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# Participation and/or/against tacit knowledge: ILAUD, 1976–1981

Prologue: Urbino, 1979

Three grainy, black-and-white photographs of an intriguing metal arch were published in the 1979 Annual Report of the International Laboratory for Architecture and Urban Design (ILAUD). It seems to float, two curves barely visible, above the ruined wall of the Orto dell'Abbondanza in Urbino, installed by three student participants of this long-running summer workshop: Kjell Beite from the Oslo School of Architecture (AHO), James Monday from the University of California (UC) Berkeley, and Pieter Uyttenhove, part of a contingent of Belgian schools. In one photograph, we see four figures—perhaps the fourth is the local craftsperson who made the arch—straining to install it, above a precipitous drop to the carpark in the Mercatale square below. Equally intriguing is a text accompanying the images. They argued this installation would provoke Urbino's residents to react "openly and honestly" to this new city gate, as a way to mediate between their skills as designers coming from the other contexts and the "collective

Fig. 1 Kjell Beite, James Monday, and Pieter Uyttenhove (1979). Installation titled "One to One: Project for the Orto dell'Abbondanza." [Photographs from ILAUD Annual Report, 1980. ILAUD Archive, Biblioteca Poletti, Modena]
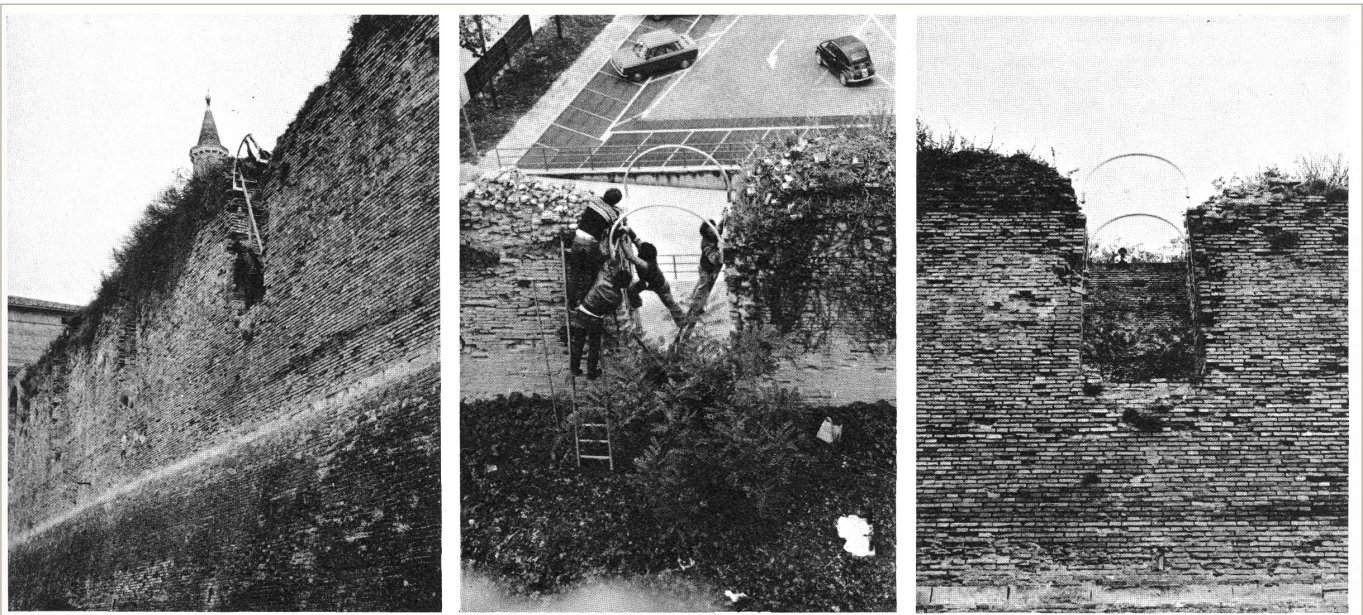
imagination" that already existed in the city. They conclude, however, that "this remains to be seen."[1]

The project reads as an earnest attempt to engage with users across linguistic and cultural barriers, yet they had been beset with problems only hinted at in this final line. ILAUD's founder, Italian architect Giancarlo De Carlo,[2] reported that the process of finding and commissioning a craftsperson for their arch dragged on so long that it was only ready in the final week of the summer workshop. With little time for consultation and discussion, De Carlo judged that "the result was therefore scarcely significant."[3]

De Carlo had founded ILAUD as a recurring platform for architecture and planning education, operating outside traditional academic institutions. From the initial workshop in Urbino in 1976, it brought together students and educators from various European and North American architecture and planning schools alongside a revolving roster of prominent urban designers, planners, architects, theorists, and historians, including several members of Team X.[4] De Carlo insisted ILAUD was not a summer school where "traditional schools are reproduced, in a carefree holiday and travel atmosphere … but a laboratory where all the participants are equally involved in common research activity."[5] It consisted not only of the Residential Course (lectures, seminars, site visits, and a design task), but also the Permanent Activities (prepared by each school throughout the year), the real urban design projects (in Genoa in 1980 and Pistoia in 1983), all collated in publications such as the annual reports, year books, and intermittent bulletin updates. Each year, the various activities of the "Laboratory" focused on themes decided the year before: between 1976 and 1980, these themes were "re-use" and "participation," although discussions of participation continued to dominate ILAUD in later years.

