

## Article

# Revisiting Giancarlo De Carlo's Participatory Design Approach: From the Representation of Designers to the Representation of Users

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**Abstract:** The article 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 characterising 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. The article explores how De Carlo's "participatory design" criticised 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 photographed 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 endeavour to replace the representation of designers by a representation of users. The article relates the potentials and limits of De Carlo's participatory design approach to more contemporary concepts such as "negotiated planning", "co-production", and "crossbenching". The article also intends to explore whether there is consistency between De Carlo's theory of participation and its application.



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**Keywords:** Giancarlo De Carlo; creative participation; inhabitants; users; Nuovo Villaggio Matteotti; co-production; negotiated planning; crossbenching; real transformation

## 1. Introduction

Giancarlo De Carlo (1919–2005) 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. [1]

In the same lecture, De Carlo identified two opposed approaches that characterised the architectural debates of the late sixties, which could be summarised in the schism between the modernist authoritarian patterns and the non-authoritarian ones. He maintained that the latter, which corresponded to “a new world trying to grow” [1], 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 endeavour 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 legitimise itself and locate itself historically, had succumbed to rigid bureaucratisation and become formalist and prescriptive of aesthetic codes” [2] (p. 114). De Carlo, apart from the modernist architects, also criticised 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” [3].

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) [4] in Italy, to groups such as the Atelier de recherche et d’action urbaines (ARAU) in Belgium [5] (pp. 95–378) and the Serviço Ambulatório de Apoio Local (SAAL) in Portugal [6]. 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 [7,8]. SAAL should be interpreted in conjunction with the Portuguese revolution of 25 April 1974. The Design Methods Group [9,10] (p. 33) [11,12], among others, was also particularly interested in introducing participation in their design methods [13].

Nowadays, under the labels of “collaboration”, “participatory design”, and “co-production”, participation is at the centre of the debates on architecture urban design. Architects and urban planners are shaping new concepts, tools, and roles to comply with these new participatory *modii operandi*. However, it seems that it is often neglected that the issue of participation has a longstanding history. By investigating the projects of ILAUD in Italy, the ARAU in Belgium, and the SAAL in Portugal, we can understand that participation in architectural and 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 refine our theories and tools in architecture and 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 and often started 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” [14]. The Architects’ Resistance (TAR), which is 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” [14]; as well as the National Organization of Minority Architecture

Students (NOMAS), among others. These initiatives explored how new concepts, roles, and tools for participation could become part of the education of the architect and urban designer. 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 architectural and urban design processes.

## 2. From Representation of Designers to Representation of Users: Revisiting Giancarlo De Carlo’s Conception of Participation

Participatory design, which is also often referred to as community design, aims to recognise and legitimise the authority of users in the architectural and urban design processes. 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” [15] (p. 272). In his article titled “An Architecture of Participation”, De Carlo refers to the intensification of the “dichotomy between architecture and reality” and criticises 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 criticised the “neutrality of techniques” and intended to take “architecture away from the architects and [to give] it back to the people who use it”. For instance, in his article titled “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.” [16] (p. 77).

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”. A question that emerges regarding De Carlo’s participatory design approach is the following: “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?” [2] (p. 114–116).

In 1978, De Carlo delivered an Inaugural Thomas Cubitt Lecture at the Royal Institution in London titled “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. During this lecture, De Carlo highlighted that there was a necessity to establish “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, while 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 be conceived as] [ . . . ] the real receiver of the operation, thus gaining the right to make his needs and values felt by competing in a dialectical confrontation with all the other actors at every stage of the process”.

Giancarlo De Carlo shed light on the issues that arise due to the “form follows function” dogma and maintained that this dogma is based on “pre-conceived schematisations of human behaviour”. More specifically, he drew a distinction between two manners of understanding architecture: one based on the comprehension of architecture as “an autonomous activity which is self-defining by its own specialisation” and one that treats 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 explained the reasons for which he preferred the second manner

of understanding architecture mentioned above 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". He also highlighted that this renewed role of 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 architectural and urban design. Interestingly enough, he remarked the following 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. [17,18]*

