Conflicts of Interest and Change in Original Intent: A Case Study of Vacant and Abandoned Homes Repurposed as Community Gardens in a Shrinking City, Daegu, South Korea

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Abstract: As part of an urban policy designed to revive South Korea's shrinking cities, vacant residential structures are being demolished and the resulting empty plots transformed into public spaces. This study discursively examines this process, its stakeholders, and the sources of conflict among them in the neighborhood of Daebong 2 in Daegu, South Korea. Additionally, solutions for maintaining public interest are explored. Employees and members of relevant municipal authorities and non-profit organizations (NPOs), as well as town residents, were selected through purposive sampling for interviews. The data were then analyzed via open coding. The results reveal conflict between users and non-users in terms of the possession of public goods, as well as conflict between project executives in the creation process. We also found that spatial and policy characteristics are a particular source of conflict in dense, historic residential areas. To overcome problems caused by rivalry and discord, the following actions are required: a change in perspective among policy practitioners; a governance structure that consists of a public/private/community partnership; consensus among community members, and; equitable welfare through programs based on inclusivity and public interest.

Keywords: declining cities; neighborhood regeneration; governance; public goods; temporary transformation into public land; urban policy; green welfare; discursive examination

1. Introduction

Around the globe, many cities are experiencing declines in population. In the 50 years prior to 2007, the populations of over 370 cities dropped significantly, and this decrease is projected to continue [1,2]. The declines of cities and declining populations are especially prominent in cities that developed during the industrial age, such as Detroit and Youngstown in the United States; and Leipzig, Germany [3–7].

Various Korean cities have experienced such declines in population, which has further intensified other societal changes, such as economic recession and low birth rates [7]. Consequently, the number of abandoned and aging properties has increased, which is the clearest physical sign of urban decline [8,9]. Houses that are vacant for extended periods often become breeding grounds for crime [10,11]. Trash and debris can mar their appearance, create odors and fire hazards, and increase the risk of collapse [12]. Subsequently, property values fall [13], and other physical, social, and economic problems arise.

Many studies and policies have addressed the issue of vacant and abandoned homes. For example, the city of Leipzig, Germany, has long demolished properties so that the resulting open spaces can be temporarily converted into public land [14,15].

To date, related studies have focused on the causes of vacant houses [16], utilization plans [16,17], and the effects of vacant houses after demolition [15–18]. While several case studies exist on this topic, there are specific areas that need further attention. An and Park's [17] study was limited to international cases and thus fell short of theorizing and empirically verifying declining Korean cities. Ha et al. [16], moreover, did not go beyond explaining the process of establishing a community garden and fell short of exploring various shareholder positions that emerged along the way. Kim and Lee's [18] research was much needed since it was one of the few studies to focus on a community garden's influence on non-participating members. In contrast to Rall and Haase [15], who mostly focused on assessing the effects of public space, the present study addresses the dynamics between shareholders that emerged during the creation of a public space.

The space created by demolishing vacant residences can reduce the economic and security costs of vacant properties and prevent an area's decline [19]. Furthermore, an area's potential can be discovered through such temporary small-scale developments, contributing to sustainable urban restoration in the future [20]. However, from a different perspective, it is contradictory to consider programs such as vegetable gardens as a type of public good since they are only utilized by a select number of citizens. Moreover, areas procured through the demolition of vacant houses are developed and opened to the public on the condition that certain individuals (e.g., the owner(s) of the vacant residences) receive benefits. Therefore, interest surrounding public goods has become even more pronounced.

Conflicts in a region increase social costs by disrupting local communities and causing policy delays [21,22]. Moreover, disputes involving conflicting values are not easy to mediate and resolve, and they can last for long periods [23]. To successfully revive declining cities, building trust among stakeholders is critically important; to this end, it is necessary to understand the factors involved in the conflicts [24–26].

