Chapter 8: Giancarlo De Carlo's participatory design methods
Growth and flexibility in architectural organisms

This chapter examines the principles of Giancarlo De Carlo's design approach. It pays special attention to his critique of the modernist functionalist logic, which was based on a simplified understanding of users. De Carlo's participatory design approach was related to his intention to replace of the linear design process characterizing the modernist approaches with a non-hierarchical model. Such a non-hierarchical model was applied to the design of the Nuovo Villaggio Matteotti in Terni among other projects. A characteristic of the design approach applied in the case of the Nuovo Villaggio Matteotti is the attention paid to the role of inhabitants during the different phases of the design process.

This chapter also explores how De Carlo's "participatory design" criticized the functionalist approaches of pre-war modernist architects. It analyses De Carlo's theory and describes how it was made manifest in his architectural practice—particularly in the design for the Nuovo Villaggio Matteotti and the master plan for Urbino—in his teaching and exhibition activities, and in the manner his buildings were photographs and represented through drawings and sketches. The work of Giancarlo De Carlo and, especially, his design methods in the case of the Nuovo Villaggio Matteotti can help us reveal the myths of participatory design approaches within the framework of their endeavor to replace the representation of designers by a representation of users. At the core of this chapter is the intention to relate the potentials and limits of De Carlo's participatory design approach to more contemporary concepts such as "negotiated planning", "co-production", and "crossbenching". The chapter also aims to explore whether there is consistency between De Carlo's theory of participation and its application.

Giancarlo De Carlo believed that the failure of how functionalism was understood during the modernist era is related to the fact that it remained "too simple and unsophisticated compared with the complexity of reality". He was convinced that the task of contemporary architecture should be to prepare "a new environment for the new world" through the comprehension of "the world in its whole complexity" and the adaptation of architecture's scope to the "problems of the greater numbers, the larger scale, the widespread communication and participation"[1]. Two lectures that are pivotal for understanding De Carlo's conception of participation are a lecture he gave at Harvard University in 1967 and a lecture he delivered at the Royal Institution in London in 1978. The following statement, which was part of the lecture he gave at Harvard University in 1967, is of great importance for comprehending how he intended to reinvent the relationship between form and function: The so-called modern architecture—namely the rationalism of the twenties—stated that a dual and self-acting interrelation binds form and function: a function expresses itself through a peculiar form; a form must peculiarly express a function. For a long period, this dogma was very useful to clarify the field of reality and to dispel the clouds of architectural academicism[2].

In the same lecture, De Carlo identified two opposed approaches that characterized the architectural debates of the late sixties, which could be summarized in the schism between the modernist authoritarian patterns and the nonauthoritarian ones. He maintained that the latter, which corresponded to "a new world trying to grow"[3], could enhance the transformation of society and renders the notions of peace, tolerance, and intelligence central for the field of architecture. De Carlo also related the interest of the modernist architects in the notion of function to their endeavor to reject academicism. He claimed that their reductive comprehension of the relationship between form and function was the main reason for which their functionalist intentions were turned into a "dogma". As John McKean reminds us, Giancarlo De Carlo "linked architecture's International Style with repressive order, sensing that Modernism, in its efforts to legitimize itself and locate itself historically, had succumbed to rigid bureaucratization and become formalist and prescriptive of aesthetic codes"[4]. De Carlo, apart from the modernist architects, also criticized Peter Eisenman's design processes by arguing that they were "abstract manipulation[s]". In parallel, he maintained that meaning should not be defined before the design process given that it is dependent of how the users conceive of it. More specifically, De Carlo placed particular emphasis on the methods in which users can "alter the process in order to give it life as they see it"[5].

In order to situate De Carlo's participatory design approach within a broader context of architects and urban planners interested in participation during the same years that De Carlo was active, it would be useful to refer, apart from the International Laboratory of Architecture and Urban Design (ILAUD)[6] in Italy, to groups such as the Atelier de recherche et d'action urbaines (ARAU) in Belgium[7] and the Serviço Ambulatório de Apoio Local (SAAL) in Portugal[8]. This would help us to contextualize De Carlo's participatory design approach in relation to other advocates of this approach. SAAL's participatory process was based on the intention to promote affordable and quality housing in Portugal[9]. SAAL should be interpreted in conjunction with the Portuguese revolution of 25 April 1974. Design Methods Group, Christopher Alexander, and Henry Sanoff among others, were also particularly interested in introducing participation in their design methods[10].

Under the headers of "collaboration", "participatory design" and "co-production", participation is nowadays at the center of the debate on urban design. Architects and urban planners are developing new concepts, tools and roles to comply with these new participatory *modi operandi.* However, it seems that it is sometimes forgotten that the issue of participation has a longstanding history. Investigating the projects of ILAUD in Italy, the ARAU in Belgium, and the SAAL in Portugal, we can understand that participation in urban design practice can take many forms, from collective processes of design, to collaborative construction and common management. Comprehending the critical differences between these different approaches can help us to refine our theories and tools of urban design.

The participatory concern regarding the architectural and urban design processes has not only a long history in practice but also in urban design education. Various experimental initiatives with participation emerged in the domain of architectural pedagogy in the late sixties, often starting from student initiatives. Some important cases are those examined in "From Harlem to New Haven: The Emergence of the Advocacy Planning Movement in the late 1960s"[11]: The Architects' Resistance (TAR) – a group formed in 1968 by architecture students from Columbia University's Graduate School of Architecture, Planning and Preservation, MIT Department of Architecture, and Yale School of Architecture describing itself as "a communications network, a research group, and an action group ... concerned about the social responsibility of architects and the framework within which architecture is practiced"[12], as well as the National Organization of Minority Architecture Students (NOMAS). Many of these groups emerged within the context of the struggles for civil

rights and thus made a plea to have non-hegemonic or 'other' voices heard in the urban design process. These initiatives explored how new concepts, roles and tools for participation could become part of the education of the architect and urban designer.

8.1   From representation of designers to representation of users: Revisiting Giancarlo De Carlo's conception of participation

Participatory design, which is also often referred to, in the literature, as community design, aims to recognize and legitimize the authority of users in the design process. It is based on the intention to promote democracy, and to invent mechanisms able to provide the users with the opportunity to participate in all the stages of the design process. For Giancarlo De Carlo, "it was vital to reconnect with the inhabitants"[13]. In "An Architecture of Participation", De Carlo refers to the intensification of the "dichotomy between architecture and reality", and criticizes the modern movement in architecture for having simplified the "interpretations of human and social behavior". His following remark regarding the modernist architects is of great significance for understanding his critique of the attitude of the modernist architects: "they were concerned with man as if he were a strictly individual subject within a strictly functional viewpoint". In parallel, De Carlo criticized the "neutrality of techniques" and wished to take "architecture away from the architects and [...] [to give] it back to the people who use it". For instance, in his article entitled "An Architecture of Participation", he underlines that the mutation of the design process due to the adoption of participatory design models would have the following main consequences: "each phase of the operation becomes a phase of the design; the 'use' becomes a phase of the operation and, therefore, of the design; the different phases merge and the operation ceases to be linear, one-way, and self-sufficient."[14]

As John McKean has underscored, for De Carlo "[a]rchitecture requires that individuals and groups take responsibilities in the initiation processes, in the production processes, and in the inhabitation processes". McKean claims that "[w]here a programme contains inherent conflicts, it can be that De Carlo's design decisions – far from camouflaging or even reconciling these – expose and even dangerously engage them, offering foci for social behaviours to change". McKean raises the following question regarding De Carlo's participatory design approach: "Could a social determinism called "participation" replace the

architectural determinism of post-war Modernism, with its belief that clean, straight tall buildings would produce clear, straight tall citizens?[15].

