

From shelter to communities: Frederick Cuny's approach to disaster relief

De refugio a comunidad: el enfoque de Frederick Cuny en la asistencia post-desastre

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Abstract

This article examines the enduring influence of Frederick Cuny, a pioneering humanitarian whose work revolutionized disaster relief and refugee camp design. It explores Cuny's legacy in reshaping notions of permanence and temporality in camps, blurring the lines between these spaces and conventional cities. Cuny's approach challenged traditional rigid grid layouts, emphasizing community-based, decentralized designs that prioritized open spaces. His principles of community participation, development over aid, and the shift from shelter products to sheltering processes — ideas that the article links to the work of John F.C. Turner — continue to shape contemporary disaster management strategies. By examining two important case studies in which Cuny was involved, Choloma Camp and Programa Kuchuba'l, the article also underscores the vital link between the spatial organization of camps and their social dynamics, emphasizing how camps evolve into permanent communities. Cuny's groundbreaking work remains pertinent in addressing challenges, including natural disasters, ongoing refugee crises, and substandard housing.

Keywords

Frederick Cuny; John F.C. Turner; refugees camp planning; disaster relief; community participation; sustainable development.

Resumen

Este artículo examina la influencia de Frederick Cuny, especialista en acción humanitaria cuya labor revolucionó la ayuda post-desastre y el diseño de campos de refugiados. Explora el legado de Cuny en la reformulación de las nociones de permanencia y temporalidad en los campos de refugiados y post-desastre, desdibujando los límites entre estos y las ciudades. El planteamiento de Cuny desafió los rígidos trazados tradicionales e hizo hincapié en los diseños descentralizados basados en la comunidad que priorizaban los espacios abiertos. Sus principios de participación comunitaria, desarrollo (en vez de simple ayuda) transición desde refugio provisional hacia vivienda permanente – ideas ligadas al trabajo de John F.C. Turner - siguen conformando las estrategias contemporáneas de gestión de catástrofes. A través de dos casos estudio en los que Cuny estuvo involucrado, Camp Choloma y Programa Kuchuba'l, el artículo también subraya el vínculo vital entre la organización espacial de los campos y su dinámica social, mostrando cómo, en muchos casos, evolucionan hasta convertirse en comunidades permanentes. El trabajo de Cuny sigue siendo pertinente a la hora de abordar retos, como las catástrofes naturales, las crisis de refugiados y la vivienda informal.

Palabras clave

Frederick Cuny; John F.C. Turner; planificación de campos de refugiados; ayuda post-desastre; participación comunitaria; desarrollo sostenible.

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Fred Cuny (1944-1995) was an American humanitarian whose work transformed disaster relief and emergency management. His legacy as a practitioner, prolific author, educator, and field-based researcher continues to influence humanitarian efforts worldwide. Cuny's journey in the field of disaster relief began in 1969 when he encountered his first international humanitarian crisis in Biafra, Nigeria. This experience led him, in 1971, to found INTERTECT, a small but highly impactful company dedicated to providing technical assistance primarily to voluntary organizations, the U.S. government, and United Nations agencies. He then went on to work as a freelance consultant in over fifty countries, conducting risk assessments for vulnerable populations in disaster-prone regions, developing recommendations and guidelines for the design and management of camps for displaced populations, and preparing training materials for local builders on disaster-resistant housing.

Cuny's groundbreaking approach departed from the prevailing techniques of the post-World War II era. Traditional methods had their origins in European refugee relief and consisted primarily of large, regimented camps set up by relief agencies working closely with military authorities. In the late 1940s, these approaches embraced natural disaster relief in newly independent nations, adapting European techniques for application in developing countries that lacked infrastructure and resources. While development concerns grew, most agencies remained focused on relief.¹ This, together with the added problem of high staff turnover, hindered the accumulation of knowledge and led to a pattern of short-term solutions. Although there was a lot of experimentation with prototypes for emergency shelters,² not much had changed since WWII, and little attention was paid to camp planning. In addition, several government departments and agencies were tasked in one way or another with responding to disasters,³ leading to duplicated efforts, complexity, lack of coordination, and confusion.⁴ Cuny's innovative methods sought to redefine this situation. His background in engineering at Texas A&M University and urban planning at the University of Houston furnished him with a unique approach to camp planning, treating camps as holistic entities made up of several interconnected systems.⁵ From layout and administration to sanitation, housing, water, and waste disposal, Cuny's comprehensive vision laid the groundwork for pioneering camp design guidelines.

In 1971, INTERTECT began a detailed study and analysis of post-disaster camps to understand their operation, management, and cost-effectiveness.⁶ Their findings yielded important insights. First, they identified three distinct classes of camps based on the stage of the crisis and the level of prior planning. Phase I camps are set up immediately after disasters, often on poorly located land, and provide minimal services to residents because they are considered as temporary by the government. These camps have no prior planning and thus have the worst living conditions of the three, are more prone to disease, and often cause tensions with the local population. Phase II camps, on the other hand, are designed to be semi-permanent. As a result, they are set up with limited planning, better physical conditions, and some prior site selection. They usually include a mix of permanent and semi-permanent structures, offer improved living conditions, and drainage and sanitation are usually good, reducing disease rates. Finally, Phase III camps are permanent, built from the ground up as post-disaster camps, and meticulously planned from the outset, with comprehensive master plans designed to maximize control, reduce costs, and facilitate relief services. Because the emotional state of the displaced people in these camps is usually good,⁷ it is easy to create work groups that continually improve camp conditions, with residents participating in camp subsystems. Phase III camps prove that cost-effectiveness can be achieved through proper planning and that effective camp design can save lives, promote self-reliance, and reduce the incidence of disease in high-risk environments.

As a camp's population grows, it essentially becomes a town or small city with the same needs and problems. Thus, camps require a similar level of detail to urban

1 Frederick C. Cuny, *Disasters and Development* (Dallas: INTERTECT Press, 1994): 18-20.

2 See UNHCR, *Shelter Design Catalogue*, 2016. <https://cms.emergency.unhcr.org/documents/11982/57181/Shelter+Design+Catalogue+January+2016/a891fdb2-4ef9-42d9-bf0f-c12002b3652e>.

3 In the U.S., around 100 agencies were involved in disaster response until President Carter created the Federal Emergency Management Agency (FEMA) in 1979.

