

Care and Informal Communities around Degraded Infrastructure

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Abstract:

In the urban environment, care includes not solely the maintenance of physical spaces but also the establishment and sustenance of intangible social connections. However, informal areas often fail to get equal care due to geographical and social vulnerability. The paper investigates how collective land strategies protect the sustainability of land and communities as well as social and environmental justice by compensating informal communities the care that they require. Then take the Caño Martín Peña Community as a case study, with a particular focus on the collective land strategies and its mechanisms for obtaining care through the interconnections of stakeholders and social networks. In the end, the paper proposes that collective land strategies be adapted to fit Chinese context and its informal land and communities, and facilitate the informal communities' transition to sustainable development.

Keywords:

Care in the City, Marginalized Lands and Communities, Degraded Infrastructure, Community Land Trust, Renewal of Urban Space

1. Introduction

Care in urban context comprises not only the provision and maintenance of physical infrastructure and spatial public space but also the interaction of invisible social relations and positive impact on urban memory and culture. There is no doubt that mostly care in urban design is people-based, and care practices in cities should involve stakeholders and organizations, taking into account their demands. Moreover, Fitz, Krasny and Wien indicated that 'care emphasizes processes and relationships that extend back and forward through time, and concerning all of the created relationships' [1]. However, the process of care is affected by alterations in land functions and the passage of time, and care in informal areas is often neglected by society and power due to geographical and social vulnerability. In order to preserve environmental and social justice of lands and communities, particularly the forgotten and invisible areas, care rises into an essential behaviour and plays a significant role in securing the land rights for these settlements and residents and preserving social sustainability. Additionally, Amin stated that 'making of micro-collectives by the poor around shared infrastructures (and other material of the urban commons) may be

a necessary political opening,' [2] which brings an approach to safeguarding rights in ignored places. Informal lands around shared infrastructures could attempt to care through the strategy of collective land stewardship, creating an equal area with infrastructure that has a favourable effect, and in the context of China, care is embodied in the reduction of uneven development and arrangement of space for vulnerable groups, the prevention of the privatisation of public space, and the reduction of unfair distribution of social resources, such as educational and employment opportunities, access to health care, public transportation and even air quality.

Taking Caño Martín Peña Community Land Trust as an instance, which works to protect marginalized lands and communities generated by urbanization and safeguard their environmental and social justice that is being threatened by capital and urban development. Community Land Trust adopts the transformative concept of collective land stewardship to prevent forced evictions and improve the neighbourhood with dilapidated infrastructure. Both community and individual are cared through the organizations composed of residents and professionals and take efforts to obtain legal recognition, attract financial and political supports. Consequently, residents defend their communities by having control, management and voice over their land and fight for the impartial social rights, against social inequality and uneven distribution of resources. Nevertheless, there are numerous lands facing similar challenges around the world, like the areas in Chinese context where the Jinwen Railway runs through are also the forgotten land and communities surrounding decommissioned infrastructure. With original infrastructures, spontaneous agriculture, and illegal settlements for the margins of the society, this silent land beneath abandoned trainline, which was once the driving force for the local economy, is a habitat for rail track workers, migrants, displaced populations, and homeless people. Whereas, these two areas both with infrastructure have different CLT attempts due to different contexts.

2. Caring Informal Lands and Communities

2.1. Care in the City

Care implied the link between needs and abilities, and reacts to the hazards encountered and the degree of adaptability to the situation. Residents and communities will be exposed to precarity and vulnerabilities when the ability to meet these needs is lacking. The core of care therefore is to provide and enhance the ability to deal with risks and impairments [3]. However, due to the impact of social and capital factors, the provision of care tends to be more inclined to those with power, while informal places are frequently excluded from order and care. In fact, care has generally been of little concern to people in positions of power since the provision of care in human society has always proceeded by the creation of strict hierarchies like castes and classes, so people at the very top of the pyramid could effortlessly get the services of others [4]. Whereas, humans, the environment and the world actually form a complex, interdependent web of life support, so that all groups should practise care as a natural and inevitable behaviour regardless of hierarchies, race and religion, since it is essential to a sustainable and thriving human civilization. Many feminist activists and academics, including Maria Rosa Dalla Costa and Silvia Federici have also pointed out caring for other living beings and our environment creates the material basis for life, maintains relationships and creates subjectivity [4]. Informal areas, which are unregulated and invisible, are frequently more prone to risk than ordered

ones, and are susceptible to precarity and vulnerabilities because of marginalised geographic territories, urbanisation and capitalist plunder, and marginalised people who have been voiceless. Therefore, in order to take better care of these communities, capacity need be strengthened to cope with circumstance through returning the legality, management, and speech rights to this land.