In 1978, De Carlo delivered an Inaugural Thomas Cubitt Lecture at the Royal Institution in London entitled "Reflections of the Present State of Architecture". This lecture was focused on the relationship between architecture and morality or "deontology", to borrow his own expression. He highlighted that there was a necessity to found "a new relationship between morality and architecture" and to "invent a new type of client". He also remarked that participation breaks the hierarchy between the different stages of the design process, underscoring that "the moment of use is 'project'", because it involves changes suggested by critical evaluation". He paid particular attention to how "[t]he user [can become] [...] the real receiver of the operation, thus gaining the right to make his needs and values felt by competing in a dialectical confrontation will all the other actors at every stage of the process".

Giancarlo De Carlo shed light on the problematic nature of the "form follows function" dogma, maintaining that it is based on "pre-conceived schematisations of human behaviour". More specifically, he drew a distinction between two ways of understanding architecture: on the one hand, one based on the comprehension of architecture as "an autonomous activity which is self-defining by its own specialisation" and, on the other hand, one treating architecture "as a system of communication and expression that can be deciphered only if one knows the context in which the messages are emitted and received". In the same lecture, he underlined his preference for the second way of understanding architecture, and described his own conception of participatory design. He shed light on the mutation of the architect's role because of the replacement of "the idiocy of specialisation" by "the responsibility of competence", highlighting that this new role of the architects would be focused on the elaboration of design strategies that would permit the involvement of the users in the process of discerning the causes and effects accompanying the various decisions concerning the design strategies. Interestingly enough, he remarked regarding his conception of participatory design:

> The introduction of participation breaks this hierarchy between the operation's various stages and moments, and brings them all back to the same logic: the problematic logic of the "project". The programme the assignment of resources, and the choice of site become hypotheses that must be tested, and even be radically changed if they prove to have inappropriate causes or undesirable consequences.[16]

8.2   The Nuovo Villaggio Matteotti in Terni and the concept of participation

Analysing the design methods employed in the case of the Nuovo Villaggio Matteotti in Terni (1969–1974) can help us better understand De Carlo's conception of participation. For this project, which is one of the first cases of participatory design in Italy (Figure 8.1, Figure 8.2, Figure 8.3), De Carlo collaborated with a big interdisciplinary group of specialists, including engineer Vittorio Korach (1918–2014), sociologist Domenico De Masi[17], and architect and architectural historian Cesare De Seta (1941)[18]. At the time, Italian sociologist Fausto Colombo (b. 1955) and architect Valeria Fossati-Bellani (b. 1935) were employees of De Carlo's studio[19]. The project consisted of 15 typologies and 5 different housing units. The fact that Società Terni financed a part of the intervention[20] should be taken into account if we are trying to understand the tensions hidden behind the realization of this project. This company published the magazine *Terni*. In the tenth issue of this magazine that was published in September 1970, one can find photographs that show the different stages of the process that explain not only the ideas that lead to the project but most importantly the phases concerning the encounters with the future inhabitants.

Figure 8.1. Brochure for the exhibition was titled "For a new village Matteotti" ("Per un nuovo villaggio Matteotti") that took place at the Galleria Poliantea in Terni in late April 1970.

Credits: Fondo Giancarlo De Carlo, Archivio Progetti, Università Iuav di Venezia

The interdisciplinary team that worked on this project paid particular attention to the meetings with the steelworkers and their families who were seriously involved in the decision-making processes. The first stage of the process had to do with bringing together the 1800 future inhabitants of the Nuovo Villaggio Matteotti. The aim of this process was to show the inhabitants the housing units within different national contexts through an exhibition of various models. As De Carlo remarked "[o]ne of the main purposes of this exhibition was to divert the attention of the inhabitants from the models normally offered in the market and which conditioned the popular imagination"[21]. De Carlo wrote in a letter he sent to Cesare De Masi in December 1969:

> The purpose of the exposition of the material we are preparing is to give the future inhabitants of the neighbourhood a series of information on ways of living different from those they have known or experienced so far[22].

The materials displayed in this exhibition included architectural drawings and photographs (Figure 8.1). Mimmo Jodice was hired to take photographs of the various meetings with the future inhabitants, the exhibition, and the different phases of construction of the project[23]. The exhibition was titled "For a new village Matteotti" ("Per un nuovo villaggio Matteotti") and took place at the Galleria Poliantea in Terni in late April 1970. It was curated by Cesare De Seta. De Carlo suggested to De Seta to choose some projects among approximately thirty projects to include in the exhibition. The list that De Carlo gave to De Seta included Westminster Court in Roxbury; Massachusetts by Carl Koch and Associates; the renovation of a residential zone in Santa Monica, California by the firm De Mars and Reay, Pietro Belluschi, and Charles Eames; and Housing in Coulsdon, Surrey, London, UK by Team 4 (Su Brumwell, Wendy Cheesman, Norman Foster, and Richard Rogers), among others. Finally, the projects that were chosen to be displayed in the exhibition were the following four: a housing complex in Ham Common, London and Preston by James Stirling and James Gowan; the Siedlung Halen in Bern, Switzerland by Atelier 5; a housing complex in Kingsbury, London by Clifford Wearden and Associates and Clifford Wearden; and St. Francis Square Cooperative in San Francisco by Marquis and Stoller architects. Three years later, a second exhibition devoted to the Nuovo Villaggio Matteotti was held from 13 to 17 October 1973 at the Galleria Poliantea as well (Figure 8.2, Figure 8.3, Figure 8.4).

This exhibition aimed to help the future inhabitants to choose their housing units. The seventeenth issue of the magazine *Terni*, which was published in

September 1973 before the opening of the second exhibition, brought together the general plan of the complex made up of 800 housing units; an ensemble photographs of the natural models; and several tables concerning the automobile and pedestrian circulation, the greenery, and the system of services spread throughout the new district (Figure 8.5).

Figure 8.2. Photograph taken during the second exhibition held at the Galleria Poliantea in Terni from 13 October 1973 to 17 October 1973.

Credits: Fondo Giancarlo De Carlo, Archivio Progetti, Università Iuav di Venezia, foto/1/075

De Masi tried to explain the reasons behind the failure of the project of the Nuovo Villagio Matteotti, reminding us that this "initiative ended up being advantageous for five or six hundred people and very disadvantageous for 3500 workers". He also noted that what was built was "just a fragment of the original idea"[24]. More specifically, only 250 out of the 840 housing units were realized. What is enlightening regarding the process followed in the case of the Nuovo Villagio Matteotti is De Masi's article titled "Sociology and the new role

of users" published in *Casabella* in 1977. In this article, De Masi included a diagram that showed all the phases of the design process[25].

Figure 8.3. One of the phases of the participation of users in the definition of the Matteotti villaggio. Photograph taken during the second exhibition by Mimmo Jodice.


Credits: Photograph by Mimmo Jodice

De Carlo, in his essay titled "Architecture's public", which was originally published in Italian as "Il pubblico dell'architettura" in *Parametro* in 1970, noted that he saw participation as a process of transforming "architectural planning from the authoritarian act which it has been up to now, into a process"[26]. Noteworthy is the title of a section of this text: "Architecture is too important to be left to architects". He called for a metamorphosis concerning the relations of the architects with the inhabitants and insisted on the need to challenge the "the intrinsic aggressiveness of architecture and the forced passivity of the user must dissolve". He suggested the replacement of the users' passivity by what he calls "a condition of creative and decisional equivalence"[27]. De Carlo claimed that authoritarian architecture "begins with the premise that to resolve a problem it is necessary to reduce its variables to a minimum to make it constant and

therefore controllable"[28]. He juxtaposed authoritarian architecture with participatory architecture, which according to De Carlo, "calls into play as many variables as possible so that the result is multiple, open to change, rich in meanings that are accessible to everyone"[29]. De Carlo also related his conception of "creative participation" to his understanding of "disorder", as it becomes evident in his following words:

> Growth and flexibility in an architectural organism are not really possible except under a new conception of architectural quality. This new conception cannot be formulated except through a more attentive exploration of those phenomena of creative participation currently dismissed as 'disorder'[30].