### **3. The Design of the Nuovo Villaggio Matteotti in Terni and the Concept of Participation**

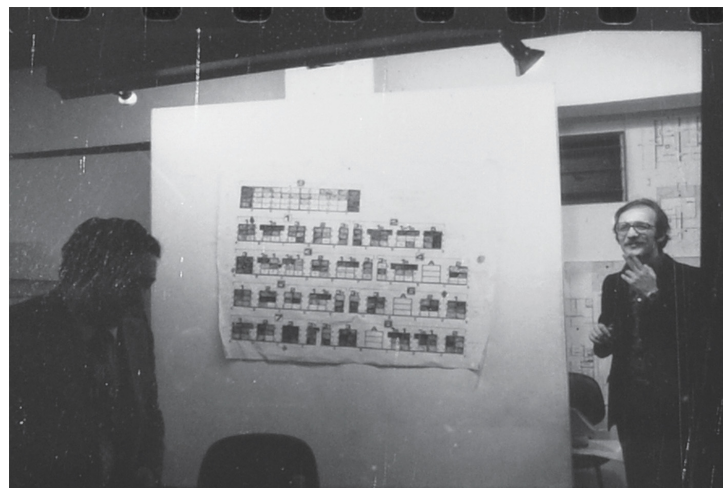
Analysing the design methods employed in the case of the Nuovo Villaggio Matteotti in Terni (1969–1974) can help us better understand De Carlo's conception of participation. For this project, which is one of the first cases of participatory design in Italy (Figures 1–3), De Carlo collaborated with a big interdisciplinary group of specialists, including engineer Vittorio Korach (1918–2014), sociologist Domenico De Masi [19–21] (p. 822), and architect and architectural historian Cesare De Seta (1941) [22–24] (p. 278). At the time, Italian sociologist Fausto Colombo (b. 1955) and architect Valeria Fossati-Bellani (b. 1935) were employees of De Carlo's studio [25] (p. 62). The project consisted of 15 typologies and 5 different housing units. The fact that Società Terni financed a part of the intervention (p. 39,69) 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.

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" [26] (p. 10). 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. [27]*



**Figure 1.** Photograph taken during 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. This photo was published in the tenth issue of the magazine Terni. Credits: Università Iuav di Venezia, Archivio Progetti, fund Giancarlo De Carlo. Giancarlo De Carlo Archive, [https://sbd.iuav.it/Cataloghi/Cataloghi-dedicati/archivi-di-architettura/risultati.html&SOLOGET=1&NOPUNTOI=1&EW\\_FL=limits\\_ap\\_fresh.php&EW\\_DT=W5034&EW\\_PT=LT\\_EW&EW\\_RM=10&EW4\\_DLL=20&EW4\\_DLP=10&EW4\\_CJL=1&EW4\\_NVR=&EW4\\_NVT=&EW4\\_NMI=1&EW\\_R=-&EW\\_PC=FON=&EW\\_PZ=AFFON=&EW\\_K=F&EW\\_T=R&EW\\_EP=&EW\\_RP=10&EW\\_D=W5034&EW\\_P=LT\\_EW&&EW\\_ER=De!Carlo,!Giancarlo!;!archivio&EW=AFFON=0000009](https://sbd.iuav.it/Cataloghi/Cataloghi-dedicati/archivi-di-architettura/risultati.html&SOLOGET=1&NOPUNTOI=1&EW_FL=limits_ap_fresh.php&EW_DT=W5034&EW_PT=LT_EW&EW_RM=10&EW4_DLL=20&EW4_DLP=10&EW4_CJL=1&EW4_NVR=&EW4_NVT=&EW4_NMI=1&EW_R=-&EW_PC=FON=&EW_PZ=AFFON=&EW_K=F&EW_T=R&EW_EP=&EW_RP=10&EW_D=W5034&EW_P=LT_EW&&EW_ER=De!Carlo,!Giancarlo!;!archivio&EW=AFFON=0000009), accessed date: 25 April 2021.