Given these circumstances, what types of conflict arise in the use of public spaces after vacant residences have been demolished? For what reasons do those conflicts occur? To answer those questions, this study examined vegetable gardens developed through the Daegu Vacant Houses Management Program. Using this approach, the study aimed to identify the sources of conflict between stakeholders intervening in the city's revitalization. Such research can serve to fill gaps in previous studies, such as the perceptions of various stakeholders and the process of dismissal and vacancy utilization. The case study examined here can also provide baseline data for creating sustainable policies and city spaces.

The city of Daegu, South Korea, has experienced steady decline since the mid-1990s [9]. According to survey results, 105 (75.5%) out of a total of 139 districts have been experiencing decline [27]. The city's old districts, including the central, southern, and eastern sections, are plagued by numerous empty houses. Fires and incidents of sexual violence in vacant houses over the past few years have prompted countermeasures. To this end, to induce the demolition of such houses, property tax exemption and subsidized demolition costs have been provided to vacant residence owners since 2013. In return, the vacated areas must be temporarily opened to the public for at least three years after demolition. These areas are developed into facilities such as vegetable gardens, parking spaces, sports facilities, and small parks [28]. According to the data provided by officials of Daegu city hall, 141 spaces had been created by 2015, including 47 vegetable gardens (33%), 67 parking spaces (47%), 11 sports facilities (8%), 12 small parks (9%), and four flower beds (3%).

This study specifically focuses on the paradox of a community garden as a public good, the benefits of which only reach a certain group of community members. Of the 47 vegetable gardens identified as having been created between 2013 and 2015, many are quite small and located in difficult-to-access areas, which results in low utilization rates. For this study, those in declining low-rise residential complexes were visited for usage surveys and preliminary interviews. In contrast, the selected sites

(Figure 1) were relatively large in size and conveniently located by the roadside, which contributed to their robust utilization by community members. Also, the sites were introduced to the media [29] as success cases. However, the preliminary interviews revealed contention surrounding the use of gardens. The results further revealed contention between users and non-users in terms of the possession of public goods, as well as conflict between project executives in the creation process.

Figure 1. (**a**) Site A before vacant house was demolished (source: Daegu city hall); (**b**) Site A after vacant house was demolished (photo: J. Lee, 2 April 2016); (**c**) Site B before vacant house was demolished (photo: Oasis Plan); (**d**) Site B after vacant house was demolished (photo: J. Lee, 23 May 2016).

2. Materials and Methods

The purpose of this study was to understand the phenomenon of the private occupation of public resources and its conflict factors. Therefore, a case study method was adopted by selecting certain cases that could reveal such characteristics though surveys. Case studies are useful for answering "how" and "why" when researchers cannot control circumstances or when relevant phenomena unfold in the present [30]. This approach offers detailed descriptions of truths, phenomena, or social units [31] so that a clear understanding of the situation can be ascertained [32].

Data were sourced from the Daegu city hall website, newspapers, and other publications from relevant agencies, as well as from interviews conducted between March and August 2016 during seven site visits. Since shareholders in the creation and use of the new public spaces were needed for interviews, the initial pool of interviewees was recruited via purposive sampling. Thus, the sampling target consisted of relevant public workers, non-profit members, and community members (garden users and non-users). For the administration, interviews were conducted with relevant employees, and for non-profit organizations, interviewees included people who led the project. For residents, interviews were divided into users and non-users, and when "theoretical saturation" [33] was achieved in the data collection with no further new data to be collected, collection was stopped. By this means,

a total of 18 individuals were selected for in-depth interviews (12 community members, four public workers, and two non-profit organization (NPO) members). Ultimately, excluding poor interviews, 12 of these individuals (seven community members, three public workers, and two NPO members), whose interviews were judged to provide qualitative abundance, were selected for the analysis.