Despite its ambiguous success, the metal arch offers us a view into some of the internal debates in ILAUD on this subject of participation. While the students were unable to engage meaningfully with residents, De Carlo praised the one-to-one installation, and the consultation process it enabled, as a possible future direction for ILAUD. His comments were significant because, in previous years, he had insisted that ILAUD did not expect students to actually engage in direct participatory practices at all, but instead deploy the method of "reading" the city, which had been developed over several years in ILAUD meetings and seminars: identifying the social significance of the built environment through analysis, drawing and, in particular, describing its contradictions, which might hint at existing behavioural or constructional logics submerged within the city.[6] In the 1977 Annual Report, for instance, he wrote:

> Another important principle was that of not expecting that "participation" could be concretized in a direct contact with Urbino residents (which would be next to impossible for difficulties in language, time limits, unavoidable abstraction of the topics). One should concentrate instead on "reading", that is on the attempt of understanding the real needs, the cultural traditions, the expectations, the means of expression of the Urbino community, through the perception of tensions circulating in the organizational and formal configuration of the environment.[7]

As several ILAUD members observed, there seems an impossible contradiction here, between the organisation's aims and results. Afterall, De Carlo had

deliberately framed participation in opposition to the way modernist architecture and planning had simplified and abstracted "human and social behaviour": participation, in contrast, would involve "the presence of the users during the whole course of the operation … the different phases merge and the operation ceases to be linear, one-way, and self-sufficient."[8] Indeed, architect and educator Lode Janssens from Sint-Lukas Brussels had criticised this same method of reading as a "safety-belt … a one-directional system from the observer to the observed subject … [which] gives *priority to the experiential approach of architecture* … but is no substitute for participation."[9] In this sense, the metal arch was unusual at ILAUD in attempting to do both. It "read" the Orto dell'Abbondanza and its place in the city through its double urban perspective—observing the need for a new civic entrance to the city and abstracting a form of arch already present in the area—while also attempting direct participation. Indeed, it hints that these approaches were ultimately complementary.

Understanding ILAUD

In this paper, I argue that, rather than representing a contradiction—between what Janssens characterised as a real "participatory ideology," as opposed to superficially "participatory architecture"—these approaches were united, on a more fundamental level, in their efforts to articulate new relationships between the intentions of designers and the autonomous desires of users of the built environment. In this sense, the various positions of ILAUD's participants reflected an alternative to both the top-down abstraction of modernist design, and what De Carlo and ILAUD characterised first as "formalism" and later as "eclecticism." ILAUD offers a useful microcosm through which to understand the similarities and dissimilarities of often divergent discourses on architecture and urban design—held by students, architects, planners, urban designers, and artists in the same period, from various geographic and theoretical milieus—which were, nonetheless, joined in their interest in accessing the tacit knowledge of everyday people.

I am interested in the continuity of two, seemingly oppositional, positions. The first closely aligned with De Carlo's theory of reading, interested in the material reality of the built environment as a window into the tacit knowledge, the needs and desires, of society, exemplified by the theorisation of architectural tacit knowledge at Université de Montréal, but equally the phenomenology of AHO and the disciplinarity of ETH Zürich. The second focused on Janssen's direct participation—consulting with residents who explicitly articulate their needs—supported by other participants from various schools in Belgium and from MIT and UC Berkeley. Rather than framing this as a strict division, I argue that these approaches instead represented analogous solutions to the problem of user engagement developed by more humanist architects and theorists on one hand and more technocratic architects and planners on the other. To understand the relationship of these various approaches at ILAUD, I engage in a close reading of the lecture transcripts, seminar reports, and student work published in the ILAUD annual reports. I triangulate these reports with archival documents, contemporaneous essays written by ILAUD participants, and a small body of secondary literature on these recurring workshops. In this sense, although discourses on issues such as participation were developed in other forums in the same period, I will focus on ILAUD's own understanding of these terms.

In insisting on what ILAUD's constituent school shared, rather than focusing on their disagreements, this paper represents a historical re-reading of the organisation, often running counter to the interpretation of participants themselves. For Janssens, there were clear differences between participants from different countries: "the Italian map rage; the Swiss technology; the Belgian finickism; the Spanish historicism."[10] Similar divisions were observed by the architect and Team X member Peter Smithson and by John McKean, then lecturer in architecture at the North London Polytechnic. Smithson observed that students' "approach to the problem reflected almost exactly what they have been taught. For example, the MIT people have been trained in urban analysis, the Belgian in flexible-lease methods, and so on."[11] McKean suggested that differences between students "within a continental background of 'participation' … show up the ideological gulfs which such a laboratory could bridge. Between MIT and Barcelona, Leuven and Zagreb, the theoretical (the latins [*sic*] say 'ideological') distances are immense."[12] Italian architectural curator Mirko Zardini, who had participated in ILAUD in 1978 as a student from Venice, reiterated this divide in his authoritative 1997 history of ILAUD, positioning Zürich and Barcelona on one side of an "irreconcilable" division—Zardini characterises their "more direct interest in the discipline of architecture, tinged with formalism"—with MIT and the schools from Northern Europe, which had "a greater commitment to participation, concerned largely with political and social aspects."[13]

Although these often-subtle distinctions certainly did exist at ILAUD—De Carlo actively welcomed a diversity of approaches[14]—I am interested in what brought this diverse group of schools and practitioners together for so many years.[15] Projects such as the double metal arch, combining both direct and indirect forms of participation, point to one such common thread traced by this paper: that both the humanist and technocratic positions were facets of the same turn away from modernism and towards people in architectural culture more broadly, and that both involved different kinds of political commitment.[16] It is by looking at these positions through the lens of one event, ILAUD, that we can begin to understand the relative approaches and perspectives—many of them tacit, hardly explicit in the individual pedagogical contexts—of a diverse group of designers brought together in Urbino.