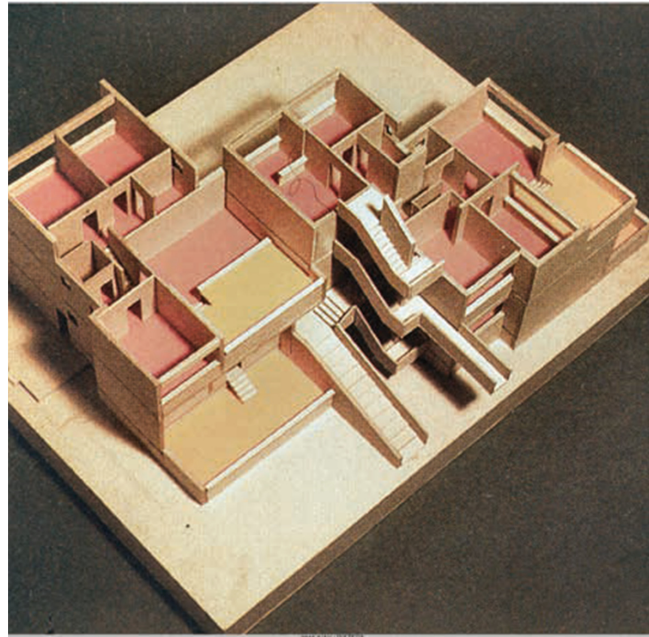


**Figure 2.** Photograph taken during the second exhibition held at the Galleria Poliantea in Terni from 13 to 17 October 1973. Credits: Università Iuav di Venezia, Archivio Progetti, fund Giancarlo De Carlo. foto/1/075. Giancarlo De Carlo Archive, [https://sbd.iuav.it/Cataloghi/Cataloghi-dedicati/archivi-di-architettura/risultati.html&SOLOGET=1&NOPUNTOI=1&EW\\_FL=limits\\_ap\\_fresh.php&EW\\_DT=W5034&EW\\_PT=LT\\_EW&EW\\_RM=10&EW4\\_DLL=20&EW4\\_DLP=10&EW4\\_CJL=1&EW4\\_NVR=&EW4\\_NVT=&EW4\\_NMI=1&EW\\_R=-&EW\\_PC=FON=&EW\\_PZ=AFFON=&EW\\_K=F&EW\\_T=R&EW\\_EP=&EW\\_RP=10&EW\\_D=W5034&EW\\_P=LT\\_EW&&EW\\_ER=De!Carlo,!Giancarlo!;!archivio&EW=AFFON=0000009](https://sbd.iuav.it/Cataloghi/Cataloghi-dedicati/archivi-di-architettura/risultati.html&SOLOGET=1&NOPUNTOI=1&EW_FL=limits_ap_fresh.php&EW_DT=W5034&EW_PT=LT_EW&EW_RM=10&EW4_DLL=20&EW4_DLP=10&EW4_CJL=1&EW4_NVR=&EW4_NVT=&EW4_NMI=1&EW_R=-&EW_PC=FON=&EW_PZ=AFFON=&EW_K=F&EW_T=R&EW_EP=&EW_RP=10&EW_D=W5034&EW_P=LT_EW&&EW_ER=De!Carlo,!Giancarlo!;!archivio&EW=AFFON=0000009), accessed date: 25 April 2021.



**Figure 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 published in G. De Carlo. *Europa*. Giancarlo De Carlo: il quartiere Matteotti a Terni. In *Europa-America: architetture urbane, alternative suburbane*; F. Raggi, Ed.; Edizioni la Biennale di Venezia, Venice, 1978; pp. 23. © Mimmo Jodice.

The materials displayed in this exhibition included architectural drawings and photographs. 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 [25]. 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 (Figures 2–4). 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 5).



**Figure 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: Università Iuav di Venezia, Archivio Progetti, fund Giancarlo De Carlo. foto/1/075. Giancarlo De Carlo Archive, [https://sbd.iuav.it/Cataloghi/Cataloghi-dedicati/archivi-di-architettura/risultati.html&SOLOGET=1&NOPUNTOI=1&EW\\_FL=limits\\_ap\\_fresh.php&EW\\_DT=W5034&EW\\_PT=LT\\_EW&EW\\_RM=10&EW4\\_DLL=20&EW4\\_DLP=10&EW4\\_CJL=1&EW4\\_NVR=&EW4\\_NVT=&EW4\\_NMI=1&EW\\_R=-&EW\\_PC=FON=&EW\\_PZ=AFFON=&EW\\_K=F&EW\\_T=R&EW\\_EP=&EW\\_RP=10&EW\\_D=W5034&EW\\_P=LT\\_EW&&EW\\_ER=De!Carlo,!Giancarlo!;!archivio&EW=AFFON=0000009](https://sbd.iuav.it/Cataloghi/Cataloghi-dedicati/archivi-di-architettura/risultati.html&SOLOGET=1&NOPUNTOI=1&EW_FL=limits_ap_fresh.php&EW_DT=W5034&EW_PT=LT_EW&EW_RM=10&EW4_DLL=20&EW4_DLP=10&EW4_CJL=1&EW4_NVR=&EW4_NVT=&EW4_NMI=1&EW_R=-&EW_PC=FON=&EW_PZ=AFFON=&EW_K=F&EW_T=R&EW_EP=&EW_RP=10&EW_D=W5034&EW_P=LT_EW&&EW_ER=De!Carlo,!Giancarlo!;!archivio&EW=AFFON=0000009), accessed date: 25 April 2021.