Figure 8.4. Photograph of a physical model of Typology 5 that was displayed at the second exhibition at the Galleria Poliantea in Terni in October 1973.
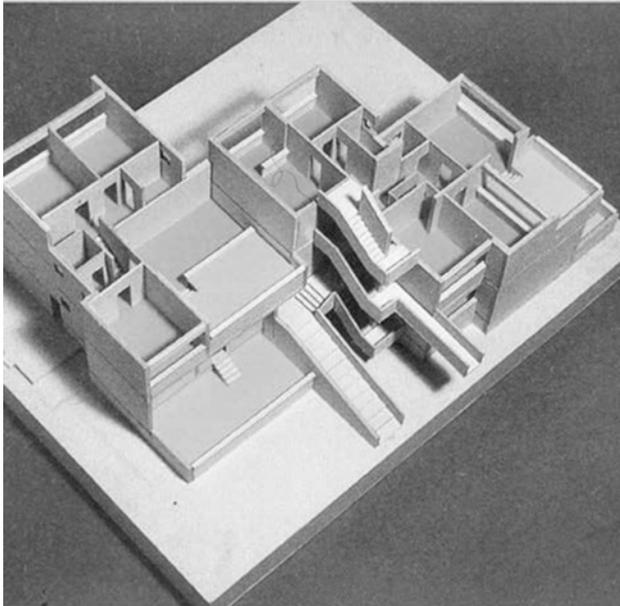
Credits: Fondo Giancarlo De Carlo, Archivio Progetti, Università Iuav di Venezia, foto/1/075

Figure 8.5. The cover of the seventeenth issue of the magazine Terni, which was published in September 1973.
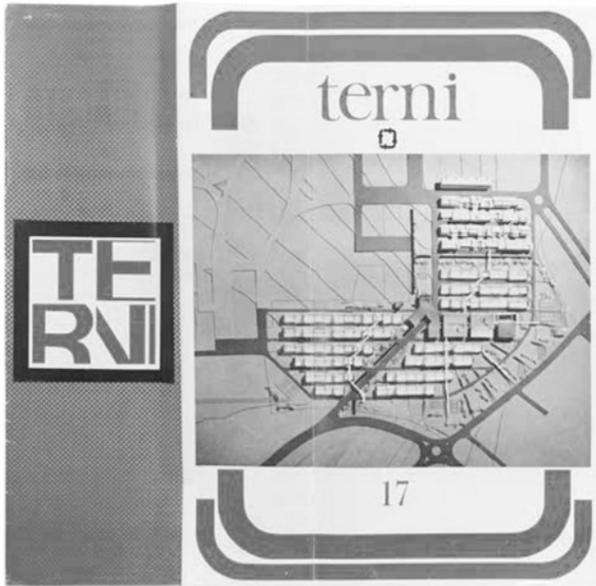
Credits: Fondo Giancarlo De Carlo, Archivio Progetti, Università Iuav di Venezia, atti/081

The design process of this project was not linear. As De Carlo remarks in his article titled "À la recherche d'une approche nouvelle: le nouveau village Matteotti à Terni" that was published in *Carré Bleu* in 1978, the aim of the design process of the Nuovo Villaggio Matteotti was to trigger a dialogue with the inhabitants. For this purpose, De Carlo launched the design process with the organisation of an exhibition of housing models that brought together examples from various countries. De Carlo's objective was to inform the prospective inhabitants of the Nuovo Villaggio Matteotti regarding "the models normally offered on the market and which conditioned the popular imagination"[31]. Some principles that characterized the design of this project was the idea that "[t]he building typology must be neither fragmented nor a single block" and the conviction that the "pedestrian walkways [should be] built in a scale proportioned to the individual's psychological needs: spaces that can be immediately per-

ceived, walkways that are both variable and inspiring, the presence of greenery, carefully chosen details"[32].

Pivotal for understanding De Carlo's conception of participation is his close relationship with anarchistic circles. De Carlo shared his interest in anarchistic ideas with intellectuals such as Elio Vittorini, Vittorio Sereni, Carlo Bo, and Italo Calvino[33]. He was passionate about several concepts of 19th century anarchist and socialist philosophy[34]. P. G. Raman, in trying to shed light on the specificity of De Carlo's understanding of cooperation, highlighted the differences between the Marxist and anarchist conception of cooperation. More specifically, Raman claimed that, while for Marxists a prerequisite for changing an established structure in society is to overcome the division between bourgeois class and proletarians, for anarchists "each stratum of society, because of its peculiar history, develops different traditions of cooperation"[35]. De Carlo remarked regarding his conception of participation:

> I think that participation is a complex process, which requires imagination and courage, projecting with deep transformations of the very substance of architecture. The aim is to achieve a multiple language able to adapt to changing circumstances, to the consumption of time that passes, to various levels of knowledge and perception, to the plural expectations of many possible interlocutors; a language composed of many equally significant strata..[36]

De Carlo was skeptical vis-à-vis Aldo Rossi's understanding of the notion of "type" and was supportive of the Renaissance comprehension of the concept of "type". More specifically, he had remarked regarding the Renaissance understanding of "type": "[t]he difference is fundamental, because the model is a hypothesis and not an axiom, a frame of reference and not of identification, a metaphor and not a truism; it is not to be reproduced, but imitated; it does not generate repetitions but connections; and it is the destiny of the model to be distorted"[37]. The types of dwellings that were designed for the Nuovo Villaggio Matteotti were the outcome of several meetings with the inhabitants. The exchanges with the inhabitants contributed to the formulation of certain hypotheses regarding their needs and resulted in the design of five typologies (Figure 8.6). In a later phase, the future inhabitants would have the opportunity to choose an alternative for their future apartment from a catalogue that would contain all the possible solutions including new ones, which would have resulted from the lived experiences of the older inhabitants of the housing units. The inhabitants themselves defined the manner the units were assembled. The

active participation of the inhabitants in the design process provoked a significant shift in the process of architectural composition. However, as McKean underscores, "[a]mong the paradoxes of Terni, where only a first small phase was realised, was the nimby embourgeoisement of the first occupants, keen to protect their amenity and preserve it from a further generation who might want to enlarge the project"[38].

Figure 8.6. *Plans, sections, and views for one of the typologies of the Nuovo Villagio Matteotti neighbourhood project. Typology 3 TR 130/07, last update September 1971.*
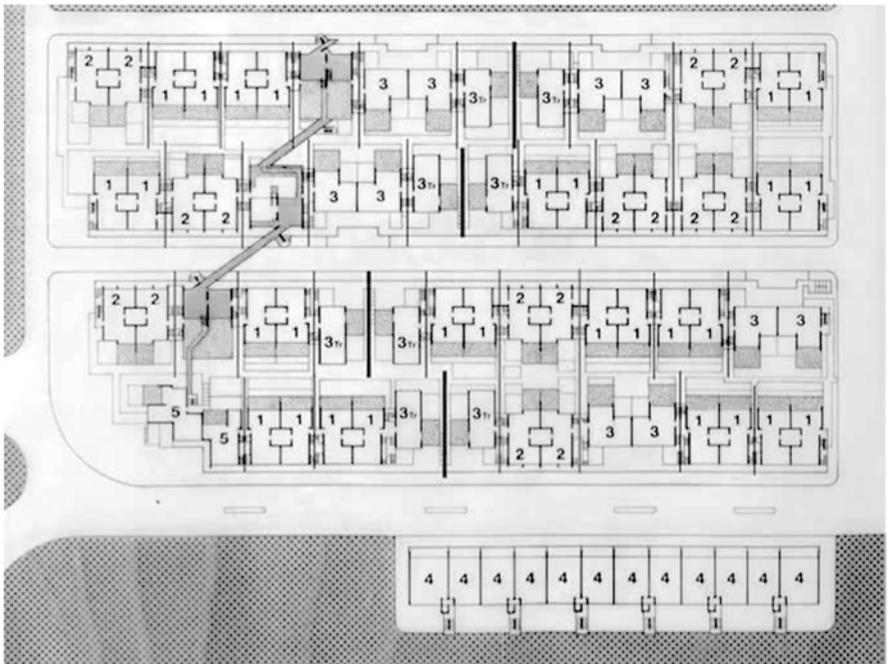
Credits: Comune di Terni, Archivio, Archivio Edilizia

