gardens. Chinese urban planning, by contrast, has historically been characterized by top-down governance in which state-led directives propel the majority of urban initiatives. Although this centralized framework enables the quick and massive rollout of urban reforms, it may lack the grassroots engagement and public ownership that characterized NYC's more distributed process (Oteng-Ababio et al., 2024). The challenge is thus to balance the efficiency of top-down approaches with participatory mechanisms that better meet local needs. Chinese cities can learn from the post-pandemic approach of NYC in engaging community voices in otherwise technocratic planning processes, especially in areas such as food security, public space management, and modular housing, where local engagement is crucial to long-term success.

Furthermore, applying NYC's tactics to culturally and politically diverse settings, such as China, requires a thoughtful recalibration of strategies rather than a verbatim replication. For instance, Open Streets can be adapted as a tactic to meet the needs of high-

density Chinese urban neighborhoods by repurposing underutilized land spaces, such as schoolyards, courtyards, and riverbanks, for flexible community use. Modular housing, another NYC innovation, may be standardized and large-scale via China's existing industrial base, but with local housing culture and family size considerations in mind. Urban agriculture projects can also draw upon China's rich agrarian culture and growing environmental awareness, but are subject to national food safety standards and land-use regulations. Finally, the New York lessons are not in single projects, but in the attitude of responsive, adaptive, and public-placing. By translating the concepts of resilience and reverse globalization into their own political and cultural contexts, cities around the world, including Chinese cities, can develop a more resilient, equitable, and sustainable urban system that can survive upcoming crises while improving equity, sustainability, and community health.

6. Conclusion

Generally, this study demonstrates the promise of reverse globalization and flexible urban planning as complementary paradigms to address the vulnerabilities exposed by the COVID-19 crisis. New York City provides a powerful case of the potential for localized systems, such as modular housing, participatory public spaces, and urban agriculture, to radically enhance the resilience and survivability of cities. By leading the way on innovative reuse of established infrastructure, decentralizing citizen power through bottom-up decision-making, and incorporating public health, equity, and environmental goals, New York's initiatives provide transferable and scalable insights for other cities undergoing post-crisis rebuilding. The report identifies that resilience is not merely about bouncing back from disturbance, but also the capacity to reimagine and enhance urban systems to promote inclusivity, adaptability, and long-term flourishing. As global cities are more and more subject to compounding threats like pandemics, climate risks, and socio-economic inequality, it is certain that a transition towards localized, human-scale urbanism is essential. Policy settings need to be regulated to support adaptive planning, enable community-led initiatives, and build infrastructure, recognizing future uncertainties alongside meeting present needs. At the end of it all, the future is one of building cities not only resilient post-disasters but also equitable, sustainable, and true to their specific context.