**Figure 5.** The cover of the seventeenth issue of the magazine Terni, which was published in September 1973. Credits: Università Iuav di Venezia, Archivio Progetti, fund Giancarlo De Carlo. atti/081. Giancarlo De Carlo Archive, [https://sbd.iuav.it/Cataloghi/Cataloghi-dedicati/archivi-di-architettura/risultati.html&SOLOGET=1&NOPUNTOI=1&EW\\_FL=limits\\_ap\\_fresh.php&EW\\_DT=W5034&EW\\_PT=LT\\_EW&EW\\_RM=10&EW4\\_DLL=20&EW4\\_DLP=10&EW4\\_CJL=1&EW4\\_NVR=&EW4\\_NVT=&EW4\\_NMI=1&EW\\_R=-&EW\\_PC=FON=&EW\\_PZ=AFFON=&EW\\_K=F&EW\\_T=R&EW\\_EP=&EW\\_RP=10&EW\\_D=W5034&EW\\_P=LT\\_EW&&EW\\_ER=De!Carlo,!Giancarlo!;!archivio&EW=AFFON=0000009](https://sbd.iuav.it/Cataloghi/Cataloghi-dedicati/archivi-di-architettura/risultati.html&SOLOGET=1&NOPUNTOI=1&EW_FL=limits_ap_fresh.php&EW_DT=W5034&EW_PT=LT_EW&EW_RM=10&EW4_DLL=20&EW4_DLP=10&EW4_CJL=1&EW4_NVR=&EW4_NVT=&EW4_NMI=1&EW_R=-&EW_PC=FON=&EW_PZ=AFFON=&EW_K=F&EW_T=R&EW_EP=&EW_RP=10&EW_D=W5034&EW_P=LT_EW&&EW_ER=De!Carlo,!Giancarlo!;!archivio&EW=AFFON=0000009), accessed date: 25 April 2021.

De Masi tried to explain the reasons behind the failure of the project of the Nuovo Villaggio 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” [28] (p. 69). 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 Villaggio 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 [29].

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” [30,31] (p. 16). Note-worthy 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” [31] (p. 13). 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” [32] (p. 168). 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” [32] (p. 168). 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’. [30,31] (pp. 13,22)*