Managers of city hall, the district hall, and the community service center associated with the project were recruited via e-mail or phone numbers found online. For members of private organizations, media reports and publications associated with the project were reviewed and relevant individuals recruited via social networking services. Since no entity oversaw community garden users, the researchers waited near the community gardens and recruited community members who were tending their plots. Non-users were recruited on the sites or via snowball sampling from among community members. To build rapport with the community, the researchers met with community members during every site visit. Interviews were typically held at community gardens or at the community pavilion for the convenience and comfort of interviewees, unless otherwise requested, in which case interviews were held at community members' homes. Public workers were interviewed at their places of employment, and the members of non-profits were interviewed at their current offices.

Upon obtaining the participant's consent, all data were recorded and transcribed. To keep sight of the study's aim but avoid steering it in a certain direction, an open and semi-structured interview questionnaire was prepared, which allowed for clear insight into the participants' opinions and emotions. The interviews were designed to grasp the overall process of the project, as well as the perceptions of stakeholders in public goods. To accomplish this, we asked questions about the process before, during, and after the project. In the case of residents, we inquired about the situation before the project's creation, the composition process, and its use after creation. Meanwhile, in the case of administrative authorities and non-profit members, we asked about the occasion and purpose of the project, the creation process, and management after creation (see Appendix B). The interviews, though based on a questionnaire, were conducted flexibly in a way that was responsive to the participants' (Tables 1–3) answers. For the literature data, newsletters and other publications made available by relevant agencies and organizations were used.

Table 1. Demographic data of users and non-users.

Current Usage Status	No./Code	Gender	Age Group	Location Residence	Years of Residence	Years of Use
Users	RU1	F	mid-60s	nearby	25	3
	RU2	F	late 20s	other neighborhood	3	3
	RU3	M	late 60s	nearby	30	3
	RU4	M	mid-70s	nearby	40	3
Non-users	RN1	F	early 70s	nearby	30	0
	RN2	F	early 70s	nearby	40	Less than 1
	RN3	F	mid-70s	nearby	30	0

Table 2. Demographic data of government workers.

Category	No./Code	Gender	Age Group	Educational Attainment	Years of Employment in Relevant Dept.
Government workers	O1	M	late 50s	College degree	Over 10
	O2	M	early 50s	College degree	5
	O3	M	mid-40s	College degree	1

Table 3. Demographic data of non-profit members.

Category	No./Code	Gender	Age Group	Educational Level	Years of Working, Employment, or Membership
Non-profit members	N1	M	mi-40s	College degree	8
	N2	M	early 30s	College degree	4

For the reliability of the study, data were analyzed when two or more interviewees gave a consistent response. To increase the reliability of the interpretation, the contents of the literature and the interviews were verified against each other, and the two researchers analyzed the data and used data that reached the same conclusion.

The collected data were processed (see Appendix A) using the open coding method of the grounded theory approach to analytic induction, which was introduced by Glaser and Strauss [33] and frequently adopted by Werner and Schoepfle [34]. All interview responses were transcribed and processed via segmenting, initial coding, and deep code generation. During the segmenting process, a researcher marked the parts that captured the essence of the interviewees' main concerns. During the subsequent initial coding process, the data processed from the previous stage were thoroughly reviewed to further deduce important meanings. Recurring details, meanings, and themes were then assigned codes. Next, related codes were repeatedly compared with one another to discover their hierarchies, connections, and similarities, from which metaphorical themes could be extracted that could turn one-dimensional data into concepts. These processes revealed causal relationships between community members' perceptions and the series of events that transpired over the course of repurposing vacant lots into community gardens. Based on this discovery, the dynamics between stakeholders were examined over two phases: while creating community gardens and after completing them.

3. Results

3.1. Creating Community Gardens: Conflicts between Private and Public Parties

3.1.1. Beginning to Create a Community Garden Together

The Daegu Community Garden Model was launched in 2013 by a non-public organization, a university student club, and public authorities working in tandem. N1, a research center employee, had been asked about urban agriculture consultation by the district office in 2011. N1 suggested a community garden and cited examples from Chicago. Later, a collaborative model consisting of the district office, the research center, and the university was established to begin creating community gardens. With the help of a K university student club, N1 surveyed the number of vacant and abandoned local houses and began persuading owners to cooperate in service of the project in 2012, which resulted in two experimental community gardens (Figures 2 and 3). N2, who was a K university agriculture student at the time, participated in the community garden project through an acquaintance's connection to N1.