Regionalism and tacit knowledge

Although the Université de Montréal officially participated in ILAUD only in 1980 and 1981, its contributions are emblematic of the more humanist approach to engagement at ILAUD. In perhaps the most succinct summation of this position, Montreal-based artist, architect, and writer Melvin Charney wrote in 1984:

> My work [is] not rooted in a Montreal regionalism but rather in the generalized condition of "regionalism" underlying all architecture: a tacit dimension of architectural knowledge which can only but exist outside the accepted idioms of an architectural community at any given point in time.[17]

In several texts and lectures in the 1970s, Charney used the term "tacit knowledge"—adapted from the work of philosopher and scientist Michael Polanyi—in order to articulate a position in opposition to transregional modernism.[18] Instead, he argued that a great deal of knowledge of the built environment—its construction and spatial organisation, of both cities and individual buildings—could not

be codified into explicit texts or directly taught in architecture schools, but was rather embodied in continuous building traditions, endemic to a particular region and passed on between craftspeople and residents. He wrote:

> … man's knowledge of the structure of the artefactual environment is embodied in his active relationship to and his active making of his physical structures … architecture attempts to objectify his knowledge of environmental structures so as to render it explicit i.e. instrumental, in the design process.[19]

The purpose of design, therefore, was to draw out this tacit knowledge of the city that already existed in the built environment and its citizens but which was, nonetheless, often suppressed by governments, architects, and planners; he accused modernist architects of regarding city sites as mere voids. This was particularly true in the context of Montreal, where anglophone elites had neglected francophone building culture.

In this sense, he implied it was unnecessary to engage in the kind of direct participation advocated by ILAUD members such as Janssens. He urged his students in the urban architecture studio he led with colleagues at the Université de Montréal—the *Unité d'architecture urbaine*—to look closely at what was already constructed in front of them.[20] In striking parallel with ILAUD's process of "reading,"[21] they redrew the "layers of the city" to seek out the physical and social traces its residents had left behind in its "material structure": the relationship of streets and plots, building forms, repeated elements such as party walls and facades, and local construction systems. Indeed, Charney seemed to imply that the full richness and complexity of our collective perception of cities and buildings—and their material reality—was not reducible to the limited range of desires and experiences that groups of individuals could express, explicitly, when engaged in participatory consultation and design processes.[22]

We can recognise something of this approach in a project at the 1981 ILAUD Residential Workshop in Urbino. A student from Barcelona, Jaume Mutlló Pàmies, specifically notes the influence of discussions with Charney on his project for a pavilion and piazza linking the new and old towns (Fig. 2).[23] Its intention to draw from existing logics of the city's squares—both the idealised painting of the *Città Ideale* in the Ducal Palace and more informal medieval spaces—could be read as a reflection of both De Carlo's reading and Charney's layering. We see this in Pàmies' observation that the Scalzi church and Accademia di Belle Arti already bounded an implied piazza, but one which lacked a civic identity because of the trees that obscured these bounding facades: a kind of contradiction in urban space, its potential revealed if these trees were removed. Moreover, Pàmies' project is unusual at ILAUD in emphasising the materiality of the construction, which repurposed simple local building methods—such as concrete foundations and lightweight metal roof sheeting—in a form resembling the rotunda of the *Città Ideale*.

Charney's references to regionalism and a relationship to environment also hint at the influence of his one-time colleague at the Université de Montréal, Alexander Tzonis.[24] Formulated in their 1981 essay, "The Grid and the Pathway," Tzonis together with Liane Lefaivre identified a *critical* form regionalism which counterposed the freedom of vernacular architecture to the top-down planning of modernism and the welfare state.[25] While remaining wary of associations with