2.2. Community Land Trust Model

The CLT is a model of collective land ownership. Although individuals own physical objects on the land, the land itself is held in trust by CLT, which is a not-for-profit entity with local governance. The cost of land is not included inhouse prices making housing to continue to be cheap for locals and CLT's democratic decision-making processes also ensures that development of this land belongs to community [5]. This model offers a solution and system for individuals, organizations, and governments to care informal and unregulated areas. Then when it comes to informal settlements, people who live here are always exposed to environmental threats, social vulnerability factors including gender discrimination and low income, as well as lack of the supports from local governments. Even worse, many governments still view informal settlements as an exception from the formal order, and informality is considered as "the unregulated, uncontrolled, messy and inefficient settlement and use of land" and "positioned as fundamentally different from the ordered, regulated, efficient notions of planned land use and settlement". In order to resist such injustice, care from individuals, groups, and governments, including material and financial supports, construction, and spiritual structure, is crucial for such unmanaged, chaotic, and ineffective settlements. It's not enough to engage only one groups, in order to build resilience for most informal settlements and communities, residents, community organizations and local governments need to cooperate through "upgrading" [6].

3. Care in Caño Martín Peña Community

Caño Martin Peña informal settlements are located at San Juan, Puerto Rico, and their residents and community-based organization manage the permanence and socioeconomic development of the eight "informal" communities, which have a history of poverty, hazardous environmental and living conditions, marginalisation, and social invisibility. Meanwhile, pollutions including debris, sediment, and organic waste also be produced in this area, and the lack of adequate sewer and storm water systems has led to flooding, exposing 27,000 residents to polluted waters and sediments [7]. To solve the pollution, maintain sustainable lands and particularly secure land tenure, Caño Martin Peña Community adopts agencies including ENLACE: a public entity created in 2004, Group of Eight Communities (G8): a non-profit organization that brings together community leaders from the eight communities surrounding the channel, and CLT which is a private, non-profit organization created to manage the land. According to Skobba and Carswell (2014), CLTs provide not just pre-purchase, but post-purchase support, allowing tenants and homeowners to recover from financial setbacks, like health issues and divorces [8]. Through various social processes of mutual assistance and community development, CLT provides care for individual, land and community (Figure 1). Then these three parts work together towards to restore the degraded channel and promote community resiliency while residents have a voice and a vote and decisional power over what happens on their land.

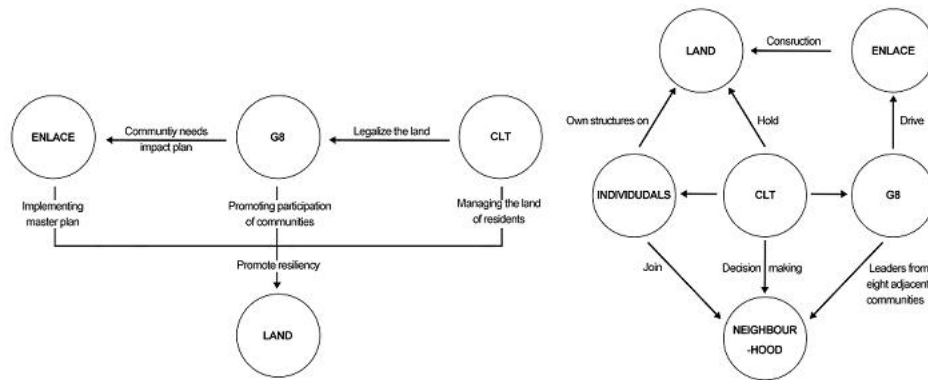


Figure 1. Relations between land, ENLACE, G8, CLT and individuals in Caño Martín Peña community.