N1 expressed concern that the demolition subsidy was KRW 30 million since it is difficult to sustain the project with a low subsidy. Therefore, N1 thought of measures to reduce costs and promote "sustainability". Rather than developing after completely vacating the area, the vegetable garden was formed through partial reorganization. In addition, N1 and N2 also planned to promote education for environmentally friendly agriculture. They hoped the business would start in urban agriculture, but over time it would be content to solve regional revitalization and regional problems.

Figure 2. The community negotiation process (photo: Regional Revitalization Lab Martello).

Figure 3. Creating a community garden (photo: Regional Revitalization Lab Martello).

3.1.2. Emerging Discord: "Unequal Relationship", "Exclusivity", and "Withdrawal"

Around the time the two community gardens began to take shape, people began complaining about the community service center, claiming it was trying to establish a hierarchical relationship. Staff members of the community center gave the students a lot of chores, similar to those given to hired employees. These complaints intensified after the community service center requested a separate budget and then unbeknownst to the others began building "a community garden of their own". Some of the results from the interviews are as follows. Community gardens started to become separated, and competition increased. In addition, people became sensitive to the performance of the project after it was publicly introduced by the media.

> Now there is "my" garden and "your" garden in that small town, which creates a rivalry. Why? It must be due to pressure to perform. They took the credit for what we created, too. What's the point of all this? The garden belongs to the town community. (N1)

> Whenever a newspaper reporter or other such people visited to interview us . . . the community service center complained that we were making it sound like we did it [created the garden] by ourselves when, according to them, they did it. And then later we found out in newspaper articles that they had taken credit for our garden as well. (N2)

> In the end, the NPO to which N1 and N2 belonged withdrew from the project, convinced it was being "excluded". Currently, the project is being implemented as a residential urban beautification initiative, led by the municipal authority and funded by the city and the county.

> The presence of abandoned and dilapidated houses makes the neighbors very uncomfortable. They stink in the summer, which poses a public health concern. Besides, they are such an eyesore. (O1)

> Abandoned and dilapidated houses attract crime, so the primary goal is to demolish those structures. (O2)

> There are so many vacant and abandoned properties with dead tree leaves in and around them, which poses a fire hazard. And there's the matter of potential collapse. (O3)

N1 said the project was meaningful and sustainable at first because it was a real "collaboration" between the government and private citizens. However, with disruption in the collaborative relationship, the project became what N2 called a "weekend farm". The public authority had not taken any specific measures regarding how the newly vacant lots should be utilized after razing vacant and abandoned houses, nor did it engage in associated efforts. Speaking with O1, O2, and O3, it became clear that the community garden project changed from what N1 and N2 "dreamed" of to a mere "residential environment improvement" project that aimed to upgrade urban aesthetics for the benefit of the declining town.

3.2. Community Garden Use: Conflict between Residents

3.2.1. Community Gardens for Personal, Economic, and Social Benefits

To learn how the spaces were seen by users and non-users, interviews were conducted with community members. Community garden users perceived the space as having personal meaning and value. For instance, RU4 would visit the garden at night and during the day to water her crops, which gave her a sense of achievement. Plus, taking walks to and from the garden became a kind of hobby. RU2, a kindergarten teacher, felt a sense of achievement while running a school gardening program where students enjoyed planting and harvesting crops each season. The interviews depicted a community garden used for education and personal hobbies, which indicated that participation in the community garden was associated with self-actualization.

In addition, RU1 depicted the community garden as a place that provided food and connection, indicating that participation had economic and social value. However, these values are more closely associated with personal satisfaction and benefits.