Fig. 2 Jaume Mutlló Pàmies (1981). Project titled "The Turning Point." [Drawings from ILAUD Annual Report, 1981. ILAUD Archive, Biblioteca Poletti, Modena]
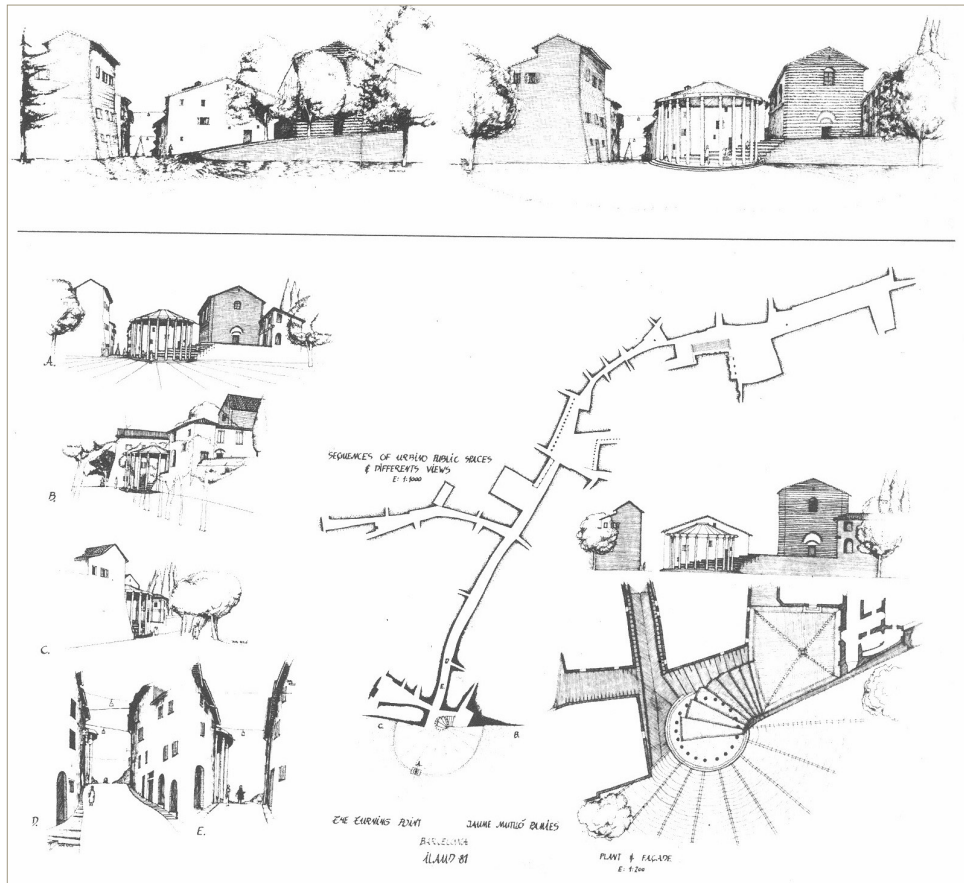
populism, they argued that this interest in "typology [which] … has not rejected a historical context" pointed the way towards a potential "new kind of relation between designer and user, without new kinds of programs."[26] In this sense, in this essay Tzonis and Lefaivre were less interested in the form of the architectural response—in the precision of its vernacularism—than in its relationship to clients and people.

We can better understand Tzonis' relationship to, and influence on, ILAUD through his participation as respondent in the "Leuven Seminar on Participatory Design," hosted by Janssens along with Marcel Smets and Jan Schreurs in 1979. According to Tzonis, many of the cases presented at the seminar isolated participatory practices from their social context. Instead, he argued for closer study of the connections between constructed architecture and both cultural meaning and social relationships.[27] At this same seminar, De Carlo had also emphasised the way "that some 'primitive' cultures and even some more modern advanced population groups … who still possess traditional knowledge of materials and common sense of construction, know rules of formal language."[28] Therefore, while ILAUD remained anti-formalist, De Carlo and others, such as Tzonis, continued to emphasise the importance of deploying some existing forms in connecting people to their dwellings.

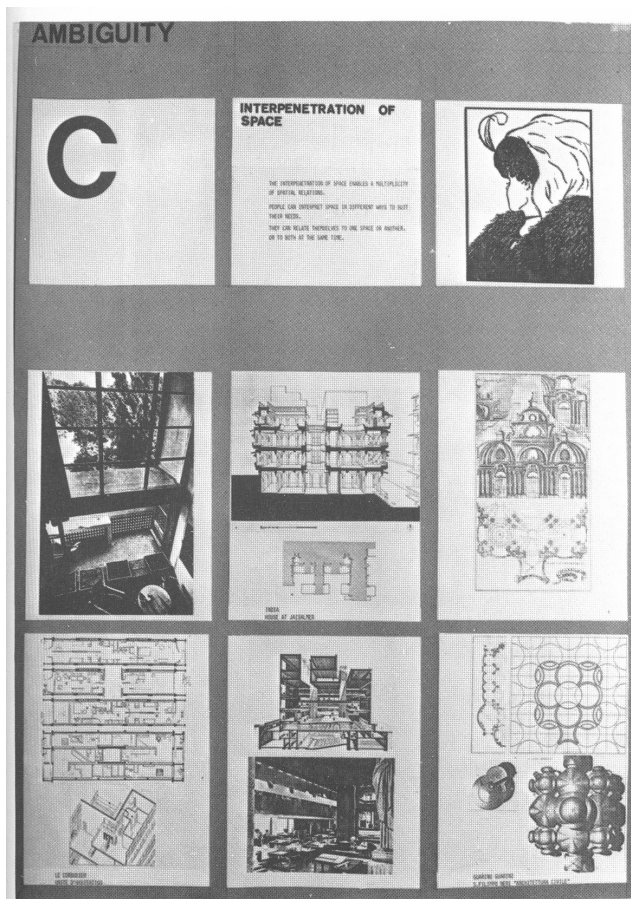## Phenomenology, materialism, and reading

There is a similar sentiment at play in Christian Norberg-Schulz's phenomenological approach, dominant at AHO, and the work presented by members of ETH Zürich. Norberg-Schulz, who had played an important role on ILAUD's board since its inception, most clearly staked his position in relation to the workshops in a lecture in the 1977 edition. He argued that ILAUD had hitherto focused on the "process of sharing," rather than the "content" of participation—accessing and understanding the "shared values" of dwelling and, above all, the importance of "belonging to a place"—which had generated a technocratic context in which it was difficult for designers to engage with the issue.[29] As architectural historian Jorge Otero-Pailos has argued, Norberg-Schulz's position—most famously articulated as the notion of *genius loci*—was a consciously humanist, and subjective, reaction to the supposed objectivity of modernism.[30]