Some questions that emerge when we revisit Giancarlo De Carlo's participatory design approach are whether it managed to overcome the authoritarian process of the architect as the director or controller of the design processes and to what extent it revealed the limits of participation[39]. An important source

for exploring to what extent the participation design approach model implemented in the Nuovo Villaggio Matteotti was successful is an interview that De Carlo gave to *Werk* in 1972. In this interview, De Carlo shed light on how he conceived the communication with the inhabitants in the case of the Nuovo Villaggio Matteotti[40]. Despite his intention to take into account their opinions, in many cases he insisted on trying to convince them that the idea of maintaining the identity of "a low-rise, high-density village was the best solution"[41].

8.3   Giancarlo De Carlo and the humanization of architecture: The real transformation of the world

De Carlo was interested in Le Corbusier's work and played an important role in the dissemination of his theories in Italy. For instance, during the post-war years, he edited a volume that brought together an ensemble of Le Corbusier's writings in Italian[42]. De Carlo was a member of the editorial board of *Domus* from 1945 to 1948 and of *Casabella Continuità* from 1954 to 1956. In 1956, he resigned from the editorial board of *Casabella Continuità* due to disagreements with Ernesto Nathan Rogers regarding the agenda of the magazine. Later on, in 1978, De Carlo founded *Spazio e Società* and was its director between 1978 and 2001[43]. De Carlo and Ernesto Nathan Rogers both played a protagonist role in this process of "re-humanisation" of architecture[44].

Despite their shared concern about the "re-humanisation" of architecture, their approaches had more differences than affinities. This explains why De Carlo decided to leave the editorial board of *Casabella Continuità* in 1956[45]. Manfredo Tafuri remarked that one of the reasons behind this decision of De Carlo was his "anti-formalism"[46]. The anti-formalist tendency of De Carlo became evident when he expressed his belief that architects are called to "choose between the aimless idealistic outbursts of the avant-garde and the development of a method based on reality"[47]. He related this tension to that "between utopia and the real transformation of the world"[48], as well to that between a conception of architecture as architecture of the drawing board and architectural interventions that are conceived as processes of continuous transformation even after their completion as built artefacts. De Carlo claimed that in the second case that corresponds to an understanding of architecture as a "real transformation of the world" special attention should be paid to how architecture is experienced on the daily basis by the inhabitants.

Luca Molinari, in "Theories and Practices of Re-humanizing Postwar Italian Architecture: Ernesto Nathan Rogers and Giancarlo De Carlo" discerns the affinities of the approaches of Giancarlo De Carlo and Ernesto Nathan Rogers. More specifically, he remarks that Rogers and De Carlo shared the intention to bring "the role of the human being as a prior argument in the re-definition of modern architecture"[49]. According to Molinari, the most significant points of convergence of Ernesto Nathan Rogers and Giancarlo De Carlo's points of view are their intentions to re-humanise post-war Italian architecture and the search for a subtle balance between modernity and history, as well as between preservation and renewal. De Carlo aimed to find this balance through the elaboration of the concept of "process planning" ("piano-processo") and is referred to below.

Through his projects, De Carlo aimed to contribute to "the real transformation of the world"[50]. The two concepts that are determining for the understanding of how De Carlo conceptualised the impact of architecture on reality are those of "guide project" ("progetto guida")[51] and "process planning". The former is related to "the organic relationship of a building to its city, and the city to its region", while the latter is linked to the promotion of "participation". As Benedict Zucchi has underlined, the concept of "guide project" is associated with De Carlo's "aspiration towards a clarity of method which makes the process accessible to the local community but is also intended to set an example, or act as a catalyst"[52].

Giancarlo De Carlo was aware of the contradictions "between the aimless idealistic impulses of the avant-gardes and the recourse to a method based on reality"[53]. He also shed light on the tensions between utopia and real transformation of the world and was particularly interested in how fashion is related to the notion of "habitus". As John McKean underlines, De Carlo privileged structural strategies instead of diagrams[54]. The prioritisation of structural strategies over diagrams should be interpreted in conjunction with his attraction to the translation of the architectural project into reality. A case in which De Carlo's concept of "process planning" was applied with great care is his masterplan for Urbino (1958–1964). De Carlo remarks, regarding this project, in *Urbino: la storia di una città e il piano della sua evoluzione urbanistica*: "the plan does not consider the renewal of the historic centre as a simple sanitation or upgrading of buildings, but as a radical restructuring of the city according to models and forms ensuring continuity between existing and new spatial patterns and new"[55]. His design for the masterplan for Urbino was derived from a close examination of the economic, spatial, and social conditions of Urbino[56]. Ea-

monn Canniffe has highlighted that this masterplan was "the great European archetype […] free of association with planned propaganda, and redolent of an urban life which emphasized community rather than order"[57]. The concept of "process planning" was also pivotal for the design strategy employed in the case of the University College in Urbino (1958–1976)[58] (Figure 8.7), for which he collaborated with Francesco Borella, who was an employee of the studio; Astolfo Sartori Sartori, who acted as a foreman; Lucio Seraghiti; and Vittorio Korach[59].

De Carlo's understanding of "process planning" should be interpreted in conjunction with his intention to replace "the traditional urban-centric perspective with a more current environmental perspective", as well as to his desire to eliminate "all the mechanical relationships and the zoning approach […] with a system of organic relationships"[60] As Luca Molinari has remarked, "Urbino and its history, landscape, community and the way people meet, live and move in the urban environment became crucial characters in the work of De Carlo"[61]. This is evident in the design strategies De Carlo elaborated in the case of the three colleges he designed for Urbino between 1973 and 1983: Il Tridente, La Vela, and L'Aquilone. Despite the fact that, in these projects, there was no participation in the sense of user involvement as in the case of the design for the Nuovo Villaggio Matteotti, his concern about the users was similarly central given that "the community's life [was teated,…] as the warm core of the design and functional program"[62]. However, instead of treating the Collegio del Colle as a strict "functional mechanism, [he aimed to enhance the humanity in students' daily lives"[63]. Even if the role of the daily experiences of the inhabitants were at the core of the design strategies in both the colleges in Urbino and the Nuovo Villaggio Matteotti in Terni, there was a shift in his focus. In the case of the former, we are confronted with an idealized understanding of the needs of the inhabitants, while in the case of the latter the whole design strategy was structured around the idea of bringing in the opinions of the inhabitants in the first place.

Giancarlo De Carlo believed that the main problem of the manner the modernist architects conceived the relationship between form and function was the fact that they reduced function "to a bare representation of conventional behaviors". He maintained that the notion of function should be transformed in a manner that would make it possible to "include the entire range of social behaviors, with all their contradictions and conflicts"[64]. De Carlo's design strategies were characterised by the intention to search for a genetic code. He was convinced that the capacity of architectural artefacts to transform a place depends on their capacity to contribute to the discovery of such a genetic code.