In order to solve the pollution, maintain sustainable environment and land tenure, individuals, organizations and governments are all involved in caring this land through the concept of collective land stewardship, and form an interdependent web containing material, political and economic supports, construction, management and individual's participation and responsibility. Residents that actively advocate for the interests of the community, capable community organizations and public government departments public government agencies prepared to collaborate are the three main factors for the community to be cared for. The local government provides sufficient financial support, seeks a variety of cooperation and funding methods, and negotiates operational plans with various stakeholders to ensure the development of the community, while community organizations strive for more benefits for marginalized residents, and protect the interests of all community residents. At the same time, CLT legalizes this land so that residents' houses are neither taken over by other capital nor disturbed by developers, and makes housing permanently affordable, maintaining the normal life of the locals and providing care for more low-income marginalized groups (Figure 2). Accordingly, vulnerable groups whose interests are often neglected by policy are given expanded participation rights and influence in this system, and can actively participate in urban governance.

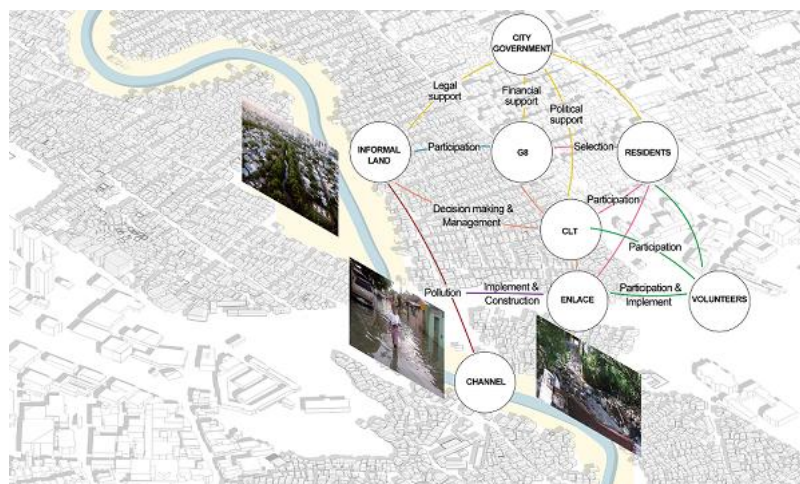


Figure 2. Relations between land, organizations and individuals in Caño Martín Peña community.

Care involves 'negotiating interdependence and constraint in place, choosing, privileging and taking responsibility, enacting an ethos'. The goal of these ethical actions is to protect and improve the complex life-sustaining webs within which we are all entangle [9]. The care inside the organizations of Caño Martín Peña is

represented in two ways: first, insisting on people renting space and oppose profit-driven urban development; second, preserving the culture of local communities derived from race and history. As far as Caño Martín Peña Community is concerned, the slums in this area have developed their own distinct impoverished culture, which has led to the replication of poverty. Caring in this context is identifying this invisible community culture instead of judging it negatively or even as prejudice.

4. Discussion Care in the Chinese Context

In the Chinese context, the land system is the LURs system, literally the “paid transfer of land-use rights” (tudi youchang zhuanran), was made official by an amendment to the Constitution of the People’s Republic of China in 1988 [10]. With this system, ownership of the land is divided from rights to its use. Therefore, as representatives of the country, local governments are actual landowners and market participator, which exacerbates local financial corruption and makes it difficult for citizens who have lost their land to get the care and compensation in many circumstances. Furthermore, a large number of marginalized suburban spaces have been transformed into new urban areas in the process of urbanization (Figure 3).