4 *Architecture for Humanity, Design Like You Give a Damn* (London: Thames & Hudson, 2006): 45-46.

5 Frederick C. Cuny, "A Report on the Coyotepe Refugee Camp in Masaya, Nicaragua" (Dallas: INTERTECT, 1973), 1-4, <https://hdl.handle.net/1969.1/159949>.

6 Although Cuny always referred to refugees and refugee camps in his documents, we will use the terms displaced, affected, post-disaster, and victims throughout this article because refugees are displaced people seeking asylum that hold this international legal status. See UNHCR, "Who is a refugee?" (Geneva: UN High Commissioner for Refugees), <https://www.unhcr.org/about-unhcr/who-we-protect/refugees>

7 Frederick C. Cuny, "Refugee Camps and Camp Planning. Report I: Camp Planning" (Dallas: INTERTECT), 18-19, <https://hdl.handle.net/1969.1/159953>.

Entre la permanencia
y la temporalidad.
Campos, urbanidad
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In between permanence
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design and master planning. In addition, Cuny observed that few Phase II or Phase III camps were ever completely abandoned. This finding prompted further study to understand how post-disaster camps evolved over time, and this influenced site selection criteria for future camps.⁸

Ultimately, it was found that the success of a camp depended on its spatial configuration –disorganized layouts were costly and difficult to manage– and the installation of adequate facilities before affected victims occupied a site. Cuny emphasized the importance of designing camp plans and components for rapid installation and mass production to provide an adequate response to disasters, and he devoted part of his career to developing standardized layouts that could be adapted to different situations.

At the end of 2022, there were 108.4 million forcibly displaced people worldwide, and the numbers are climbing. Similarly, systemic substandard housing conditions continue to plague the world's cities, with more than a third of the world's population living in slums.⁹ This, along with the continuing increase in the number and intensity of disasters worldwide, poses a challenge to and test local, national and international response mechanisms.¹⁰ In a future that promises more climate-related disasters and more complex and protracted crises, Cuny's fieldwork and legacy in post-disaster camps is worth studying and is analyzed here from two perspectives: the interplay between the geographic dimension (camp planning and the production of camp layouts) and the social dimension (in terms of collective participation and the appropriation of space) of camps.¹¹ An overall view of Cuny's work will make it possible to gain a new understanding of permanence and temporality, which will help us to address both camps and cities as hybrid states of settlement and transfer the lessons learned from one to another.

The spatial dimension of camps

From their fieldwork in various post-disaster camps, INTERTECT developed a "catalog" of housing and layout types to be used in camp planning, depending on the needs and objectives of each camp. Their evidence-based experience led them to a series of conclusions that have helped to rethink the design of camps.

Housing strategies for post-disaster camps

The establishment of post-disaster camps requires careful planning to ensure the well-being of displaced populations. Over the years, three main strategies for providing post-disaster shelter have emerged:¹² emergency shelters, temporary shelters and preconstruction of permanent housing. Emergency shelters provide victims with immediate shelter, usually tents, after a disaster. This strategy leads to sub-optimal results, as it rarely meets the needs of the victims. Temporary shelters aim to provide semi-permanent shelter. They are designed to be built on the site of a victim's former home, giving them time to rebuild. However, cost can be an issue, and these temporary units sometimes slow down the reconstruction process, often becoming long-term homes. Finally, the speedy preconstruction of permanent housing promotes the rapid rebuilding of normal housing. This strategy assumes that individuals will take care of their own emergency shelter and that most reconstruction activities will be carried out through self-help housing programs, reducing costs and building on community skills.

Because numerous case studies showed that shelters often became permanent structures, Cuny believed that the best strategy after a natural disaster was to encourage rapid rebuilding of permanent housing and to avoid the shelter phase unless necessary. Encouraging residents to return to permanent housing quickly promotes self-sufficiency, community rebuilding, and overall stability.

8 Frederick C. Cuny, "Refugee Camps and Camp Planning: The State of the Art", *Disasters* vol. 1, no. 2 (1977): 127, 129. <https://doi.org/10.1111/j.1467-7717.1977.tb00020.x>

9 UNHCR, "Global trends. Forced displacement in 2022" (UNHCR, Geneva, 2023), <https://www.unhcr.org/refugee-statistics>.

10 IFRC, "Global Plan 2024" (IFRC, Geneva, 2023), 38, https://www.ifrc.org/sites/default/files/2023-12/20231215_GlobalPlan2024.pdf

11 This two-dimensional analysis is based on: Henri Lefebvre, *La producción del espacio*, trans. Emilio Martínez (Madrid: Capitán Swing, 2013): 129, 431.

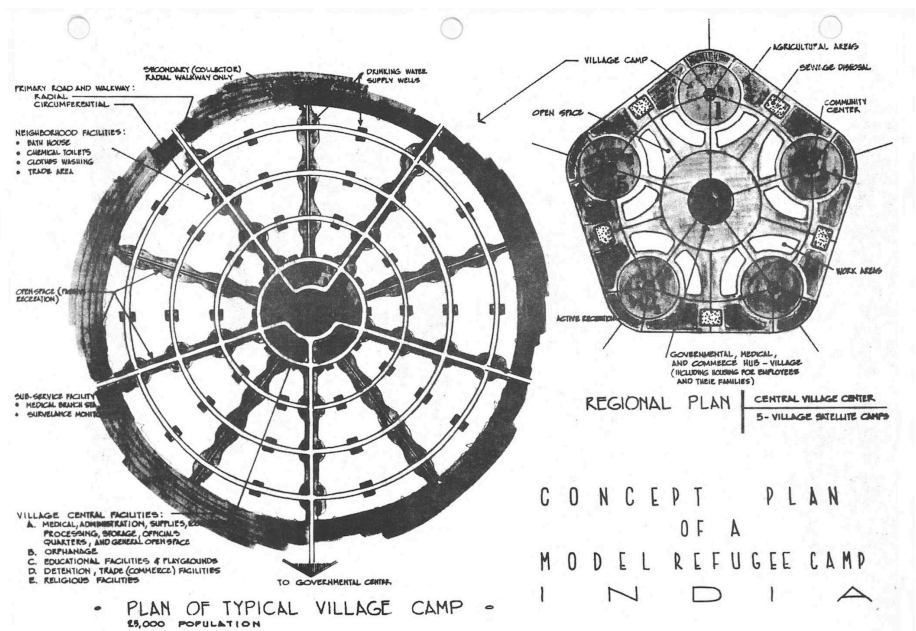
12 See Frederick C. Cuny, "Strategies and Approaches which can be used by Voluntary Agencies to Provide Post Disaster Shelter and Housing" (Dallas: INTERTECT, 1977): 2-3, 7, <https://hdl.handle.net/1969.1/160081>