At the 1978 workshop, students and tutors at ETH had also recognised the importance of collective and personal forms of identification with place. A series of panels assembled "12 theses" for participation on topics such as Ambiguity— "contradictory levels of meaning and use in architecture offer the possibilities of choice and interpretation"—and Elements of Identification (Fig. 3).[31] At the same time, as a lecture from their teacher Bernhard Hoesli made clear in 1979, this approach was, like that of De Carlo, less unequivocally anti-modernist than Norberg-Schulz, suggesting that the true legacy of modernism was a focus on "material facts" in the built environment: on closely observing use and context in material terms. As it was for students at AHO, they argued for the importance

Fig. 3 Participants from ETH Zürich (1978). One of twelve thesis panels, titled "Ambiguity." [Panel and text from ILAUD Annual Report, 1978. ILAUD Archive, Biblioteca Poletti, Modena]

of some kind of form: for Hoesli and his colleagues, abandoning the intentionality of form was a failure of the architect's task. But this form should not be arbitrary or autonomous—not a postmodern return to "historical reference nor … structuralist-semiotic search for 'significance'"—instead one that must be combined with a sense of place and detailed knowledge of the construction systems of traditional forms.[32]

While I have so far suggested an equivalence between these more humanist, disciplinary positions at ILAUD and De Carlo's method of reading, there were important differences. Whereas Charney, Tzonis, Norberg-Schulz, and Hoesli regarded these approaches to participation—in close observation, materiality, regional variation, and *genius loci*—as appropriate for all architecture, for De Carlo reading was an alternative to more direct forms of participation only because of the limitations imposed by the summer workshop format: "as far as 'participation' is concerned, the users' sharing of the whole design process is essential in a real situation. But in a research work … obstacle[s] can be got around by going deeper into the 'reading.'"[33] Indeed, in the Leuven Seminar, De Carlo had argued forcefully for participation as a situation for potential power

sharing between architects, their clients, and other users of the built environment, against the backdrop of the cultural heritage of a particular place.[34]

Participation and planning

This argument aligned much more closely with the participants from the Belgian schools, and with discourses ascendant in the United States, prominently represented at ILAUD by MIT. Indeed, the Belgian convenors of the Leuven Seminar had also defined participation as "a method essentially based on human equality and dignity," rejecting the model of architect as a problem-solving specialist.[35] Instead, they called on designers to give decision-making power to users in the design process while also—acknowledging that direct participation is not always perfectly democratic—investing built forms with an openness that could be adapted by users once constructed. In this sense, they were more interested in hearing from users themselves and allowing users to change their environment in the short term, rather than interpreting context and culture through the material changes already made by inhabitants to existing buildings and urban configurations.

Marcel Smets, Belgian architect and urban planner from KU Leuven, put this position particularly clearly in his lecture to ILAUD 1977. While he agreed that designers should observe the city and reproduce its typologies and street systems on the urban scale—he gives Bologna's "adjoining gallerias" as an example— the scale of the individual development required real contact with residents and their needs. To do otherwise risked participation becoming an "abstraction of formal outcome of a real design process into rigid models."[36] Indeed, Smets would leave ILAUD in 1979 after playing an important role in formulating the organisation's curriculum and structure in the first four years; amongst the reasons he gave for his departure was ILAUD's overly broad definition of participation.[37]

Meanwhile, planners at MIT, such as Julian Beinart and Tunney Lee, emphasised the political component of participation. In a lecture at ILAUD in 1976, Beinart also reflected on what he called "post-hoc transformation of the form" on one side—through processes such as appropriation and self-built housing— and active user participation in the design process.[38] While Lee, like De Carlo, had acknowledged that direct participation with clients and users was not always possible in an educational context,[39] in a lecture at ILAUD in 1978 he argued for a broadened understanding of reading: one which involved observation and sketching, a deep knowledge of history and place, but one ideally combined with surveys, questionnaires, and ultimately collaboration with inhabitants.[40] For Lee, participation was nothing less than the practical outcome of class analysis: a radical reorganisation of design that undermined capitalist systems by directly serving tenants and users, rather than developers, repositioning the economically and racially disenfranchised as partners in creating their environment, rather than mere consumers.

These approaches can be detected in a project in the same year, produced by MIT student Diane Georgopulos, for a path leading from De Carlo's student housing project to the Mercatale carpark (Fig. 4). She developed a nine-step procedure which included observations of how people already walked this route and drafted a hypothetical consultation process with stakeholders. From this simulated participation, she proposed a new garden for the Mercatale which prioritised

Fig. 4 Diane Georgopulos (1978). Project titled "Cappuccini—Mercatale Connection Study and Design." [Drawings and text from ILAUD Annual Report, 1978. ILAUD Archive, Biblioteca Poletti, Modena]

the safety of students who she observed walking across the carpark and claiming space for public use by constraining commercial activities to places where it already existed along Via Mazzini. While it is difficult to grasp the project itself from her plan, the process of engagement had a level of speculative precision that matched more architecturally developed projects at ILAUD.