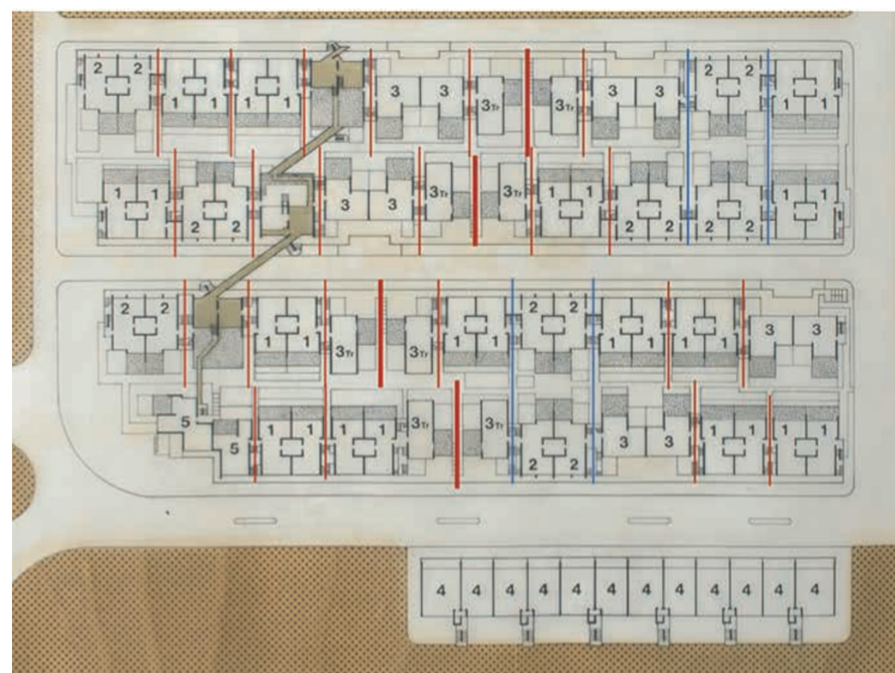
The design process of this project was not linear. As De Carlo remarks in his article titled “À la recherche d’une approche nouvelle: le nouveau village Matteotti à Terni” that was published in *Carré Bleu* in 1978, the aim of the design process of the Nuovo Villaggio Matteotti was to trigger a dialogue 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” [26] (p. 10) [29,33–35]. Some principles that characterised 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 perceived, walkways that are both variable and inspiring, the presence of greenery, carefully chosen details” [36].

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 [37]. He was passionate about several concepts of 19<sup>th</sup> century anarchist and socialist philosophy [38]. 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” [37] (p. 205). 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. [24,39] (p. 278)*

De Carlo was sceptical 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" [2] (p. 114). 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 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" [2] (p. 116).



**Figure 6.** Plans of first floor of the Nuovo Villaggio Matteotti neighbourhood project. Credits: Università Iuav di Venezia, Archivio Progetti, fund Giancarlo De Carlo. FGDC-pro/054/11/03. Giancarlo De Carlo Archive, [https://sbd.iuav.it/Cataloghi/Cataloghi-dedicati/archivi-di-architettura/risultati.html&SOLOGET=1&NOPUNTOI=1&EW\\_FL=limits\\_ap\\_fresh.php&EW\\_DT=W5034&EW\\_PT=LT\\_EW&EW\\_RM=10&EW4\\_DLL=20&EW4\\_DLP=10&EW4\\_CJL=1&EW4\\_NVR=&EW4\\_NVT=&EW4\\_NMI=1&EW\\_R=-&EW\\_PC=FON=&EW\\_PZ=AFFON=&EW\\_K=F&EW\\_T=R&EW\\_EP=&EW\\_RP=10&EW\\_D=W5034&EW\\_P=LT\\_EW&&EW\\_ER=De!Carlo,!Giancarlo!&archivio&EW=AFFON=0000009](https://sbd.iuav.it/Cataloghi/Cataloghi-dedicati/archivi-di-architettura/risultati.html&SOLOGET=1&NOPUNTOI=1&EW_FL=limits_ap_fresh.php&EW_DT=W5034&EW_PT=LT_EW&EW_RM=10&EW4_DLL=20&EW4_DLP=10&EW4_CJL=1&EW4_NVR=&EW4_NVT=&EW4_NMI=1&EW_R=-&EW_PC=FON=&EW_PZ=AFFON=&EW_K=F&EW_T=R&EW_EP=&EW_RP=10&EW_D=W5034&EW_P=LT_EW&&EW_ER=De!Carlo,!Giancarlo!&archivio&EW=AFFON=0000009), accessed date: 25 April 2021.

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 [40]. 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 [41]. 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" [13] (p. 161).

#### 4. 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] (p. 234). Manfredo Tafuri remarked that one of the reasons behind this decision of De Carlo was his "anti-formalism" [46] (p. 35) [47,48] (p. 58) [49]. 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" [46] (p. 20). He related this tension to that "between utopia and the real transformation of the world" [46] (p. 20), 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" [45] (p. 230). 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.