For instance, he remarked regarding his rehabilitation of the Ligurian mountain village of Colletta di Castelbianco (1993–1995): "What I started to look for was the genetic code. It became clear to me there was a code, and that I had to discover it to change the place. Anything I could have done out of this genetic code would have been a mistake"[65].

Figure 8.7. Giancarlo de Carlo, College del Colle student accommodation, Urbino, 1962–1966. Mass plan of the main building mounted in the plan of routes.
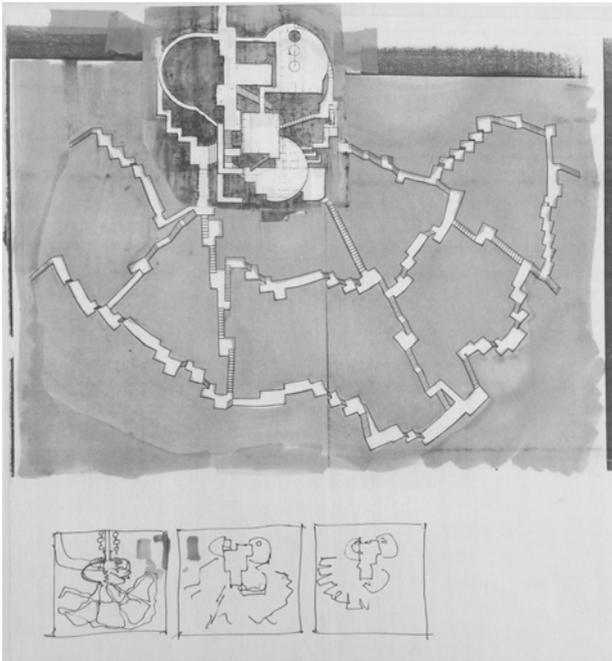
Credits: Fondo Giancarlo De Carlo, Archivio Progetti, Università Iuav di Venezia

8.4   Giancarlo De Carlo and architectural pedagogy

Giancarlo De Carlo taught architecture and planning at the Istituto Univer-
sitario di Architettura di Venezia (IUAV) from 1955 through 1983. Until 1964,
he taught a course entitled "The Elements of Architecture", and between 1964
and 1970, he taught "Territorial Planning". From 1983 to 1989, he taught archi-
tectural composition at the School of Architecture of the University of Genoa.
In parallel, he was an Italian delegate to the Congrès internationaux d'archi-
tecture moderne (CIAM) since 1952. In 1976, Giancarlo De Carlo founded the
International Laboratory of Architecture and Urban Design (ILAUD), an in-
ternational summer school that was held between 1976 and 2003 in Urbino in
Italy. It involved various international figures such Alison and Peter Smithson
and other members of the Team 10, as well as Charles Moore, Donlyn Lyndon,
Melvin Charney among other. The ILAUD intended to bring together students
from universities around the world. The duration of the ILAUD seminars was
two months. The vision of the ILAUD, which was very close to that of the Team
10, was characterised by the intention to shape alternative views in order to
challenge the rigid methodologies of the modern movement. More specifically,
it favoured anti-authoritarian participatory approaches. De Carlo was also the
director of the journal *Spazio e Società* between 1978 and 2001. That same year
he founded the ILAUD, De Carlo contributed with his proposal for the Nuovo
Villaggio Matteotti to the exhibition "Europa/America: Architettura urbana, al-
ternative suburbane" that Vittorio Gregotti curated in the framework of the Bi-
ennale di Venezia, to which Alison and Peter Smithson also participated among
other[66].

In an interview he gave to Thierry Paquot and Ariella Masboungi in 1997, De
Carlo underlined that the idea of participation became central to his approach
in 1966, during his stay in the United States. De Carlo was appointed Visiting
Professor in several schools of Architecture in the United States of America[67].
In 1966, Paul Rudolph invited him to teach as Visiting Professor at Yale Uni-
versity. Additionally, during the following years he was also De Carlo under-
lined appointed Visiting Professors in numerous universities and institutes in
the United States of America, such as Massachusetts Institute of Technology,
Harvard University, Cornell University, University of California, and Yale Uni-
versity. In 1978 – the year he founded *Spazio e Società* – De Carlo was appointed
William B. and Charlotte Shepherd Davenport Visiting Professor at Yale Uni-
versity.

During the post-war era, and especially within the circle of Team 10, university buildings acquired an important place in architects' thought. Within such a context, the notions of university and education dominated the epistemology of architecture. Giancarlo De Carlo's project for the competition of the University College Dublin (1963–64) is note-worthy, since it epitomizes, in a similar way as the Free University of Berlin by Georges Candilis, Alexis Josic and Shadrach Woods, the intention of the architects to contribute to social transformation through the design of university buildings. De Carlo's article entitled "Why/How to Build School Buildings" published in *Harvard Educational Review* in 1969 is representative of this tendency[68]. In the same issue of *Harvard Educational Review*, Shadrach Woods published "The Education Bazaar", where he invited architects to "see the city as the total school, not the school as a 'micro-community'"[69].

Woods paid much attention to the interaction between the quality of education, the structure of society and the quality of life in the city. He believed that "the social structure affects and reacts to both the quality of education and the quality of life". In the aforementioned article, he aimed to respond to the dilemma whether the most efficient way to follow was to intensify the exchanges between social structure and education, accepting the spontaneity of their relationship or to try to control the impact that each of these parameters has on the other. To better grasp De Carlo's relations with Georges Candilis, Alexis Josic and Shadrach Woods we could bring to mind the exchanges of De Carlo with Candilis. The two men met for the first time in 1959 in Otterlo in the framework of the 11th Congrès Internationaux d'Architecture Moderne (CIAM).

8.5   Giancarlo De Carlo as exhibition curator

In the ninth Triennale of 1951, Giancarlo De Carlo co-curated with Ezio Cerutti and Giuseppe Samonà the show "Spontaneous Architecture" ("Architettura spontanea") (fig. 7). Three years later, he curated, in collaboration with Ludovico Quaroni and Carlo Doglio, the "Mostra dell'urbanistica" in the framework of the tenth Triennale di Milano of 1954. De Carlo underscored, in *Casabella*, that the intention of this exhibition was to "bring in the urban planning the collaboration of all the active forces of the culture that are involved in it and to devise the means that make possible an effective capillary participation of the community"[70]. Additionally, De Carlo curated the fourteenth Triennale di Milano of 1968. He chose as theme "The Great Number" ("Il

grande numero") and invited the contributors to respond to the question of the relationship between architecture and democracy in contemporary society.

De Carlo's concern about the "great number" should be understood in conjunction with his preoccupations regarding the threats of mass society. He maintained that the "advent of mass society" was in disagreement with "a society inhabited by numerous federations of free and freethinking individuals". More specifically, he proclaimed that he was "not worried about large numbers, but [was] [...] against this mass society, to which [he opposed] [...] a large society of small groups forming and reforming according to the circumstances because their cement is the problem they experience and face together, which is always different"[71]. Among the architects that were invited to contribute to the fourteenth Triennale di Milano of 1968, were Hans Hollein, who curated the Austrian pavilion, Arata Isozaki, Alison and Peter Smithson, Shadrach Woods, Aldo van Eyck, Archigram, Archizoom and György Kepes. A crucial episode concerning the demand to incorporate social concerns in epistemology of architecture is the occupation by students of architecture of this Triennale di Milano of May 1968, which postponed its opening[72].