Standard layouts in camp planning

After reviewing various case studies, INTERTECT proposed a set of standard camp plans, tailored to factors such as terrain and population size, types of housing, and the economic and social objectives of the camp, that could facilitate and speed up construction.¹³ They argued that detailed master plans are essential for creating self-contained camps and that residents must play a significant role in their development.¹⁴ The following categories were established:

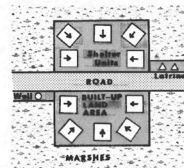
Terrain-dictated camps (Figure 1a-c)

- Circular camps: Designed for hilly or mountainous terrain, circular camps can be built in clusters and managed as one camp. They maximize density and allow for decentralized site improvements based on terrain features. Socially, they allow for the integration of diverse groups that function as satellite villages.
- Linear camps: Used when environmental factors such as flooding or restrictive land use make it necessary to locate camps near roads or on narrow sites. Decentralization of services becomes critical, and relocation to better sites is advisable when feasible.
- Triangular camps: Designed for irregular lots in urban areas, these layouts optimize available space.



LINEAR PLANS

Planning Unit

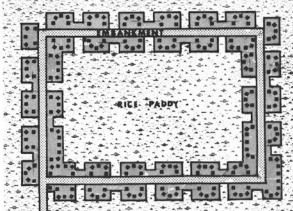


Site Plans

Roadside Camp

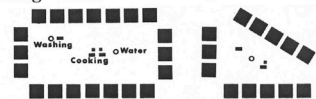


Camp on banks of a rice paddy

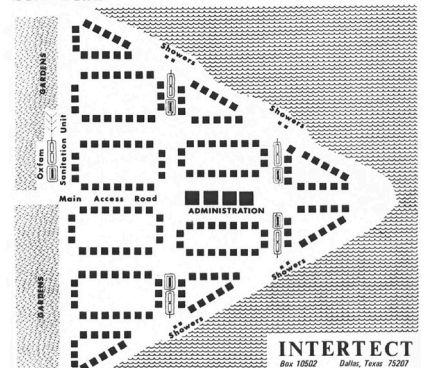


TRIANGULAR PLAN

Planning Units



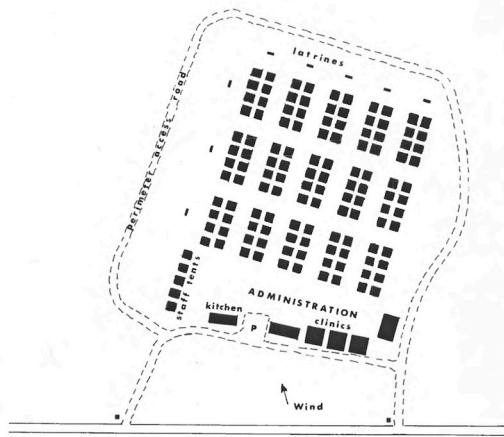
Site Plan



¹³ UNHCR, "Camp Planning Principles and Examples", 3-5, 9, <https://hdl.handle.net/1969.1/160062>

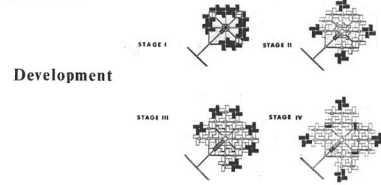
¹⁴ Frederick C. Cuny, "Refugee Camps and Camp Planning: The State of the Art", 133.

GRID PLAN

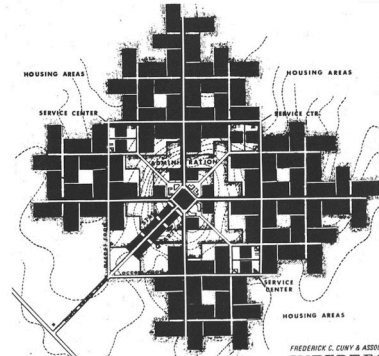


FREDERICK C. CUNY & ASSOCIATES
INTERTECT

CROSS-AXIS PLAN



Site Plan



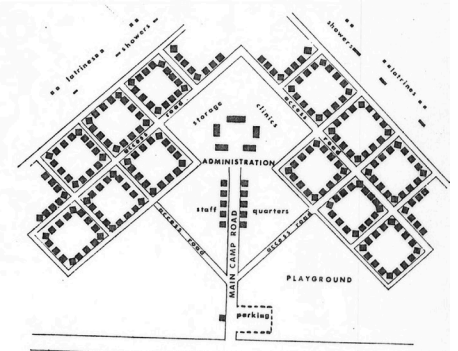
FREDERICK C. CUNY & ASSOCIATES
INTERTECT

MODIFIED CROSS-AXIS PLAN

Planning Unit



Site Plan



FREDERICK C. CUNY & ASSOCIATES
INTERTECT

[Figure 2a-c] Grid, cross axis and modified cross axis camp layouts designed by INTERTECT.

Open class layouts (Figure 2a-c)

Grid camps are simple and easy to implement –in terms of both housing and camp subsystems of water, drainage, etc.–, which is why they have been widely used in the past. Grid camps work best on flat terrain. However, they can lead to high-density living, the spread of disease and undesirable social conditions, and often neglect the basic requirements of adequate space for families and the needs of specific groups within the displaced community.

Community unit camps emphasize small clusters or communities as planning units. Examples include the cross-axis and modified cross-axis layouts (with smaller planning units) that foster a sense of community among residents. They are adaptable to a variety of terrains, including rugged ground, and provide flexibility for expansion where additional units can be added as needed without violating the design principles.¹⁵ Integrated site-housing plans are influenced by the design of the housing units, with a standard building unit for all camp structures. While more expensive initially, they allow for greater density and the preservation of open space (Figure 3).