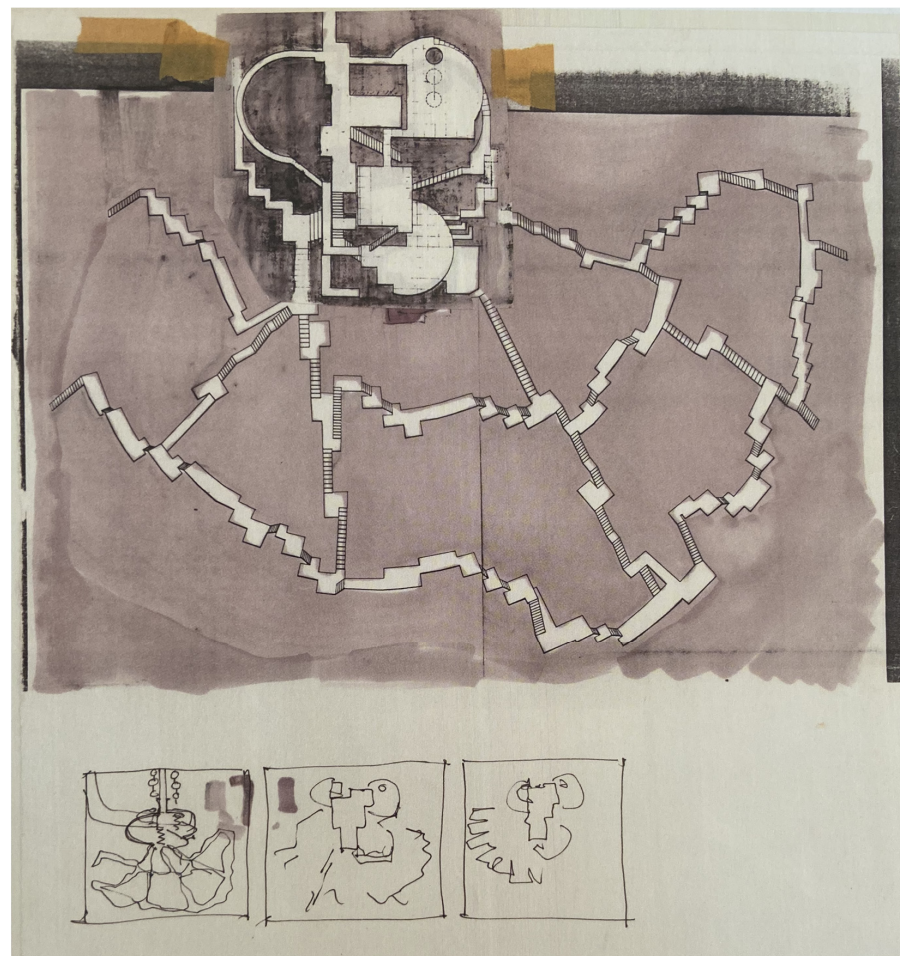
Through his projects, De Carlo aimed to contribute to "the real transformation of the world" [50]. The two concepts that are determining for the understanding of how De Carlo conceptualised the impact of architecture on reality are those of "guide project" ("progetto guida") [2] (p. 121) and "process 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" [32] (p. 130).

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" [50]. 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 [2]. 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" [51] (p. 119). His design for the masterplan for Urbino was derived from a close examination of the economic, spatial, and social conditions of Urbino [52]. Eamonn 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" [53] (p. 235). The concept of "process planning" was also pivotal for the design strategy employed in the case of the University College in Urbino (1958–1976) (Figure 7) [54], 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 [55].

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" [45] (p. 235). 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" [45] (p. 235). 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 treated, . . . ] as the warm core of the design and functional program" [45] (p. 235,240). However, instead of treating the Collegio del Colle as a strict "functional mechanism, [he aimed to enhance the humanity in students' daily lives" [45] (p. 240). 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" [16]. 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" [56] (p. 6).