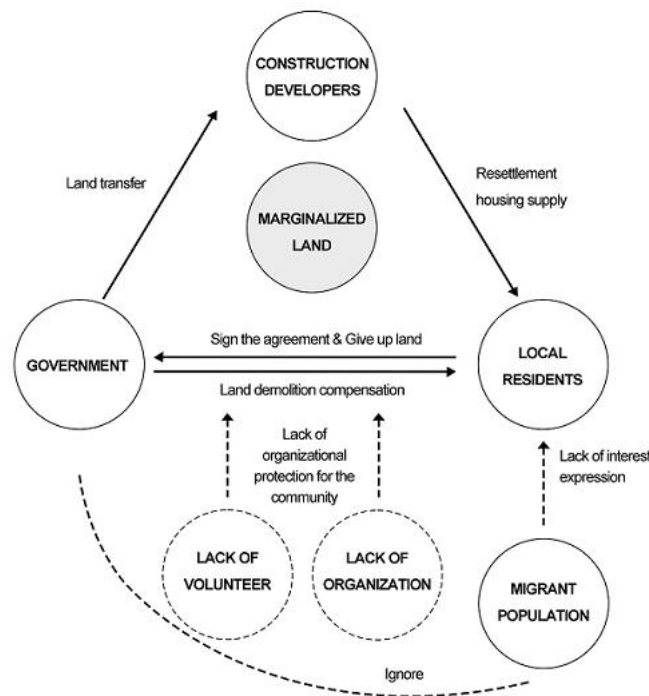


Figure 3. Relations between land, government, developer and individuals in Chinese urban development.

Due to the inability to express the public opinion in the lower-class communities and the dual influence of power and capital, this top-down urban renewal emphasizes the exchange value of urban space and disregards the original use value of urban space [11]. Due to some improper policies, landless residents in the suburbs are deprived of their original space rights and unable to integrate into urban space. These impoverished groups including urban poor populations, migrant workers and their children are marginalized and concentrated in the suburbs to form informal settlements just like space around Jinwen Railway, which is the first trainline in Wenzhou city, China, and was once the most important driving force for local economy and urban development. The forgotten land and communities with

decommissioned infrastructures, spontaneous agriculture, and illegal settlements for the margins of the society is a habitat for rail track workers, migrants, displaced populations, and homeless people (Figure 4). Public care and access to resources in a fair way are not achievable for them, and they lack the capacity to interact and appeal to their own interests while are unaware of their living rights, which exacerbates their poverty and marginalisation. Residents here are excluded from local government's supports and some social relationships and accompanying social inequality such as environmental risks, low-income, employment opportunities, public services, and social exclusion also occur in this messy and unregulated settlement, separating from the ordered, planned and formal land use and settlement.



Figure 4. Jinwen trainline land in China with original infrastructures, spontaneous agriculture, and illegal settlements.

The renewal of urban space should be formed under the combined effects of the mutual constraints of the government, market and society, and the so-called spatial justice should seek the balance between different stakeholders and the balance between different value orientations [12]. However, it is challenging for local communities in China to against power and capital, hence the formation and legalization of effective expression, acceptance and feedback mechanisms of citizen rights, and the development of NGO organizations become the essential elements of urban care. According to the case study's research, there are three ways to provide care for residents living in Chinses informal settlements. First, creating a community land trust to foster collaboration between government and community organizations, provide local representatives negotiating power, and safeguard the rights and interests of marginalised groups in urban development. Second, examining ways that social capital and community groups engage together to run communal assets, boosting local revenue and assuring the autonomous community development. Lastly, allowing volunteers with professional knowledge and abilities to join the community work to encourage marginalized and vulnerable people who lack access to information and voices to engage in urban development, and enhance the voice of the community. Under the new model, informal settlement neighbours are cared during the reconstruction and urban process with the help of community organisations and the regulations established by the government.

5. Conclusions

Care is crucial for environmental and social justice of lands and communities, particularly the forgotten and invisible areas, and plays a significant role in securing the land rights for these settlements and preserving social sustainability. Residents lose control over communal space as a result of the bureaucratic-led space production process, and vulnerable groups are gradually marginalized, making care more vital in informal situations. The informal lands around shared infrastructures need care

through the strategy of collective land stewardship just like Caño Martín Peña Community Land Trust. It takes efforts to protect marginalized lands and communities generated by urbanization, safeguard their environmental and social justice that is being threatened by capital and urban development, prevent forced evictions and improve the neighbourhood with dilapidated infrastructure.

Nevertheless, the areas in Chinese context where the Jinwen Railway runs through are also the forgotten land and communities surrounding decommissioned infrastructure. In order to resist such injustice, learning from Caño Martín Peña Community Land Trust, care from individuals, groups, and governments, including material and financial supports, construction, and spiritual structure, is crucial for such unmanaged, chaotic, and ineffective settlements. This model could be adopted to deal with this trainline land with original infrastructures, spontaneous agriculture, and illegal settlements for the margins of the society.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

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