8.6   Around the presence of human figures in the photographs and drawings of Giancarlo De Carlo's buildings

The photographs of Collegio del Colle in Urbino by Cesare Colombo (1935–2016) (Figure 8.8, Figure 8.9) and those of the Nuovo Villaggio Matteotti by Mimmo Jodice (b. 1934) (Figure 8.10) played an important role in the dissemination of Giancarlo De Carlo's participatory design approach. These photographs communicated the importance of users for De Carlo's design approach. The manner the aforementioned projects were photographed contributed significantly to the formation of a specific conception of the observer and the user of architecture. In contrast to the photographs of De Carlo's aforementioned projects, the most known photographs of Ludwig Mies van der Rohe and Aldo Rossi's buildings are characterised by the absence of human presence[73]. Regarding this issue, one can recall the absence of human presence in the photographs that Luigi Ghirri (1943–1992) took of Rossi's San Cataldo Cemetery at Modena (1971–1973)[74] (Figure 8.11). In these photographs, the building stands alone in the snowy and empty environment. By contrast, in the photographs that Sandra Lousada took of the Alison and Peter Smithson's Robin Hood

Gardens (1969–1972), one can admire the intense presence of the figures of children playing in front of the building.

Figure 8.8.   Giancarlo De Carlo's collegio del Colle, Urbino, 1962–1965. Dimensions of the photograph: 24 × 30 cm.

Credits: Photography by Cesare Colombo

De Carlo was conscious of the fact that the presence of human figures in the photographs of his buildings goes hand in hand with a specific interpretation of his architecture. He wrote regarding the absence of human figures in the photographs of buildings: "And isn't it quite astonishing, too, that buildings are never published in a magazine with people inside? The architecture critics never speak about the way a building answers the needs of its users?"[75]. This remark of De Carlo brings to mind François Penz's following observation, in *Cinematic Aided Design: An Everyday Life Approach to Architecture*: "To enrich our understanding of architecture with affect and lived experience is an at-

tempt to address Robin Evans' remark on the absence of the way human figures occupy 'even the most elaborately illustrated buildings'"[76]. Cesare Colombo, apart from the photographs of De Carlo's collegio del Colle in Urbino, also took some photographs of De Carlo's debates with Gianemilio Simonetti in front of the protesting students during the fourteenth Triennale di Milano of 1968. These photographs contributed significantly to the dissemination of the ideas of De Carlo's approach (Figure 8.12). This photograph depicts vividly "a crucial episode concerning the demand to incorporate social concerns in epistemology of architecture is the occupation by students of architecture of this Triennale di Milano of May 1968, which postponed its opening"[77].

The analysis of the human figures in Giancarlo De Carlo's sketches could also be useful for interpreting the role of inhabitants in his architectural thought. His special method of designing human figures as a continuation of his buildings and his drawings featuring the structure of trees inhabited by people are particularly thought-provoking (Figure 8.13). They can be interpreted as gestures that situate human life and nature on the same plane. Such an amalgam of human and natural cosmos is compatible with De Carlo's conception of architecture as a continuation of existing natural reality. Regarding this issue, it would be relevant to refer to his following remark regarding Urbino: "the ambivalence between nature and architecture is embodied most strikingly in Urbino itself"[78]. At the centre of De Carlo's stance was the desire to overcome this ambivalence. In other words, De Carlo intended to challenge the division between man-made and natural cosmos and to establish strategies that permit their osmosis. His intention to create such an osmosis between man-made and natural cosmos should be understood in conjunction with the fact that De Carlo was aware of the contradictions "between the aimless idealistic impulses of the avant-gardes and the recourse to a method based on reality"[79].

Figure 8.9. Collegio universitario del Colle in Urbino by Giancarlo De Carlo.

Photograph taken by a student during a student workshop held in Urbino in 1965. Credits: ZHdK Archive

Figure 8.10. Photograph of the Nuovo Villaggio Matteotti in Terni by Mimmo Jodice.

Credits: Mimmo Jodice

Figure 8.11. Aldo Rossi's Cemetery of San Cataldo, Modena. Chromogenic colour print. Dimensions : 40.5 × 50.6 cm.
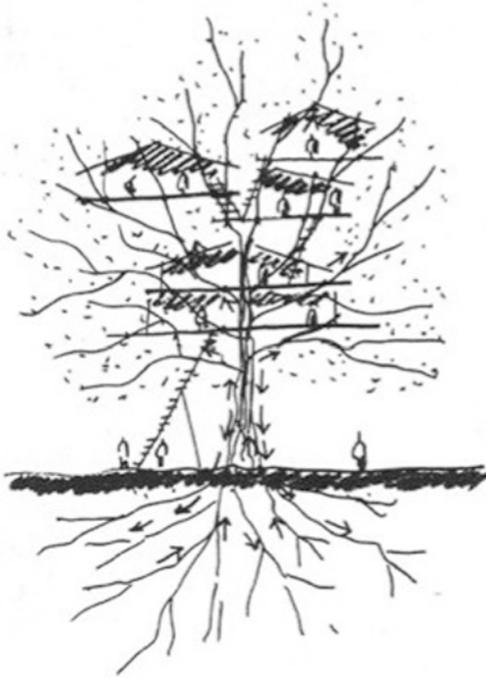

Photograph taken in 1986 by Luigi Ghirri. Credits: Fondazione Luigi Ghirri

Figure 8.12. Giancarlo de Carlo debates with Gianemilio Simonetti as protesting students take over the fourteenth Milan Triennale in May 1968.

Photograph by Cesare Colombo. Credits: Cesare Colombo

Figure 8.13.   Giancarlo De Carlo, Le ragioni dell'architettura.

Credits: Anne De Carlo

8.7   Towards a conclusion or problematizing participation: From "participation" to "co-production" to "negotiated planning" to "crossbenching"

The contemporary interest in methods of "collaboration", "participatory design", and "co-production" can learn from the long history of participation about how architecture and urban design can forge a critical relationship with civic engagement and social responsibility. Instead of repeating the concepts, roles, and tools that were tested some decades ago, it would be more relevant to engage more intensively with the historical examples and use them as a base for developing new critical approaches. Experiments such as TAR and NOMAS remind us that the issue of participation is not only the question of architectural and urban design practice but also—and maybe most urgently—the requirement of experiments and changes in architectural and urban design education.

Useful "for realizing the implication of the implementation of participation-oriented strategies is [the distinction,...] between the so-called "collaborative approaches" and the concept of "co-production"[80] and the concept of "negotiated planning", which Vanessa Watson has analysed in "Co-production and Collaboration in Planning: The Difference". As Watson has highlighted, "co-production, along with collaborative and communicative planning positions, assume a context of democracy, where "active citizens" are able and prepared to engage collectively and individually (with each other and with the state) to improve their material and political conditions"[81]. Understanding the concept of "negotiated planning" in relation to the growing interest in the common practices goes hand in hand with taking into consideration the actual "actors and power dynamics, involved," and "the 'virtuous cycle' of planning, infrastructure, and land."[82].

Another concept that is also interesting for relating the debates on participation to the current trends concerning urban transformation strategies is that of "crossbenching", which Markus Miessen has analysed in *Crossbenching: Toward Participation as Critical Spatial Practice* where he highlights that "[i]nstead of being interested in a simulation of participation, crossbench practice performs a non-illusory form of pragmatism"[83]. In order to grasp the significance of "crossbenching", we should take into consideration that the former "[c]rossbenching constitutes an operative practice"[84]. The great interest of the aforementioned approaches remain in their intention to break the myths in which participation was based, taking into account its potentials, but also challeng-

ing and going beyond it. The Nuovo Villaggio Matteotti constitutes a case that reveals the myths of participatory design approaches and of their endeavour to replace the representation of designers by a representation of users.