> I garden, and then I bring some of my harvest to my son's . . . and I also share it with my friends. I just pull it out and bring it to my friends [laughs]. Look at the lettuce. It is different from what you buy at the store. You have no idea how popular it is. . . . Everyone wants some. (RU1)

3.2.2. Community Gardens as a Source of Pain, Suffering, and Welfare Frustration for Non-Users

Non-users were upset and disgruntled because some "selfish" community members had summoned their personal connections to acquire multiple plots during the allotment process. This damaged trust among the community members. The situation worsened when those who had been allotted multiple plots neglected them, causing others to "simmer with anger".

> It's no use studying stuff like this. It just sours relationships between neighbors. All this bickering and arguing . . . for what? In the end, only those who eat, get to eat, and those who don't, don't get to eat. It's not even done together. Of course it makes you upset, if you are not picked to participate. (RN1)

> Some have up to five plots. You pick and see, and I pick and see. Somehow, they all pick. Even people who don't live here sneak in to pick. Like this. It's not right, correct? People shouldn't do that, right? They all put dibs on it in the beginning, and then. . . . It makes me angry. (RN3)

The hardship stemming from the community garden sometimes led to estranged family relationships and discontent with national welfare policies. RN2 was upset because RN2's grandson would not visit for fear of the insects propagated by the community garden. RN3 and RN1 expressed dissatisfaction toward the garden and the welfare policy, while focusing on the fact that it was a public good funded by taxpayers.

My grandson refuses to come visit his grandma because of the mosquitoes. He's ten. I ask him to come for a visit, and he won't, saying that there are too many mosquitoes in my place. Those who haven't experienced it don't understand. (RN2)

Because it would cost money, the district office demolished it for free and told the neighborhood to utilize it. ... Those who didn't give permission received all sorts of crap. With what money did the district office do it? It just drives up our health insurance. Why don't they help out those in need instead? Several tens of millions of won got poured into that. (RN3)

There's no welfare that doesn't require tax money. The current state of the nation. ... Young people are struggling to stay alive because of taxes. ... Do they have money to burn? [profanity]. There's no money to spend like this. ... Tell them to find jobs for our unemployed youths instead. They are foaming at the mouth to score some easy points for the next election season. (RN1)

Saito [35] mentions the concept of "openness" as a prerequisite condition for "publicness". Here, publicness means "inclusive of everyone" as well as "fair and just". In this sense, the unfair garden plot allotment process and the exclusivity of its benefits (limited only to those who actively participated in gardening) undermined the publicness of the residential environment improvement project, in terms of both procedures and outcomes.

3.2.3. The Meaning of "Trees" and "Fences": A Place of Rivalry and Exclusivity

RN2 was eager to express her frustration to the researcher. According to her, despite the insect-related "stress" caused by inadequate garden care, she "keeps her mouth shut" about others since they were all neighbors. She then talked about two trees she had planted (Figure 4).

Dude, this place is teeming with flies and mosquitos. They are watered. Sprayed. We have been living with the doors closed for two years now. Look at the water there. Look at the container (Figure 5). You see it's swarming with bugs. But I can't bring myself to talk to them about it. Because we are neighbors, I just keep quiet. And it turns out that from here to over there is my property. I wasn't aware of it before the demolition [of the abandoned house]. ... So my son told me to plant some trees. ... Plant some trees because we will get it [our property] back soon. (RN2)

(a)

Figure 4. *Cont.*

(**b**)

Figure 4. Pictures of trees and fences on the site (photo: J. Lee, 2 April 2016); (**a**) fences installed by users of the community garden; (**b**) trees planted by non-user (RN2). Translation of the text in the image of Figure 4a: "You may have pulled off stealing, but there are 22 eyes watching you now".

Figure 5. Unmanaged watering can (photo: J. Lee, 2 April 2016).