Diane Georgopulos

Cappuccini - Mercatale connection study and design

The procedure used to study and design a piece of a route leading from the Cappuccini College to the Mercatale was the following:

1. the statement of the problem in the sketch design phase as a reflection of concerns of the University of Urbino for the safe passage of 1,000 students who will be in residence at the Cappuccini College, to the Via Saffi area.

2. the draft of a process for the incorporation of different interest groups likely to be effected by the increased pedestrian traffic.

3. the development of a list of things that the connection could be, through the simulation of a public meeting consulting students residents, business people, religious leaders, University officials and town council members.

4. the survey of alternative routes from the Cappuccini to the University area.

5. selection of routes from list of alternatives which most closely meet criteria established by the public meeting as well as those of the architect.

6. the brief analysis of major directions and related landscape elements, generalized land use, edges and their attributes; obervation of activity by townspeople along the edges and a projection of what activities could be supported along the route.

7. the development of an analogy for design based upon an observed relationship between the spatial organization of the Giardini of the Palazzo Ducale and the Mercatale.

8. the revision of the problem statement in the form of issues goals and specific design strategies.

9. the design of a public garden whose aims were:

a. to secure for the students a safe passage across the Mercatale (currently used for parking).

b. to reinforce the existing commercial activity growing down the west side of the Via Mazzini through the Porta Valbona along the Via Nazionale.

c. to claim for public use, the way along the Mercatale to the Rampa.

d. to reinforce the Rampa as the major pedestrian connection to the town.

e. to relieve the pressure for commercial development along the east side of Via Nazionale thus preserving the open character of the Mercatale and the beautiful view from the road up to the town.

f. to intensity the quality of place by developing the area just outside the Porta Valbona as an anteroom to the town using a combination of built and landscape elements.

g. to incorporate in this anteroom some of the small scale physical definition found in Urbino including: paving patterns, banding colors, bollards, stone reinforced corners and dimensions of public furniture and enclosures.
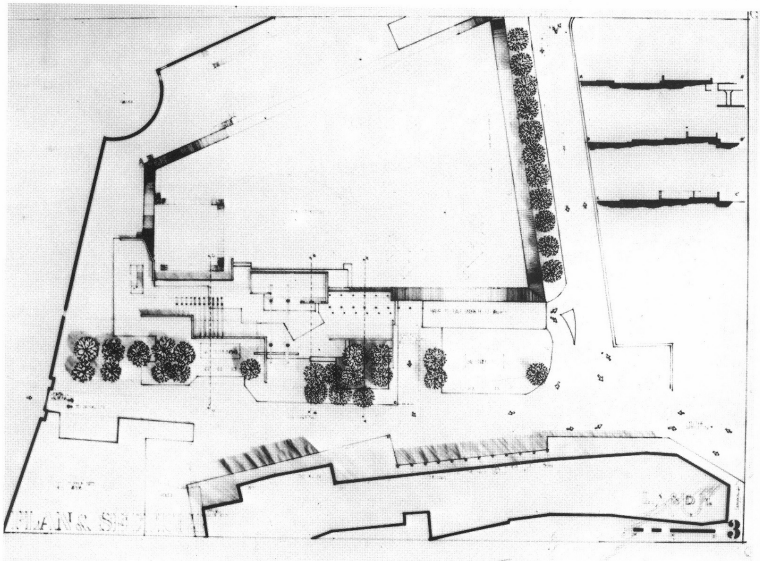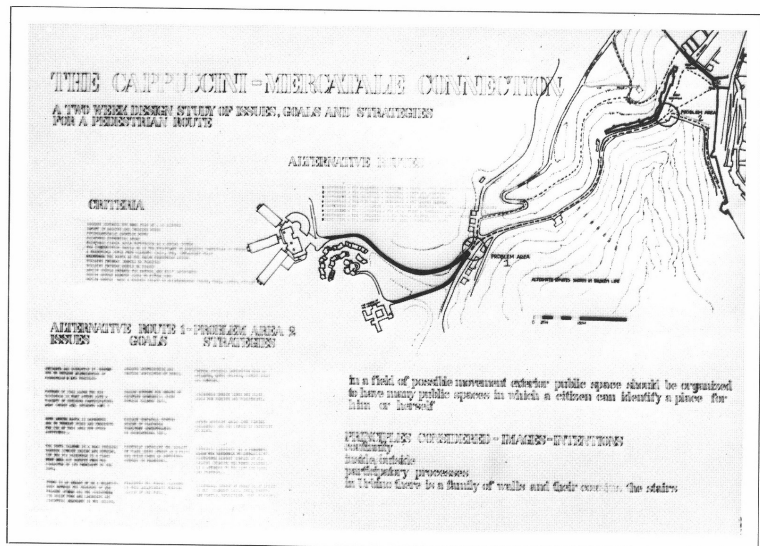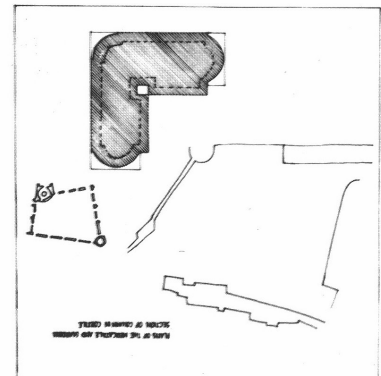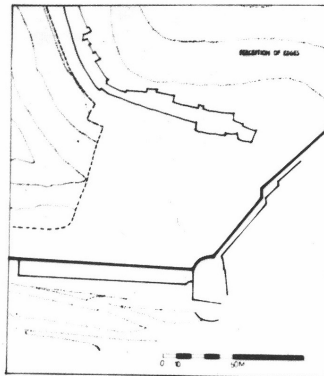
Conclusions