A remark by Giancarlo De Carlo that is of great significance for the comprehension of his participatory design approach is his claim that "[p]articipation implies the presence of the users during the whole course of the operation"[85]. The importance of this observation lies in the fact that it renders explicit that a transformation of how the architect conceives the users implies a reorganisation of the design process and a re-articulation of all the phases of the procedure. The point of departure of De Carlo's participatory design approach was the rejection of the linear design process of modernism, which, according to him, was based on the following three distinct phases: firstly, the definition of the problem; secondly, the elaboration of the solution; and thirdly, the evaluation of the results. The tension between control and freedom was of the utmost importance for the participatory design approaches that were at the centre of the epistemological debates during the sixties. According to De Carlo, the shift from modernist architecture to an architecture of participation implied a reorientation of architecture's scope and a shift from an organisation based on the aforementioned three distinct phases towards a non-hierarchical model of architectural design processes during which the user is welcome to participate in every phase.

Notes

1   Giancarlo De Carlo. Transcript of lecture delivered at Harvard University in December 1967. Fondo Giancarlo De Carlo, Archivio Progetti, Università Iuav di Venezia.

2   Ibid.

3   Ibid.; Marianna Charitonidou, "Revisting Giancarlo De Carlo's Participatory Design Approach: From the Representation of Designers to the Representation of Users", *Heritage*, 4(2) (2021): 985–1004, doi: https://doi.org/10.3390/heritage4020054

4   John McKean, *Giancarlo De Carlo: Layered Places* (Stuttgart: Edition Axel Menges: Germany, 2004), 114.

5   De Carlo, "The Invisible in Architecture". Lecture series opening speech. Presented at the TU Delft, Delft, The Netherlands, 7 October 1987.

6   De Carlo, "Residential Course Programme", in ILAUD, *The Contemporary Town* (Urbino: International Laboratory of Architecture and Urban Design, 1991), 72–75.

7   Giovanna Borasi, ed., *The Other Architect: Another Way of Building Architecture* (Leipzig: Spector Books; Montreal: Canadian Centre for Architecture, 2015), 95–378.

8   Brigitte David, "Le SAAL ou l'Exception Irrationnelle du Systéme", *L'Architecture d'Aujourd'hui*, 185 (1976): 60–61.

9   José António Banderinha, "Saal 1974, L'architecture portugaise s'ouvre au mode", in Nuno Grande, ed., *50 ans d'architecture portugaise : Les universalistes* (Marseille : éditions Parenthèses, 2016), 142–149.

10   Hermann Schlimme, "The Mediterranean Hill Town: A Travel Paradigm", in Miodrag Mitrasinovic, Jilly Traganou, eds., *Travel, Space, Architecture* (Burlington: Ashgate, 2016), 148–166.

11   Marianna Charitonidou, "From Harlem to New Haven: The Emergence of the Advocacy Planning Movement in the late 1960s", in Dirk van den Heuvel, Soscha Monteiro de Jesus, Sun Ah Hwang, eds., *Architecture and Democracy 1965–1989: Urban Renewal, Populism and the Welfare State* (Delft, Rotterdam: TU Delft and Het Nieuwe Instituut, 2019), 41–47, doi: https://doi.org/10.3929/ethz-b-000402979; Charitonidou, "The 1968 effects and civic responsibility in architecture and urban planning in the USA and Italy: Challenging 'nuova dimensione' and 'urban renewal'", *Urban, Planning and Transport Research*, 9(1) (2021): 549–578, doi: https://doi.org/10.1080/21650020.2021.2001365

12   Ibid.

13   Peter Blundell Jones, "Giancarlo De Carlo: works 'professional activity'", in Francesco Samassa, ed., *Giancarlo De Carlo Percorsi. Archivio Progetti* (Padova: Il Poligrafo, 2004), 272.

14   De Carlo, "An Architecture of Participation", *Perspecta*, 17 (1980): 74–79.

15   McKean, *Giancarlo De Carlo: Layered Places*, 114–116.

16   De Carlo, "Reflections of the Present State of Architecture", Inaugural Thomas Cubitt Lecture, Royal Institution, London, 22 May 1978, 1–22.

17   Virginia De Jorge Huertas, "Fantastic Four Females: The Superheroes Hidden behind the Cape: Bisquert, Fossati-Nellani, Kanstinger and Macintosh", in Helena Seražin, Emilia Maria Garda, Caterina Franchini, eds., *Women's Creativity since the Modern Movement (1918–2018): Toward a New Perception and Reception* (Ljubljana: Založba ZRC, 2018), 822; Giancarlo De Carlo, "La progettazione nel rapporto con le istituzioni e i cittadini.

Il caso del Villaggio Matteotti a Terni", in Meneghetti Lodo-vico, ed., *Introduzione alla cultura delle città* (Milan: Clup, 1981); Domenico De Masi, *Il lavoro nel XXI secolo* (Turin: Einaudi, 2018).

18   Cesare De Seta, *La cultura architettonica in Italia tra le due Guerre* (Rome: La-terza, 1983); De Seta, "Luigi Cosenza: Dalla Mitteleuropa al Mediterraneo", in *Architetti Italiani del Novecento* (Rome: Laterza, 1987); De Jorge Huertas, "Mat-hybrid housing: Two case studies in Terni and London", *Frontiers of Architectural Research*, 7 (2018), 278, doi: https://doi.org/10.1016/j.foar.201 8.05.002

19   Alberto Franchini, *Il villaggio Matteotti a Terni. Giancarlo De Carlo e l'abitare collettivo* (Rome: L'Erma di Bretschneider, 2020), 62.

20   Ibid., 39,69.

21   De Carlo, "À la recherche d'une approche nouvelle : le nouveau village Mat-teotti à Terni", *Carré Bleu*, 78(3) (1978), 10.

22   De Carlo, Personal communication letter sent to Cesare De Seta, 18 De-cember 1969. Fondo Giancarlo De Carlo, Archivio Progetti, Università Iuav di Venezia.

23   Franchini, *Il villaggio Matteotti a Terni. Giancarlo De Carlo e l'abitare collettivo.*

24   De Masi, "Participation and project", in Margherita Guccione, Alessandra Vittorini, eds., *Giancarlo De Carlo: le ragioni dell'architettura* (Milan: Electa, 2005), 69.

25   De Masi, "Sociologia e nuovo ruolo degli utenti", *Casabella*, 421 (1977): 15–16.

26   De Carlo, "Il pubblico dell'architettura", *Parametro*, 5 (1970): 4–13; De Car-lo, "Architecture's public", in Peter Blundell Jones, Doina Petrescu, Jeremy Till, eds., *Architecture and Participation* (London: Routledge, 2005), 16.

27   De Carlo, "Architecture's public", 13.

28   Benedict Zucchi, *Giancarlo De Carlo* (Oxford: Butterworth Architecture: 1992), 168.

29   Ibid.

30   De Carlo, "Il pubblico dell'architettura", 13; De Carlo, "Architecture's pu-blic", 22.

31   De Carlo, "À la recherche d'une approche nouvelle : le nouveau village Mat-teotti à Terni", *Carré Bleu*, 78(3) (1978), 10 ; De Masi, "Sociologia e nuovo ruolo degli utenti", *Casabella*, 421 (1977) : 15–16 ; De Carlo, "Alla ricerca di un diverso modo di progettare", *Casabella*, 421 (1977) : 17–34 ; Peter Smith-son, "À propos de Terni", *L'Architecture d'Aujourd'hui*, 189 (1977): 10–11.

32 De Carlo, Notes on a copy of De Carlo's six-point plan, preserved in the archive of the Terni Steelworks, Nuovo Villaggio Matteotti, F.1.4. Fondo Giancarlo de Carlo, Archivio Progetti, Università Iuav di Venezia.

33 P. G. Raman, "Libertarian themes in the work of Giancarlo De Carlo", *Ekistics*, 65 (1998): 192–206.

34 De Carlo, "L'architetto e il potere", *Rivista anarchica*, 161 (1989).

35 Raman, "Libertarian themes in the work of Giancarlo De Carlo", 205.

36 De Jorge Huertas, "V. Mat-hybrid housing: Two case studies in Terni and London", 278; Lamberto Rossi, Giancarlo De Carlo, Giuliana Baracco, *Giancarlo De Carlo: Architetture* (Milan: Arnoldo Mondadori, 1988).