Experience with grid-based plans showed that while they were better than no plan at all, they had no regard for community identity and discouraged participation by residents. In addition, Cuny discovered a tendency for residents to regroup within the grid and try to divide themselves into some sort of common space. This prompted him to advocate community-oriented layouts in order to improve residents' sense of belonging, social interaction, mutual support and security, as opposed to the military model of tents in a grid. The role of this model is to enforce discipline on victims, who, in this layout, are easily controlled and monitored by camp governors.

As the camp layout is inextricably linked to and determines the social organization of the camp and the participation of the residents (Figure 4a-b), the physical dimension of camps needs to be understood in relation to their social dimension.

15 INTERTECT used the modified cross-axis plan in the Coyotepe refugee camp, established after the Managua earthquake of December 1972. Cuny, "Refugee Camps and Camp Planning: The State of the Art", 127-129.

16 Although Turner focused on informal settlements, he and Cuny are connected by the common principles that they share.

The Social Dimension of Camps: Cuny meets and surpasses Turner ¹⁶

John F. C. Turner (1927-2023) was a British architect and visionary in the field of informal self-help housing. He promoted the concept that self-building empowers individuals to create their own living spaces and advocated a more democratic

Integrated Site-Housing Concept Plan

Analysis

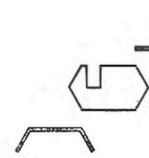
ELEMENTS

The building system is based on three basic elements:

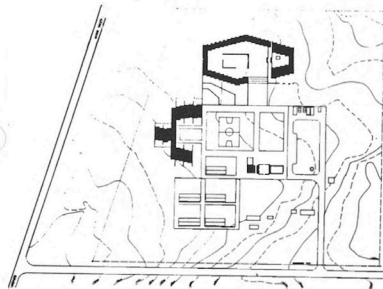
Foundation beam

External wall

The saddle



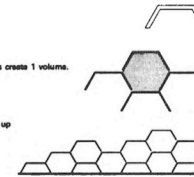
Site Plan



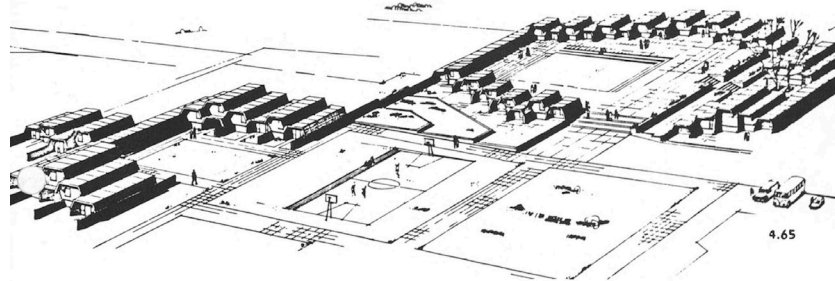
CONSTRUCTION

4 units create 1 volume.

Piling up



Perspective



[Figure 3] Integrated site-housing camp layout designed by INTERTECT.

[Figure 4a-b] Rigid grids, such as the one shown in Figure 1, discourage participation, while inward-facing community units, such as the one shown in Figure 2, encourage bonding and participation.

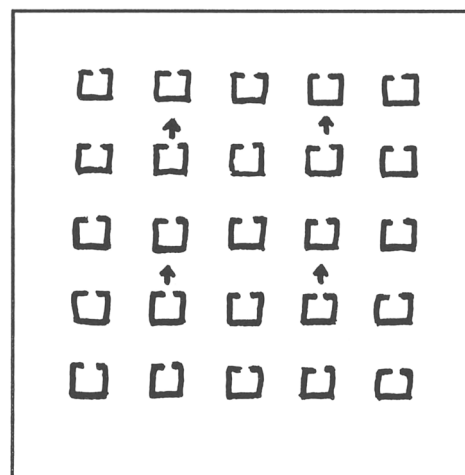


FIGURE 1: GRID LAYOUT

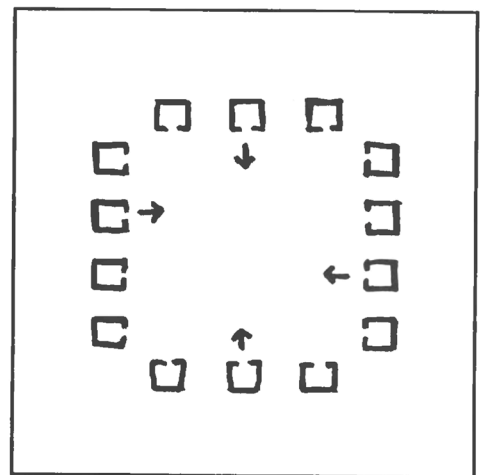


FIGURE 2: COMMUNITY UNIT LAYOUT

and community-based approach to addressing housing shortages in rapidly growing urban areas.¹⁷

17 John F.C. Turner, *Vivienda, Todo el Poder para los Usuarios. Hacia la economía en la construcción del entorno* (Madrid: Hermann Blume Ediciones, 1977): 50.

18 John F.C. Turner, "Uncontrolled urban settlement: problems and policies", *International social development review*, no. 1 (1968): 128.

19 Turner believed that participation should be included from the earliest stages of decision making for better acceptance and results. Turner, *Vivienda, Todo el Poder para los Usuarios*, 115.

Turner believed that the housing problem in emerging regions was rooted in the mismatch between the popular demand for housing and the available institutional resources. He stated that "no housing agency in any newly urbanizing country can even begin to make an impression on the housing problem without the active participation of the people themselves"¹⁸ and emphasized that the viability of any housing system depended on the care and participation of its users. He proposed a self-help-based solution, arguing that the involvement of local people in decision-making, design and construction was essential for better outcomes and sustainable community self-determination.¹⁹

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20 John F.C. Turner and Patrick Wakely, Fifty Years of the Community-Led Incremental Development: Paradigm for Urban Housing and Place-Making, not published (2013): 5. <https://doi.org/10.1002/9781119148784.ch2>

21 Michael Cohen, "John F.C. Turner and Housing as a Verb", *Built Environment* (1978-), vol. 41, no. 3 (2015): 414.

22 Kathrin Golda-Pongratz, "John FC Turner (1927-)", *The Architectural Review*, January 11, 2021, <https://www.architectural-review.com/essays/reputations/john-fc-turner-1927>.