Charney had staked his pedagogical position—what he called Urban Architecture—in direct opposition to urban planning discourse in the United States. In planning, he saw "aesthetified, but anachronistic, positivist notions, a jargon derived from perceptual psychology, and a false conception of technology."[41] This paper considers only a small number of the projects, incidents, and figures over ILAUD's first six years, yet this cross-section suggests that this dichotomy between planning and architecture was less pronounced than Charney suggests, just as differences between technocratic and humanistic approaches to participation had more in common than Janssens implied. Although their methods might have diverged, these positions were all concerned with uncovering a type of tacit knowledge in the city and its residents that had been neglected: some forms that remained tacit in the built fabric and collective traditions, and others that were deliberately kept below the surface by earlier modernist architects, often due to institutional, racial, linguistic, and economic barriers.[42]

In this sense, although Smets was critical of the broad understanding of participation at ILAUD, even the most humanist positions in the organisation joined the most technocratic in attempting to approach users through real observation, consultation, and research, rather than simplistic assumptions and abstractions.

Moreover, in their engagement with the city and its people, this continuity of approaches staked a position in opposition not only to modernism but also to the arbitrariness of eclecticism, to return to De Carlo's term: the appropriate expression for users and place, rather than quotation or abstraction.[43] Yet, lurking behind this eclecticism is the spectre of postmodernism. In concluding, I want to speculate a little further on this complex relationship. Lode Janssens worried that ILAUD and De Carlo had never been transparent in their opposition to postmodernism.[44] This had obscured the way Charles Jencks' conception of the term shared many qualities with ILAUD's approach: particularly interests in memory, context, traditions, and participation. Similarly, McKean suggested that while members of Team X, such as Peter Smithson, "lump together and then dismiss the 'opposition,' everyone from Rossi to the Kriers [and] Jencks," other ILAUD participants hardly recognised such a strong divide.[45] Indeed, scholars have called the later writings of Norberg-Schulz postmodern; the same for Charney's art.[46] Rather than strictly respecting this stylistic label, the connections between these various planning and architectural approaches at ILAUD might imply another continuum: between modernism and what some would call postmodernism in the years to come.

NOTES

1. Kjell Beite, James Monday, and Pieter Uyttenhove, "One to One: Project for the Orto dell'Abbondanza," in *Signs and Insights: ILAUD Annual Report Urbino 1979* (Milan: ILAUD, 1980), 142.

2. Giancarlo De Carlo (1919–2005) was also a prolific editor and educator, founding the magazine *Spazio e Società* (1978–2001) and teaching at the Istituto Universitario di Architettura di Venezia and the Politecnico di Milano. He wrote widely on issues of participation, and deployed these principles in his schemes for housing at Terni and for the University of Urbino; this connection was the reason for hosting the first ILAUD in the town. De Carlo was also an active member of Team X. See: John McKean, *Giancarlo De Carlo: Layered Places* (Stuttgart: Edition Axel Menges, 2004); Britt Eversole, "Giancarlo de Carlo (1919–2005)," *Architectural Review*, 30 January 2014, www. architectural-review.com/essays/ reputations/giancarlo-de-carlo-1919-2005.

3. De Carlo, "Afterthoughts on the Design Work," in *Signs and Insights*, 107.

4. In 1979 students attended from: Berkeley, Lund, Rome, Venice, Oslo, ETSA Barcelona, Sint-Lukas Brussels, Sint-Lucas Gent, KU Leuven, MIT, AHO, Urbino, Zagreb, and ETH Zürich. Visitors and faculty included Francesco

Dal Co, Sverre Fehn, Bernhard Hoesli, Donlyn Lyndon, Renzo Piano, Peter Smithson, and Aldo van Eyck.

5. Giancarlo De Carlo, "Report on the First Residential Course in Urbino. September 6–October 31 1976," *ILAUD: 1st Residential Course Urbino 1976* (Milan: Gammaoffset for ILAUD, 1977), 9.

6. Elsewhere, De Carlo writes that "in order to know how to read, you have to know how to look deep into the stratifications, you have to discover and critically select the significant signs" (author's translation). De Carlo and Franco Bunčuga, *Conversazioni Con Giancarlo De Carlo: Architettura e Libertà* (Milan: Elèuthera, 2000), 138. See also Elke Couchez, "Reading by Drawing—ILAUD 1987: A Tentative Tool for Urban Regeneration," *OASE* 107 (2020): 39–47.

7. Giancarlo De Carlo, "Design Work," *ILAUD: 2nd Residential Course Urbino 1977* (Milan: ILAUD, 1978), 73.

8. He writes that "although the Modern Movement was born in a period of great intellectual expansion, it was also a period of great simplification of human and social behavior … the problem of organizing physical space was approached with the same criteria as those used in organizing the production of commodities." Giancarlo De Carlo, "An Architecture of Participation," *Perspecta* 17 (6 August 1980): 74–79.