RN2 learned from her housing deed that part of her property, which she had been unaware of, had been lumped in with the project during the demolition. However, because there was nothing she could do about her property already having been used, she planted the trees to mark her territory (Figure 4). In other words, she used them to signal her presence. Furthermore, attached to the metal gate of the community garden were handmade signs that read "Let's live an honest life" (the backside of the metal gate) and "You may have pulled off stealing, but there are 22 eyes watching you now" (the front side of the metal gate) (Figure 4a).

> It was not stealing. . . . So what if the neighborhood tore off and ate some vegetables? All the ladies do it at times as they hang out here and talk. Isn't it understandable? I say people are so devoid of warmth. Look at the metal fencing. . . . Hell is raised if stuff goes missing. (RN2)

RN2, who had been allotted a plot in the first year following the demolition, was disgruntled that despite her property having been incorporated into the garden unbeknownst to her, she had been designated a plot elsewhere. Her frustration intensified due to the different views held by her and other gardeners. In other words, she thought that sharing was okay when others did not. She went on to suffer from flies and the mosquitoes until she finally stopped participating. She is now counting the days until the program ends.

In the target area, fences were installed by users to block the entry of non-users. Since there were no regulations regarding the management of vegetable gardens, individuals attempted to physically blockade what they perceive as their private vegetable gardens. Such marking of territory indicates that although the residential environment improvement project had been promoted as a public good, it assumed the characteristics of a private good with rivalry and exclusivity. In a broad sense, satisfying either the non-rivalry or non-excludability condition makes goods public [36]. Since space was limited, the community gardens had an element of rivalry. They also imposed an element of excludability for community members who did not participate in gardening, resulting in the inadvertent privatization of a public good.

4. Discussion

According to the survey results, conflicts surrounding public goods existed among stakeholders, and as a result, public goods came to assume the characteristics of a competitive and exclusive space. This suggests the tragic ending of the commons as suggested by Hardin [37], who argued that freedom in the commons brings devastation to everyone, and external force—the "Leviathan" [38]—becomes inevitable. However, while identifying individualism as the major cause of the tragedy of the commons, Hardin does not pay attention to the cause that triggers individualism. Meanwhile, in response to Hardin, there have been studies on "the comedy of the commons" [39] and the continuity of common resources through autonomous operation [40,41]. Aside from such investigations of the factors that keep the commons healthy, further research is needed on conflicts related to the commons and their adverse effects. Such work can help to identify measures that will ultimately achieve the sustainable use of public goods.

In the present study, conflicts between residents began with the process of distributing vegetable gardens. Meanwhile, the illegal acquisition of vegetable gardens by a small number of residents and the random distribution of land caused complaints among neighbors. Moreover, the vegetable gardens that were originally allocated were occupied for almost three years, and vegetable gardens no longer in use were left unattended without changing users. This process of community garden establishment and inadequate operation contributed to conflicts among residents.

Additionally, the spatial characteristics of vacated areas were shown to be a factor in conflict. Since such areas did not have access to a water supply, individuals had to procure the water required to manage the vegetable gardens. The excess water was then mismanaged and left in buckets, causing insects to gather. Moreover, the dense residential environments also make it easier for nearby residents to be exposed to insects. The community service center should invest more effort in consistent management based on an understanding of such special characteristics. Given the high density of the residential environment, unexpected parcels of land were discovered during the demolition of vacant houses, leading to complaints when people marked their territory using methods such as "planting trees". However, the implicit silence that was adopted to protect relationships with longtime neighbors could not resolve the complaints. Since most residents had lived in the neighborhood for a long time, they were reluctant to directly express their complaints. As a result, spatial factors and social characteristics appeared as various factors causing conflict. Therefore, there needs to be a medium to invigorate communication among residents.

The Vacant Houses Management Program stipulates that vacated areas be opened to the public for at least three years. After three years, this term is subject to change according to the landowner's intentions. As such, the uncertainty arising from the unspecified expiration date of this term became a source of dubious hope and caused non-users to stifle their discontent.