23 Participation was not more widespread because of government fear of losing control over victims, as well as administrative and social barriers.

24 Frederick C. Cuny, "Refugee Participation in Emergency Relief Operations" (Dallas: INTERTECT, 1987), 1-3, <https://hdl.handle.net/1969.1/159893>

25 Mark Purcell, "Excavating Lefebvre: The Right to the City and Its Urban Politics of the Inhabitant", *GeoJournal*, vol. 58 (2002), 102. doi:10.1023/B:GEJO.0000010829.62237.8f

26 Cuny, "Refugee Participation", 13-14

27 Frederick C. Cuny, "Project Manual for an Emergency Shelter-to-Housing Program" (Dallas: INTERTECT), 35, <https://hdl.handle.net/1969.1/160080>.

28 A shelter is a top-down imposed form of housing, and a dwelling is a bottom-up form of housing that meets the needs of its inhabitants. Ayham Dalal, *From Shelters to Dwellings: The Zaatari Refugee Camp* (Berlin: Transcript Verlag, 2022): 29.

29 This term refers to the right of refugees to use their physical urban space. This concept emerged as a development of the "right to the city" proposed by Lefebvre. Purcell, "Excavating Lefebvre", 103.

30 Frederick C. Cuny, "A Report on the Refugee Camp and Housing Programs in Choloma, Honduras, For the Refugees of Hurricane Fifi: December 1974" (Dallas: INTERTECT, 1974), 3-11, <https://hdl.handle.net/1969.1/160003>.

Through observation of the self-building processes in Peru, where he worked from 1957 to 1965, Turner solidified an earlier perception that housing should be understood as a process that is directly related to its user. Rather than seeing a house as an object or a finished product, Turner saw it as an ongoing process that grows, improves and evolves according to each person's resources. In this sense, he believed that the key to Peru's *barriadas*, or any shanty town, was in fact its progressive growth. Thus, he advocated flexible and open design as a means of adaptability and resilience in today's complex urban environments.²⁰

Although Turner's ideas revolutionized urban development and continue to influence urban planning and housing policy today,²¹ they have been criticized for potentially overlooking structural inequalities and constraints.²² The two case studies that we discuss below are intended to illustrate the ideas —advocated by Cuny and Turner— about community participation and the social dimension of camps. The second case study also highlights the goal, pursued by Cuny, of development rather than relief. It exemplifies how Cuny takes Turner's theory one step further.

On participation

When Cuny began studying post-disaster camps, he found that international aid agencies generally recognized the importance of local participation, but this was often limited to menial tasks, fostering a cycle of dependency among residents.²³ Most organizations were paternalistic and viewed disaster victims as helpless. This further discouraged real and meaningful participation and eventually led to a growing lethargy among residents, reinforcing the view that they were incapable of participating in the decision-making process.²⁴

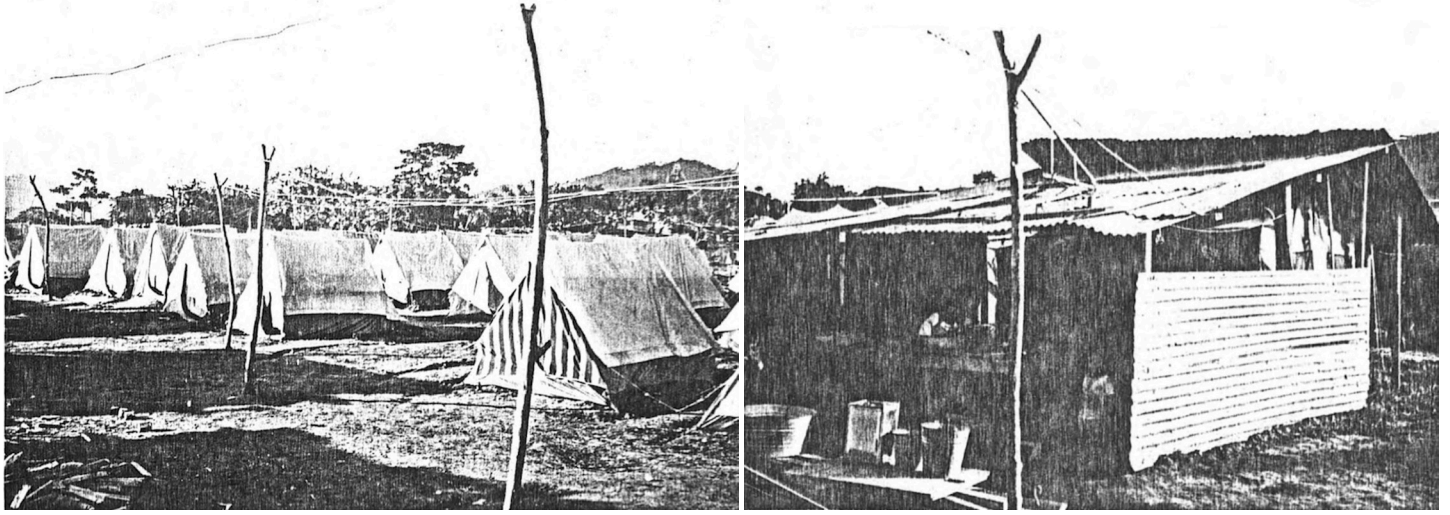
Cuny recognized the importance of giving residents a central and direct role in making decisions that affected their camp space.²⁵ Like Turner, he believed in the positive effects of civic participation, emphasizing how victims' involvement in daily activities, which enhances their coping process —building self-esteem and reducing isolation—, is cost-effective because it requires less outside labor, promotes the protective role of community bonding and contributes to self-sufficiency.²⁶

He advocated guided participation in all phases of relief work, training residents for specific tasks, from leadership selection to project and camp planning, in the understanding that local organization and participation is a means to achieve longer-term goals. With this in mind, he introduced programs for community and cooperative participation, empowering residents to make decisions about housing reconstruction and encouraging families to work together to help each other repair and rebuild, reducing costs and speeding up reconstruction.²⁷

From housing as a verb to placemaking: choloma camp

The Choloma Camp case study aims to illustrate two dynamics that often occur in post-disaster camps: i) the self-help processes that take place at the housing level, where victims transform their shelters into what Ayham Dalal calls "from shelter to dwellings"²⁸, and ii) the informal rearrangement of shelters to form community in what Mark Purcell calls "the right to appropriate".²⁹ Although Turner had already focused on self-help housing, Cuny saw this idea evolve and grow into the appropriation not only of the house but also of the urban space in Choloma.