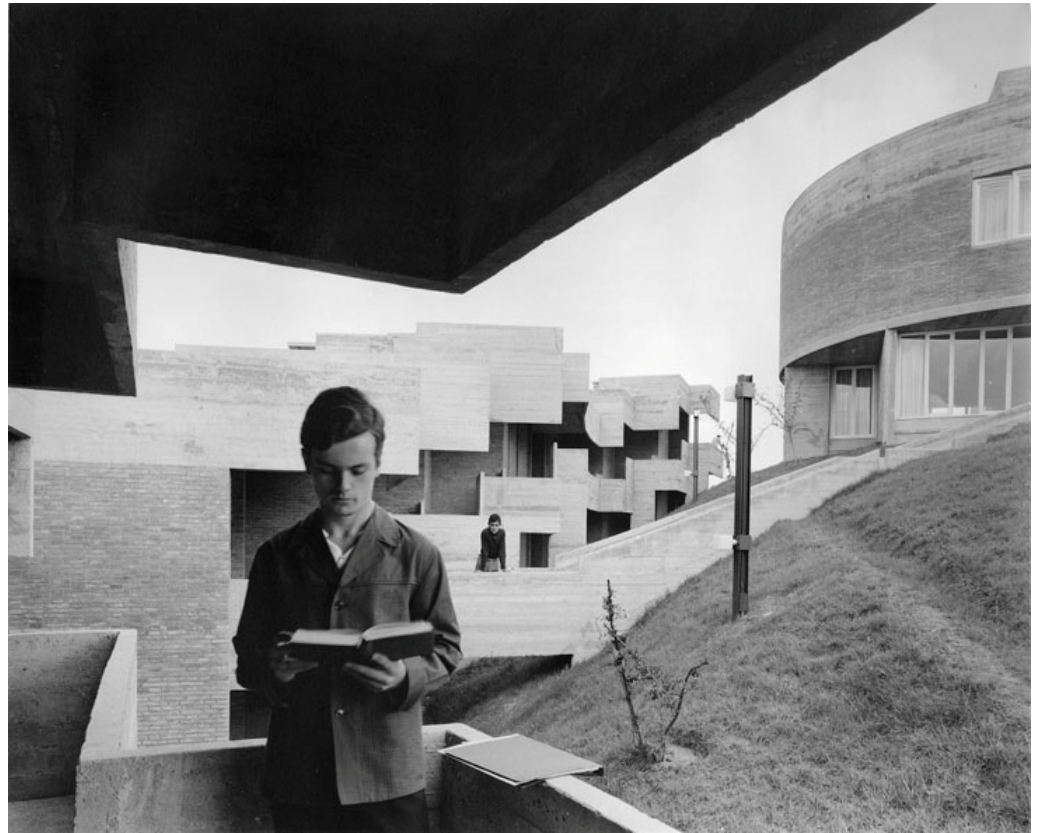


**Figure 7.** Giancarlo de Carlo, College del Colle student accommodation, Urbino, 1962–1966. Mass plan of the main building mounted in the plan of routes. Credits: Università Iuav di Venezia, Archivio Progetti, fund Giancarlo De Carlo. Giancarlo De Carlo Archive, [https://sbd.iuav.it/Cataloghi/Cataloghi-dedicati/archivi-di-architettura/risultati.html&SOLOGET=1&NOPUNTOI=1&EW\\_FL=limits\\_ap\\_fresh.php&EW\\_DT=W5034&EW\\_PT=LT\\_EW&EW\\_RM=10&EW4\\_DLL=20&EW4\\_DLP=10&EW4\\_CJL=1&EW4\\_NVR=&EW4\\_NVT=&EW4\\_NMI=1&EW\\_R=-&EW\\_PC=FON=&EW\\_PZ=AFFON=&EW\\_K=F&EW\\_T=R&EW\\_EP=&EW\\_RP=10&EW\\_D=W5034&EW\\_P=LT\\_EW&&EW\\_ER=De!Carlo,!Giancarlo!!archivio&EW=AFFON=0000009](https://sbd.iuav.it/Cataloghi/Cataloghi-dedicati/archivi-di-architettura/risultati.html&SOLOGET=1&NOPUNTOI=1&EW_FL=limits_ap_fresh.php&EW_DT=W5034&EW_PT=LT_EW&EW_RM=10&EW4_DLL=20&EW4_DLP=10&EW4_CJL=1&EW4_NVR=&EW4_NVT=&EW4_NMI=1&EW_R=-&EW_PC=FON=&EW_PZ=AFFON=&EW_K=F&EW_T=R&EW_EP=&EW_RP=10&EW_D=W5034&EW_P=LT_EW&&EW_ER=De!Carlo,!Giancarlo!!archivio&EW=AFFON=0000009), accessed date: 25 April 2021.

##### 5. 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) (Figures 8 and 9) and those of the Nuovo Villaggio Matteotti by Mimmo Jodice (b. 1934) (Figure 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 [57]. 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) [58] (Figure 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.** Giancarlo De Carlo's collegio del Colle, Urbino, 1962–1965. Dimensions of the photograph: 24 × 30 cm. Photograph by Cesare Colombo. © Cesare Colombo.