In the process of developing community gardens, the implementing body was changed due to conflicts between the private organization and the public institution. As the implementing body changed from private to public, it became a top-down policy centered on administrative authority. This also changed the nature of the project. As the private organization raised complaints about the authoritarian stance of the administrative authority, an asymmetrical relationship formed. This relationship damaged the connections between groups, even though the project was mutually beneficial, and developed into mutual suspicion and cynicism until the partnership was eventually dissolved [42]. The project then progressed as a "residential environment improvement project", with limited public aid for the demolition of vacant or deserted houses and the development of vacated areas. This led to a lack of supervision of the vacated areas and became the main factor instilling a sense of competition and exclusion among residents.

To restore the publicness and function of such areas as communal spaces, there is a need for continuous involvement and interest via the administration and management of programs. To this end, it is crucial that ongoing projects for aesthetic improvements be acknowledged as part of the town restoration project, and that the process for such projects is centered on local residents. It is also essential

that the governance involves private and public parties as well as residents to ensure sustainable and effective administration. In addition, because gardening requires continuous work, the creation of community gardens alone does not guarantee the continued existence of such gardens [43,44]. Thus, it is necessary to form governance consisting of a third party along with the community involved in the maintenance and management of the shared spaces [45].

The simple approach of the program, which used the spaces only as vegetable gardens, resulted in limited access. People who do not tend vegetable gardens essentially have limited access since no other facilities aside from vegetable gardens are currently available. If there are resting facilities, such as benches and pagodas, or spaces and facilities that allow for different activities, the users of vacated spaces could be diversified to include those not involved in vegetable gardens. Although an area becomes an exclusive space when ownership exists, various people can use the area if it is versatile and freely available. Areas made available by demolishing vacant houses are a product of public funding. The landowner and user, as well as neighboring residents, possess a sense of psychological ownership of such areas [46]. Such areas should not have the characteristic of being occupied by particular individuals. Thus, it is necessary to create a complex space that allows anyone to use it and stay, rather than one that is occupied by specific individuals.

5. Conclusions

This study examined sources of conflict between stakeholders involved in demolishing and reusing the vacant residences that emerge in shrinking cities and explored solutions for maintaining public interest. The results indicated that the competition that arises among residents during the use of vacated areas is related to the conflicts among implementers that appear during project development, as well as to the resulting changes in the nature of the project. Also contributing to conflict are the spatial characteristics of the vacated area, being located near elderly residences, and policy characteristics, such as the temporary transformation into public land.

This study showed that continuous management and administration are needed to maintain public interest. To this end, a change in perception, transitioning from an aesthetic improvement project to a city restoration project, is necessary, in addition to governance and cooperation efforts involving private and public parties as well as the community.

Many discussions have suggested that it is not plausible to have unconditional tragedy or comedy in the use and management of commons. Therefore, a careful approach is needed on a case-by-case basis; the present study can be considered one such case. This study has provided meaningful data on the process of dismissal and vacancy utilization, as well as the perceptions and attitudes of various stakeholders. Since multiple case studies are needed for the efficient implementation of projects, this study can serve to provide baseline data for creating sustainable projects and spaces. As abandoned houses become more abundant, similar policies will need to be discussed. In this sense, this study provides much needed suggestions. Future studies could perhaps examine vacant land use decision making on a larger scale (such as in an entire city) or in another country, which would reveal the effects of differing cultures.