The Choloma Camp in Honduras was established in 1974 as a temporary settlement immediately following Hurricane Fifi, housing 318 families. It was set up on a flat, unoccupied tract of land previously owned by a small cement company. As a Phase I camp, its layout followed a grid pattern for tent placement, without regard to terrain, social integration, or spatial orientation. Administrative services were scattered throughout the site, and there was little organization of group living.³⁰



[Figure 5a-b] Tents used in Choloma that were then appropriated by residents to prolong tent use.

Three months after its establishment, INTERTECT visited the camp and observed its transition from a temporary settlement to a permanent community. People had moved their tents closer to friends, regrouping and rearranging the camp in response to socio-cultural relationships. This transformation gave rise to distinct communities within the camp, with spatial separations, oriented tents, and obvious group activities.³¹ What was really interesting was that neither the government nor the voluntary agencies provided any administration for the camp. Thus, it was the camp residents themselves who altered the built space, having an effect on the overall layout.³² In addition, several agencies facilitated the purchase of the land from the cement company, which led to the construction of permanent multi-family housing.

The INTERTECT study identified three stages of development in this, and almost all camps following natural disasters. Stage I was initial occupation, where victims took what was allocated to them with little involvement or participation. Stage II was a period of reorganization, marked by adjustments to the camp layout, regrouping into units, and the formation of residents' organizations, where social reorganization and the formation of new friendships took place. Phase III represented the transition to permanent settlement, where residents saw the camp as the logical place to rebuild, leading to the establishment of permanent facilities.³³ This evolution of many post-disaster camps into permanent communities highlights the importance of considering each camp site as a potential permanent "city" and the need for adequate site selection and planning from the outset.

The "camp as a city" planning vision, reinforced by this study, recognizes that victims adapt, change, and structure their built spaces to suit their own demands and needs, reflecting a desire to build meaningful communities and create permanent-like environments.³⁴

Furthermore, spontaneous camp transformation also takes place at the shelter level, where units are continuously self-constructed, expanded, and reassembled based on changes within the family, understanding *housing as a verb*³⁵: a flexible process of adaptation by users (Figure 5a-b). Through these organic practices, refugees gradually become inhabitants of the new city, diluting the boundaries between temporality and permanence.

Housing training: Programa Kuchuba'l

After the devastating 1976 earthquake in Guatemala, Cuny was approached by Oxfam and World Neighbors to develop a housing reconstruction strategy. Unlike the short-term solutions proposed by other organizations working in the area,

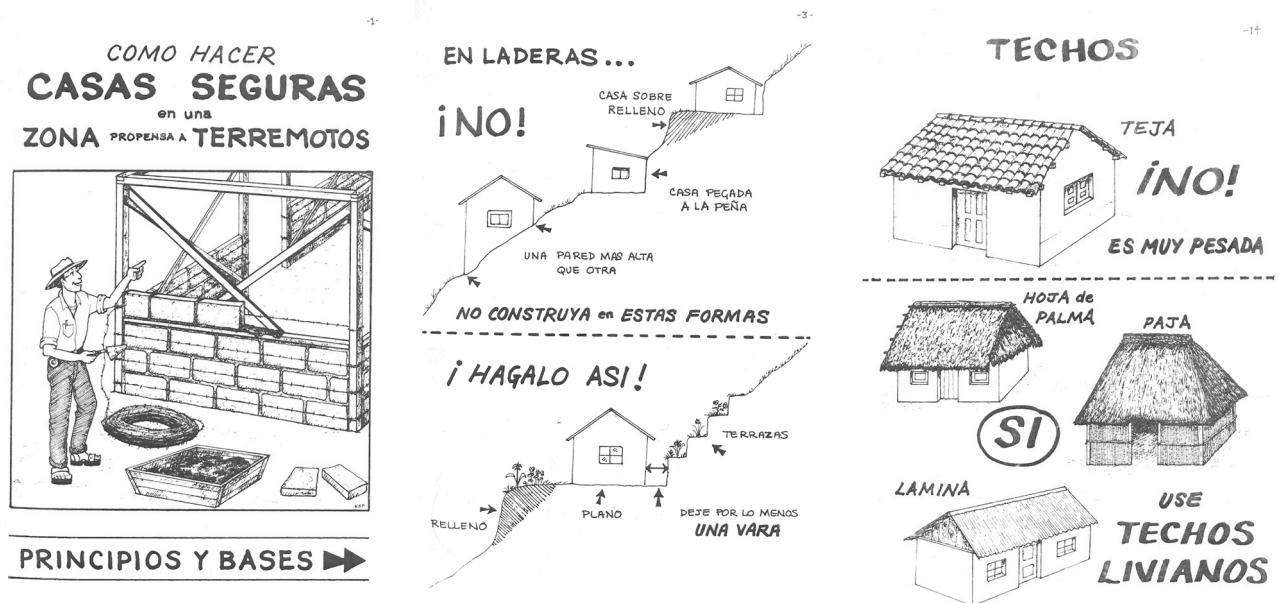
31 This evolution has later been studied in other refugee camps. See Ayham Dalal, "The Refugee as Urban Housing", *Housing Studies*, vol. 37, no. 2 (2022). <https://doi.org/10.1080/02673037.2020.1782850>. Also, Valerio Cutini and Michael Buonocore "We were building a camp, they were building a city: Refugee camps as a spatial laboratory for spatial inclusion". In *Proc., 11th Space Syntax Symp.* Lisbon, Portugal: University of Lisbon (2017).

32 Cuny, "Refugee Camp in Choloma", 10.

33 Cuny, "Refugee Camps and Camp Planning: The State of the Art", 130.

34 Peter Grbac, "Civitas, Polis, and Urbs: Reimagining the Refugee Camp as the City" (Oxford: Refugee Studies Centre, 2013): 17. <https://www.refworld.org/pdfid/55c9f3504.pdf>

35 *Housing as a Verb* as a phrase coined by Turner, who saw the house as a process of adaptation and change, not as a finished product. John F.C. Turner and Robert Fitcher, *Freedom to Build: Dweller Control of the Housing Process* (NY: Macmillan Publishers, 1972): 148.