Funding: This research received no external funding

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

Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

References

- [1] Abbas, S., Haider, A., Kousar, S., Lu, H., Lu, S., Liu, F., Li, H., Miao, C., Feng, W., & Ahamad, M. I. (2025). Climate variability, population growth, and globalization impacting food security in Pakistan. *Scientific Reports*, *15*(1), 4225
- [2] Abujder Ochoa, W. A., Iarozinski Neto, A., Vitorio Junior, P. C., Calabokis, O. P., & Ballesteros-Ballesteros, V. (2025). The Theory of complexity and sustainable urban development: A systematic literature review. *Sustainability*, *17*(1), 3.
- [3] Agostini, G., Young, R., Fitzpatrick, M., Garg, N., & Pierson, E. (2025). Inferring fine-grained migration patterns across the United States. *arXiv preprint arXiv:2503.20989*.
- [4] Ahern, J. (2011). From fail-safe to safe-to-fail: Sustainability and resilience in the new urban world. *Landscape and urban Planning*, 100(4), 341-343.
- [5] Alami, I. (2024). Foreign investment screening mechanisms and emergent geographies of (post) globalization. *Dialogues in Human Geography*, 20438206241278733.
- [6] Almulhim, A. I. (2025). Building Urban Resilience Through Smart City Planning: A Systematic Literature Review. *Smart Cities* (2624-6511), 8(1).
- [7] Amirzadeh, M., Sobhaninia, S., Buckman, S. T., & Sharifi, A. (2023). Towards building resilient cities to pandemics: A review of COVID-19 literature. *Sustainable cities and society*, 89, 104326.
- [8] Ascione, L., Gargiulo, C., & Guida, C. (2025). A Systematic Review of Climate Action Plans: A Focus on Urban Green Spaces for Adaptation and Energy Saving. International Conference on Computational Science and Its Applications,
- [9] Baydemir, R. (2025). Urban movements and climate change: loss, damage and radical adaptation: edited by Marco Armiero, Ethemcan Turhan, and Salvatore Paolo De Rosa,(eds.). Amsterdam, Amsterdam University Press, 2023, 290 pp., index.€ 122.00 (hardback), ISBN 9789463726665,€ 0, 00 (eBook PDF), e-ISBN 9789048554805. In: Taylor & Francis.
- [10] Benabed, A. (2024). The Recoil of Globalization and the Rising Aspects of Slowbalization, De-Globalization, Re-Globalization and Sustainability for Business and Companies. *Ovidius University Annals, Economic Sciences Series*, 24(1), 22-30.
- [11] Bittencourt, J. C. N., Costa, D. G., Portugal, P., & Vasques, F. (2024). A survey on adaptive smart urban systems. IEEE Access.
- [12] Cannon, C. E., Chu, E. K., Natekal, A., & Waaland, G. (2024). Institutional designs for procedural justice and inclusion in urban climate change adaptation. *Journal of Planning Education and Research*, 0739456X241274579.
- [13] Carraminana, D., Bernardos, A. M., Besada, J. A., & Casar, J. R. (2024). Towards resilient cities: A hybrid simulation framework for risk mitigation through data-driven decision making. *Simulation Modelling Practice and Theory*, 133, 102924.
- [14] Chang, J.-W., & Park, S.-H. (2025). Local Space Branding-Based Adaptive Reuse Strategies-A Comparative Analysis of Office Projects in New York. *KIEAE Journal*, *25*(3), 15-26.