37 McKean, *Giancarlo De Carlo: Layered Places*, 114.

38 Ibid., 116.

39 Markus Miessen, *The Nightmare of Participation: Crossbench Praxis as a Mode of Criticality* (Berlin: Sternberg Press, 2011).

40 Mario Broggi, "Arbeiterwohnungen in Terni. Ein Interview mit Giancarlo De Carlo in Terni", *Werk*, 59 (1972): 141–145.

41 Schlimme, "The Mediterranean hill town: A travel paradigm", 161.

42 De Carlo, *Le Corbusier, Antologia Critica Degli Scritti* (Milan: Rosa e Ballo, 1945).

43 Isabella Daidone, *Giancarlo De Carlo. Gli Editoriali di Spazio e Società* (Rome: Gangemi Editore, 2017).

44 Marianna Charitonidou, "The immediacy of urban reality in post-war Italy: Between neorealism's and Tendenza's instrumentalization of ugliness", in Thomas Mical, Wouter van Acker, eds., *Architecture and Ugliness. Anti-Aesthetics in Postmodern Architecture* (London: Bloomsbury Academic, 2020), 223–244, doi: https://doi.org/10.5040/9781350068261.ch-013

45 Luca Molinari, "Theories and Practices of Re-Humanizing Postwar Italian Architecture: Ernesto Nathan Rogers and Giancarlo De Carlo", in Ákos Moravánszky, Judith Hopfengartner, eds., *Re-humanizing Architecture: New Forms of Community, 1950–1970. East West Central: Re-Building Europe, 1950–1990*, vol. 1 (Basel: Birkhäuser, 2017), 234.

46 McKean, *Giancarlo De Carlo: Des lieux, des hommes* (Paris: Éditions du Centre Pompidou, 2004), 35; Manfredo *Tafuri, Storia dell'Architettura Italiana: 1944–1985* (Turin: Einaudi: Turin, 1986); Tafuri, *History of Italian Architecture, 1944–1985* (Cambridge, Mass.: The MIT Press, 1989), 58; De Carloscritti/068, 1–2. Fondo Giancarlo De Carlo, Archivio Progetti, Università Iuav di Venezia.

47 McKean, *Giancarlo De Carlo : Des lieux, des hommes*, 20.

48   Ibid.

49   Molinari, "Theories and Practices of re-humanizing postwar Italian archi-
      tecture: Ernesto Nathan Rogers and Giancarlo De Carlo", 230.

50   De Carlo, "Una precisazione", *Casabella-Continuità*, 214 (1957), 1.

51   McKean, *Giancarlo De Carlo: Layered Places*, 121.

52   Zucchi, *Giancarlo De Carlo*, 130.

53   De Carlo, "Una precisazione".

54   McKean, *Giancarlo De Carlo: Layered Places*.

55   De Carlo, *Urbino: La storia di una città e il piano della sua evoluzione urbanistica*
      (Padova: Marsilio, 1966), 119.

56   Lorenzo Mingardi, *Sono geloso di questa Città: Giancarlo De Carlo e Urbino*
      (Macerata: Quodlibet, 2018).

57   Eamonn Canniffe, "Neo-Realism: Urban form and La Dolce Vita in post-
      war Italy 1945–75", in John Pendlebury, Erdem Erten, Peter J. Larkham,
      eds., *Alternative Visions of Post-War Reconstruction: Creating the Modern Town-
      scape* (London; New York: Routledge, 2014), 235.

58   De Carlo, *Urbino: The History of a City and Plans for its Development* (Cam-
      bridge, Mass.: The MIT Press, 1970).

59   Michelangelo Sabatino, *Pride in Modesty: Modernist Architecture and the Ver-
      nacular Tradition in Italy* (Toronto: University of Toronto Press, 2010).

60   Molinari, "Theories and Practices of re-humanizing postwar Italian archi-
      tecture: Ernesto Nathan Rogers and Giancarlo De Carlo", 235.

61   Ibid.

62   Ibid., 235, 240.

63   Ibid., 240.

64   De Carlo, "An architecture of participation".

65   De Carlo, "Colletta di Castelbianco [Speaking of Places]", *Places Journal*,
      16(2) (2004), 6.

66   Franco Raggi, ed., *Europa-America: architetture urbane, alternative suburbane*
      (Venice: Edizioni la Biennale di Venezia, 1978).

67   Transcript of an interview that De Carlo gave to Thierry Paquot and Ariella
      Masboungi in March 1997. Accessed 8 September 2019: http://www.joint
      master.ch/file.cfm//giancarlo_de_carlo_interview.pdf?contentID=4153.

68   De Carlo, "Why/How to Build School Buildings", *Harvard Educational Re-
      view*, 39(4) (1969): 12–35.

69   Shadrach Woods, "The Education Bazaar", *Harvard Educational Review*,
      39(4) (1969): 119–120.

70   De Carlo, "Intenzioni e risultati della mostra di urbanistica", *Casabella*, 203 (1954), 24.

71   De Carlo, "Designing public places (Progettare I luoghi pubblici)", in Margherita Guccione, Alessandra Vittorin, eds., *Giancarlo De Carlo: le ragioni dell'architettura* (Milan: Electa, 2005).

72   Charitonidou, "Between Urban Renewal and Nuova Dimensione: The 68 Effects vis-à-vis the Real", *Histories of Postwar Architecture*, 2 (2018): 1- 26, doi: doi.org/10.6092/issn.2611-0075/7734

73   Claire Zimmerman, *Photographic Architecture in the Twentieth Century* (Minneapolis: University of Minnesota Press, 2014).

74   Paolo Costantini, *Luigi Ghirri/Aldo Rossi: Things Which Are Only Themselves* (Milan: Electa, 1996).

75   De Carlo-scritti/068, 1–2. Fondo Giancarlo De Carlo, Archivio Progetti, Università Iuav di Venezia.

76   François Penz, *Cinematic Aided Design: An Everyday Life Approach to Architecture* (London: Routledge, 2017), 130; Robin Evans, *Translations from Drawing to Building and Other Essays*. AA Documents 2 (London: Architectural Association, 1997).

77   Charitonidou, "Between Urban Renewal and Nuova Dimensione: The 68 Effects vis-à-vis the Real".

78   Zucchi, *Giancarlo De Carlo*, 84.

79   Tafuri, *History of Italian Architecture, 1944–1985*.

80   Charitonidou, "Housing Programs for the Poor in Addis Ababa: Urban Commons as a Bridge between Spatial and Social", *Journal of Urban History*, 48(6) (2022): 1345–1364, doi: https://doi.org/10.1177/0096144221989975; Marianna Charitonidou, "Urban Commons as a Bridge between the Spatial and the Social", in Robert C. Brears, ed., *The Palgrave Encyclopedia of Urban and Regional Futures* (Cham: Palgrave Macmillan, 2022), doi: https://doi.org/10.1007/978-3-030-51812-7_290-2

81   Vanessa Watson, "Co-Production and Collaboration in Planning: The Difference", *Planning Theory & Practice*, 15(1) (2014), 70, doi: https://doi.org/10.1080/14649357.2013.866266

82   Liza Rose Cirolia, Stephen Berrisford, "'Negotiated planning': Diverse trajectories of implementation in Nairobi, Addis Ababa, and Harare", *Habitat International*, 59 (2017), 77, doi: https://doi.org/10.1016/j.habitatint.2016.11.005

83   Miessen, *Crossbenching: Toward Participation as Critical Spatial Practice* (Berlin: Sternberg Press, 2016), 73.

84   Ibid., 44.
85   Zucchi, *Giancarlo De Carlo*, 130.