[Figure 6a-c] Extracts from the cartoon manuals developed by INTERTECT.

such as CARE or the Salvation Army, which offered a heavily subsidized housing program for a small number of people, INTERTECT's novel response was an approach known as *Programa Kuchuba'l*.

Programa Kuchuba'l was a self-built model that sought to emphasize citizen participation at all levels of the reconstruction process and to facilitate the construction of safer, earthquake-resistant homes, including an educational component for the general public and local builders to "build back better". The goal was to develop a long-term solution that prioritized development over relief, ensuring that the homes rebuilt after the earthquake would be more resilient to future disasters by providing people with the necessary knowledge and skills.

Programa Kuchuba'l had two basic principles. The first focused on mitigation through reconstruction, aimed at reducing future loss of life and property, by teaching people how to rebuild their homes in a way that would prevent the scale of damage experienced during the earthquake occurring again in the future. Cuny's program concentrated on raising public awareness about the vulnerability of local housing and on individual actions towards house safety.³⁶ The second core principle was community involvement. Families worked together to build their homes, which led to stronger community organizations and increased self-reliance.³⁷

INTERTECT developed practical guidelines and techniques that built on and improved the methods traditionally used in the region, employing local materials and labor rather than importing construction materials from outside the area. This turned out to strengthen regional markets and employment opportunities in keeping with the principles of long-term development over short-term relief. Simple, cartoon-style manuals that were comprehensible even to non-readers were designed and distributed to facilitate the acceptance of the improved construction techniques³⁸ (Figure 6a-c).

In addition, training was provided and model structures were built in the communities to help less experienced craftsmen and new builders acquire the necessary skills and provide practical on-the-job training (Figure 7a-b). One particularly impactful point is that the local construction companies were eventually able to operate without further assistance from Programa Kuchuba'l, making it a self-sustaining endeavor.³⁹

36 Cuny, "Project Manual", 2.

37 Cuny, Disasters and Development, 179.

38 INTERTECT, "The OXFAM/World Neighbors Housing Reconstruction Program: Guatemala 1976-1977", (Dallas: INTERTECT, 1977), 32, <https://hdl.handle.net/1969.1/160013>.

39 Charlotte and Paul Thomson, "Report on the OXFAM/World Neighbors Housing Reconstruction Program Following the Earthquakes of February 1976 in Guatemala", (Dallas: INTERTECT, 1977), 44, <https://hdl.handle.net/1969.1/159989>.



[Figure 7a-b] Programa Kuchuba'l: a relief agency worker illustrates safe construction sites and, on the right, a group of locals working together to rebuild a house in a disaster area.

The evaluation of the impact of this pioneering initiative revealed many contributions. It eased the burden of reconstruction by providing materials that reduced the overall cost of rebuilding, and it effectively reduced the community's vulnerability to future earthquakes by improving the housing stock and skills of local builders. The training materials were later adopted in other disaster-stricken regions, influencing many volunteer and government programs, leading the way in materials development, introducing new housing concepts and providing an alternative to traditional forms of aid typically provided by outside agencies. Organizations such as the United Nations Disaster Relief Office, CARE, CARITAS, and the US Peace Corps were inspired by this program, leading to the replication of its components.⁴⁰

Cuny concluded that, despite the challenges of the program, which was a time-consuming effort and had unique characteristics and complexities that were not necessarily seen in all disaster-affected regions, the best approach to rapid rebuilding of permanent housing is one that utilizes both local material distribution and training.

40 INTERTECT, "Housing Reconstruction Program: Guatemala", 72-73

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Conclusions and Relevance

Frederick Cuny's work in the field of disaster relief has left a lasting legacy, significantly influencing the way humanitarian efforts are structured and executed. Cuny's pioneering guidelines for post-disaster camp design challenged the conventional wisdom of rigid, military-style grid layouts. He introduced a community-based approach that focused on decentralized, family- and cluster-oriented designs that recognized the importance of open space for community interaction.⁴¹ This novel approach also emphasized the importance of a bottom-up method, starting with the needs and desires of individual families. This idea still holds true today, as NGOs call for an urgent shift of leadership and decision-making to a more local level in the knowledge that "when we truly engage communities and they play an active role in designing and managing programs and operations, the outcomes are more effective, sustainable and of a higher quality"⁴².

Like John F. C. Turner, Cuny recognized that the key to success was the active participation of affected communities from the beginning of the planning process, with the idea of working with, not just for, the community. He developed a different view of the role of government and humanitarian agencies after witnessing that too few shelters often arrived too late in the disaster areas. He believed that they should play the role of provider by mobilizing local material and technical resources and encouraging self-help programs, linking their assistance to local initiatives and resources, with the aim of fostering residents' own ability to provide for themselves and avoid dependency. This emphasis on community participation and self-reliance is still highly applicable today, as organizations like UNHCR have developed an approach to shelter and settlement development in emergencies based on community empowerment and self-recovery.⁴³

Like Turner, Cuny advocated a fundamental shift in thinking and perspective from simply providing tangible products like shelter to focusing on the process of sheltering and housing. He urged agencies to move away from one-size-fits-all solutions and consider whether shelters are truly meeting the needs of the people that they serve. This emphasis on the process, rather than just the product, of sheltering has shaped contemporary disaster response and highlighted the importance of context-specific, locally adapted solutions. In addition, Cuny (like Turner) underscored the importance of building upon local resources and traditional knowledge. He emphasized that disaster relief should be compatible with local materials and building practices, taking into account existing indigenous designs. This principle is still very important today, as experience has shown that most affected families rebuild their homes after a disaster without any external assistance.⁴⁴ For this reason, it is crucial that shelter agencies analyze the existing local building culture to promote both cultural sensitivity and the use of readily available resources, thereby contributing to sustainability and community acceptance.