- [15] Cheshmehzangi, A., Zuo, J., Sharifi, A., Zhang, R., Ziafati Bafarasat, A., & Zhao, J. (2025). Healthy and Sustainable Living Through Climate-Resilient Urbanism: Moving Forward in Designing Healthy Cities and Communities. In *Designing Healthy Cities: Integrating Climate-Resilient Urbanism for Sustainable Living* (pp. 1-12). Springer.
- [16] Díez-González, J., Ferrero-Guillén, R., Verde, P., Martínez-Gutiérrez, A., Alija-Pérez, J.-M., & Perez, H. (2024). Analysis of synchronous localization systems for UAVs urban applications. *Neurocomputing*, 564, 126969.
- [17] Dougherty, T. R., & Jain, R. K. (2023). Invisible walls: Exploration of microclimate effects on building energy consumption in New York City. *Sustainable cities and society*, *90*, 104364.
- [18] Dui, H., Zhu, Y., & Tao, J. (2024). Multi-phased resilience methodology of urban sewage treatment network based on the phase and node recovery importance in IoT. *Reliability Engineering & System Safety*, 247, 110130.
- [19] Figueroa, E. (2023). Open for Whom? An Equity Analysis of New York City's Open Streets Program Tufts University].
- [20] Fünfgeld, H., & McEvoy, D. (2012). Resilience as a useful concept for climate change adaptation? *Planning theory and practice*, 13(2), 324-328.
- [21] Gereffi, G. (2020). What does the COVID-19 pandemic teach us about global value chains? The case of medical supplies. *Journal of International Business Policy*, 3(3), 287.
- [22] Guzman-Echavarria, G., Middel, A., Vecellio, D. J., & Vanos, J. (2024). The development of an adaptive heat stress compensability classification applied to the United States. *International journal of biometeorology*, 1-15.
- [23] Han, F., & An, Y. (2025). City-Level Digital Twins Empowered by Edge Computing: A New Path to Improve the Construction of Resilient Cities. *International Journal of High Speed Electronics and Systems*, 2540758.
- [24] Ijiga, A. C., Abutu, E., Idoko, P., Ezebuka, C. I., Harry, K. D., Ukatu, I. E., & Agbo, D. O. (2024). Technological innovations in mitigating winter health challenges in New York City, USA. *International Journal of Science and Research Archive*, 11(01), 535-551
- [25] Kim, S.-K. A. (2024). Reconstructing Reverse Innovation and Expansions. 2024 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM),
- [26] Kochskämper, E., Glass, L.-M., Haupt, W., Malekpour, S., & Grainger-Brown, J. (2025). Resilience and the Sustainable Development Goals: a scrutiny of urban strategies in the 100 Resilient Cities initiative. *Journal of Environmental Planning and Management*, 68(7), 1691-1717.
- [27] Kollmeyer, C. (2025). Does economic globalization promote civil peace in developing countries? *Cooperation and Conflict*, 60(2), 308-341.
- [28] Meerow, S., Newell, J. P., & Stults, M. (2016). Defining urban resilience: A review. Landscape and urban Planning, 147, 38-49.
- [29] Milberg, W., Liess, T., & Tedesco, M. (2024). Globalization after De-globalization. *Social Research: An International Quarterly*, 91(3), 939-971.
- [30] N'Goala, G., Scherrer, F. P., & Durif, F. (2025). The Smart and Resilient City: Models and Ways of Life. John Wiley & Sons.
- [31] Neves, J. L. (2024). Urban planning for flood resilience under technical and financial constraints: The role of planners and competence development in building a flood-resilient city in Matola, Mozambique. *City and Environment Interactions*, 22, 100147.
- [32] Norring, A. (2024). Geoeconomic fragmentation, globalization, and multilateralism.
- [33] Oteng-Ababio, M., Agergaard, J., Møller-Jensen, L., & Andreasen, M. H. (2024). Flood risk reduction and resilient city growth in sub-Saharan Africa: searching for coherence in Accra's urban planning. *Frontiers in Sustainable Cities*, *6*, 1118896.
- [34] Pan, Y., Liu, J., & Cheng, C. (2024). Research on urban resilience from the perspective of land intensive use: indicator measurement, impact and policy implications. *Buildings*, *14*(8), 2564.
- [35] Papanikos, G. T. (2025). The Trump Effect on Globalization: If the First Time was a Farce, Would the Second be a Tragedy? *Athens Journal of Business & Economics*.
- [36] Parsons, T., Wu, P. C., Wei, M., & D'Hondt, S. (2023). The weight of New York City: Possible contributions to subsidence from anthropogenic sources. *Earth's Future*, *11*(5), e2022EF003465.
- [37] Sari, M. M., Pranata, S., & Sulaiman, V. D. (2024). Innovative economic development in developing countries through ai and tackling globalization. 2024 3rd International Conference on Creative Communication and Innovative Technology (ICCIT).
- [38] Shokry, G., Anguelovski, I., & Connolly, J. J. (2025). (Mis-) belonging to the climate-resilient city: Making place in multi-risk communities of racialized urban America. *Journal of Urban Affairs*, 47(1), 121-141.
- [39] Vale, L. J., & Campanella, T. J. (2005). The resilient city: How modern cities recover from disaster. Oxford University Press.
- [40] Yan, X., & Qi, H. (2025). China–US competition, reverse globalization, and the regression of world politics. *China International Strategy Review*, 1-15.
- [41] Yang, J., Zeng, Y., & Li, R. (2025). The Nexus Between De-Globalization and OFDI From Emerging Economies: Moderating Roles of Institution and Government. *Managerial and Decision Economics*, 46(2), 980-998.
- [42] Zhang, Y., & Shang, K. (2023). Cloud model assessment of urban flood resilience based on PSR model and game theory. *International journal of disaster risk reduction*, 97, 104050.