**Figure 9.** Collegio universitario del Colle in Urbino by Giancarlo De Carlo, 1962–1965. Photograph taken by a student during a student workshop held in Urbino in 1965. Credits: ZHdK Archive



**Figure 10.** Photograph of the Nuovo Villaggio Matteotti in Terni by Mimmo Jodice. © Mimmo Jodice.



**Figure 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. © Eredi Luigi Ghirri.

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

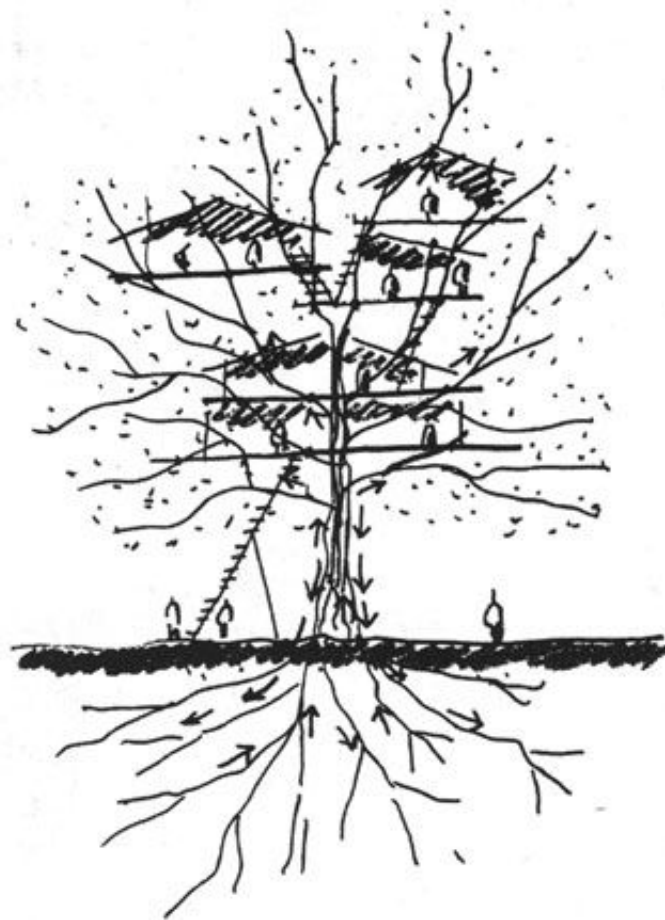
inside? The architecture critics never speak about the way a building answers the needs of its users?" [59]. This remark of De Carlo brings to mind François Penz's following observation, in *Cinematic Aided Design: An Everyday Life Approach to Architecture*: "To enrich our understanding of architecture with affect and lived experience is an attempt to address Robin Evans' remark on the absence of the way human figures occupy 'even the most elaborately illustrated buildings'" [60,61] (p. 130). Cesare Colombo, apart from the photographs of De Carlo's collegio del Colle in Urbino, also took a photograph of De Carlo's debates with Gianemilio Simonetti in front of the protesting students during the fourteenth Triennale di Milano of 1968. This photograph contributed significantly to the dissemination of the ideas of De Carlo's approach (Figure 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" [62].



**Figure 12.** Giancarlo de Carlo debates with Gianemilio Simonetti as protesting students take over the fourteenth Milan Triennale in May 1968. Photograph by Cesare Colombo. © Cesare Colombo.

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 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" [32] (p. 84). 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" [48].





**Figure 13.** Giancarlo De Carlo, *Le ragioni dell'architettura*. Sketch published in F. Serrazanetti, M. Schubert. *Giancarlo De Carlo: Inspiration and Process in Architecture*; Moleskine Srl: Milan, Italy, 2011, pp. 24. © Anne De Carlo.

### **6. Towards a Conclusion or Problematising 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” [63] 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” [64] (p. 70). 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.” [65] (p. 77).

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” [66] (p. 73). In order to grasp the significance of “crossbenching”, we should take into consideration that the former “[c]rossbenching constitutes an operative practice” (p. 44). 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 challenging 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” [32] (p. 130). 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.

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