One of the most important lessons of Cuny's work is his advocacy of disaster mitigation rather than disaster relief, arguing that relief efforts should not only rebuild but also improve upon pre-disaster structures in order to prevent or lessen the impact of a future disaster. Relief agencies tended to view disasters solely as emergencies, which meant that they provided only emergency medical care, basic supplies, and temporary shelter, without addressing the roots of the problem: poverty and underdevelopment. Cuny urged a focus on development issues, such as proper land-use planning –avoiding areas prone to flooding or on steep slopes– building codes and improved construction techniques, stressing the link between poverty and vulnerability.⁴⁵ Furthermore, disaster relief had, in the past, focused on introducing new construction methods and components rather than improving

41 This is still a guiding principle in camp planning today, see Global Shelter Cluster, "The State of Humanitarian Shelter and Settlements 2018" (Geneva: IFRC and UNHCR, 2018), 7, <https://sheltercluster.s3.eu-central-1.amazonaws.com/public/docs/gsc-strategy-narrative.pdf>. Also, UNHCR, "Handbook for Emergencies" (Geneva: UN High Commissioner for Refugees, 2007), 213-216, <https://www.refworld.org/pdfid/46a9e29a2.pdf>.

42 IFRC, "Community Engagement and Accountability (CEA) Strategy 2023-2025" (Geneva: IFRC, 2023), 5, https://www.ifrc.org/sites/default/files/2023-06/20230523_CEA_Strategy_ONLINE.pdf

43 See IOM on behalf of the Global Shelter Cluster, "Shelter Project Essentials" (Geneva: IOM, 2021), <http://shelterprojects.org/essentials/shelter-projects-essentials-2021-print.pdf>. Also, UNHCR, "Global Strategy for Settlement and Shelter" (Geneva: UNHCR, 2014), 12, <https://www.unhcr.org/us/media/global-strategy-settlement-and-shelter>

44 Global Shelter Cluster, "The State...", 10, 25.

45 Today, terms like preparedness, resilience, prevention, and mitigation are the cornerstones of IFRC strategic priorities. See IFRC, "Preparedness for Effective Response Leaflet and Case Studies" (Geneva: IFRC, 2023), 1, https://www.ifrc.org/sites/default/files/2023-09/NS_Preparedness_leaflet_2023_EN.pdf

existing housing structures. Cuny's practical experience showed that a more effective approach was to start with people's current homes and improve their performance by introducing modifications that were consistent with standard building practices and financially feasible for residents. To this end, he and his colleagues developed training programs with local builders that have since inspired progressive shelter and housing rehabilitation policies, such as those promoted by IFRC.⁴⁶

Cuny's reports and observations have guided international organizations and laid the groundwork for many of the global manuals that shape modern humanitarian practice. Moreover, the lack of inter-agency coordination that Cuny witnessed in the field led him to inspire a change in the role of the UNHCR as the coordinator of relief efforts in countries where host governments would not assume this role.⁴⁷ In addition, Cuny was a prominent figure in disaster management institution building, contributing to the professionalization of disaster management through the development of training programs and resources, such as the comprehensive collection now housed at Texas A&M University⁴⁸ of publications that remain valuable and current today.⁴⁹

Cuny understood the complexities of camp planning as a comprehensive action. While most organizations saw camps as a temporary space intended for transition, his fieldwork showed that displaced operations often lasted longer than expected, leading him to define camps as hybrid spaces or even permanent cities, emphasizing the importance of designing camps not merely as temporary spaces but as evolving communities, making long-term sustainability a critical consideration. This paradox between the temporary and the permanent remains a central contemporary issue and makes Cuny's work highly relevant in the face of today's evolving challenges.

However, many of his contributions, which are highly regarded by shelter practitioners today, have not yet been fully implemented due to a variety of factors, including inconsistent funding, political constraints, poor response capacity, and lack of coordination between NGOs and the government. In addition, there is still a division between the humanitarian sector, which focuses on short-term disaster relief, and the development sector, which works towards long-term recovery; while efforts are underway, progress remains slow.⁵⁰ Addressing these gaps will be critical to improving the impact and quality of emergency responses and ensuring that we can meet the challenges of the coming decades. With an increase in natural disasters, ongoing refugee crises and substandard housing in slums, exacerbated by uncontrolled population growth and adverse environmental changes,⁵¹ the need for effective, community-based and sustainable approaches is more urgent than ever.

46 See IFRC, "Participatory Approach for Safe Shelter Awareness (PASSA) Manual" (Geneva: IFRC, 2011), <https://www.ifrc.org/sites/default/files/305400-PASSA-manual-EN-LR.pdf>

47 Frederick C. Cuny, "The UNHCR and Relief Operations: A Changing Role", *The International Migration Review*, vol. 15 (1981), 16-19, <https://doi.org/10.2307/2545319>. Note that UNHCR is currently mandated as the coordinator in conflict situations, while IFRC is the coordinator in natural disasters.

48 See the Oaktrust Digital Library: Frederick C. Cuny/INTERTECT Collection.

49 Although many newer manuals have been written on post-disaster relief, *Disasters and Development*, published by Cuny in 1983, is still considered by many academics to be the textbook on the subject. *Architecture for Humanity, Design Like You Give a Damn*, 48.

50 For more information on this, see Global Shelter Cluster, "The State...", 10-11, 98, 102. Also: IFRC, "CEA", 5-10.

51 IFRC, "World Disasters Report 2022" (Geneva: IFRC, 2023), 240, <https://www.ifrc.org/document/world-disasters-report-2022>

Authorship

Conception and design of the work: PFG, IMR; Methodology: PFG, IMR; Data Collection and Analysis: PFG, IMR; Discussion and Conclusions: PFG, IMR; Drafting, formatting, version revision, and approval: PFG, IMR

Figure sources

Figure 1a-c. OAKTrust Digital Library: Frederick C. Cuny/INTERTECT Collection.

Figure 2a-c. OAKTrust Digital Library: Frederick C. Cuny/INTERTECT Collection.

Figure 3. OAKTrust Digital Library: Frederick C. Cuny/INTERTECT Collection.

Figure 4a-b. OAKTrust Digital Library: Frederick C. Cuny/INTERTECT Collection.

Figure 5a-b. OAKTrust Digital Library: Frederick C. Cuny/INTERTECT Collection.

Figure 6a-c. OAKTrust Digital Library: Frederick C. Cuny/INTERTECT Collection.

Figure 7a-b. OAKTrust Digital Library: Frederick C. Cuny/INTERTECT Collection.

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