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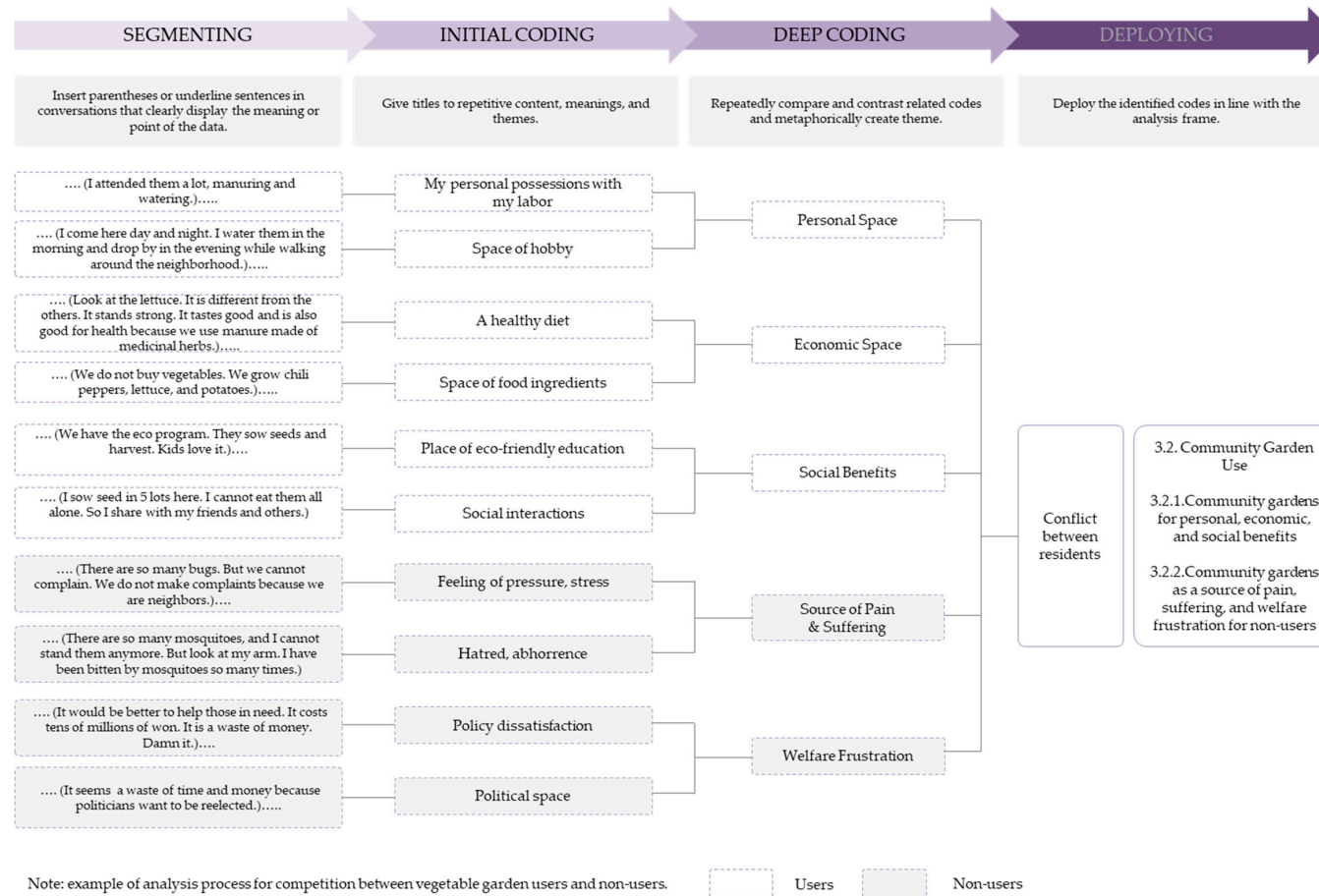
Appendix A

Figure A1. A portion of analysis process using open coding method of the grounded theory approach.

Appendix B

Interview questions

To community members:

Before the creation: What was this space like before, when it contained a vacant house?

Composition process: What was the plot allotment process like following demolition?

After the creation: How does one get to use the garden?

What are the pros and cons of the garden?

To government workers:

Motive and goal of the project: How did the project come to be launched?

What is the project's goal?

Process of creation: Did it incorporate the community members' opinions?

After the creation: How is the established garden managed?

To non-profit members:

Motive and goal of the project: How did the project come to be launched?

What is the project's goal?

Process of creation: What are the events that unfolded during the creation process?

After of creation: How did your level of involvement change after the garden was created?

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