9. Lode Janssens, "In Order to Discuss ILAUD," *Architecture, Multiple and Complex: ILAUD Annual Report Urbino 1984* (Florence: Sansoni Editore, 1985), 166.

10. Janssens, "In Order to Discuss ILAUD," 172.

11. Letter from Peter Smithson to Giancarlo De Carlo, 13 January 1977. ILAUD Archives, Biblioteca civica d'arte Luigi Poletti, Modena. Box: Correspondence.

12. John McKean, "Week by Week," *Building Design*, 23 November 1979, 9.

13. Mirko Zardini, "From Team X to Team x: International Laboratory of Architecture and Urban Design (ILAUD)," *Lotus International* 95 (1997): 76–97. Other important

commentaries include: Paolo Ceccarelli, *Giancarlo De Carlo and ILAUD, a Movable Frontier: The International Laboratory of Architecture and Urban Design from 1976* (Milano: Fondazione OAMI, 2019); Couchez, "Reading by Drawing."

14. "The diversity in approach … is to be considered as a desirable occurrence, since it gives the opportunity of enriching both the comprehension and the imagery of the problem of designing, through comparison of different points of view pertaining to different backgrounds." Giancarlo De Carlo, "Introduction," *ILAUD: 2nd Residential Course Urbino 1977*, 140–41.

15. ILAUD operated for several decades under De Carlo's leadership, in various northern Italian cities including Siena, San Marino, and Venice, continuing in a revised format even today.

16. It should be noted here that Zardini acknowledged that ILAUD itself played a role in bridging between the disciplinary and participatory positions through its focus on what Janssens called "the theory of 'equal power' … reflect[ing] the new social and political situation." Zardini, "From Team X to Team x," 85.

17. Letter from Melvin Charney to Margot Paris, 14 October 1984, Canadian Centre for Architecture, reference number DR2012:0012:096:011.

18. Charney cited Polanyi's book *Personal Knowledge: Towards a Post-critical Philosophy* (1958) in his influential polemical text "Towards a Definition of Architecture in Quebec" (1971) and in several other unpublished lectures and essays. See Melvin Charney, "Towards a Definition of Architecture in Quebec," in *On Architecture: Melvin Charney, A Critical Anthology*, trans. and ed. Louis Martin (Montreal and Kingston: McGill-Queen's University Press, 2013), 246–64; Melvin Charney, "Notes on Architectural Hardware: Of Grain Silos, Computer Circuits and Orbiting Machines" (lecture, MIT Hayden Gallery, Boston, MA, March 1969), Canadian Centre for Architecture, reference number DR2012:0015:024:008.

19. Melvin Charney, "MEMO Series on the Architecture of an Air Force MEMOrial," 9 (unpublished essay draft, April 1970), Canadian Centre for Architecture, reference number DR2012:0012:082:006.

20. Melvin Charney, 'Confrontations in Urban Architecture,' in *Ville Métaphore Projet: Architecture Urbaine à Montréal, 1980–1990*, ed. Irena Latek (Montreal: Éditions du Méridien, 1992), 100.

21. Charney also uses the term "reading" to describe this process, but it is unclear whether he refers directly to ILAUD's method, or simply borrows the term. Charney, "Confrontations in Urban Architecture."

22. Here, Charney seems to draw on Polanyi's argument that some tacit knowledge appears so natural that we are unaware we even know it, much less are capable of describing it. Michael Polanyi, *Personal Knowledge: Towards a Post-critical Philosophy* (London: Routledge, 1958), 62.

23. Jaume Mutlló Pàmies, "The Turning Point," in *Language of Architecture: ILAUD Urbino 1981* (Milan: Sansoni Editions, 1981), 119.

24. Tzonis would soon after take up a position at TU Delft. His influence on Charney can be seen in a series of letters between the two in the 1980s, Canadian Centre for Architecture, reference number DR2012:0012:096:025.

25. On the influence of liberalism on architecture in this period as an alternative to centralised modernist planning, especially disciplinary interest in vernacular architecture, see Anthony Fontenot, *Non-design: Architecture, Liberalism, and the Market* (Chicago: University of Chicago Press, 2021).

26. Alexander Tzonis and Liane Lefaivre, "The Grid and the Pathway," *Architecture in Greece* 15 (1981). Republished in *Times of Creative Destruction: Shaping Buildings and Cities in the Late C20th* (London: Routledge, 2016), 128.

27. Jan Schreurs, Marcel Smets, and Lode Janssens, eds., *Leuven Seminar on Participatory Design* (Leuven: Uitgeverij Acco, 1981), 50.

28. Schreurs, Smets, and Janssens, eds., *Leuven Seminar*, 57.

29. Christian Norberg-Schulz, "Dwelling Participation Place," in *ILAUD: 2nd Residential Course Urbino 1977* (Milan: ILAUD, 1978), 147–48.

30. Jorge Otero-Pailos, "Architectural Phenomenology and the Rise of the Postmodern," in *The SAGE Handbook of Architectural Theory*, ed. C. Greig Crysler, Stephen Cairns, and Hilde Heynen (London: SAGE, 2012), 136–51.

31. Marc Angelil et al., "Eidgenössische Technische Hochschule: Presentation of the Permanent Activities," in *Participation and Re-use: ILAUD Annual Report Urbino 1978* (Urbino: ILAUD, 1979), 28–30.

32. Bernhard Hoesli, "Participation: Eclecticism or Functionalism," in *Signs and Insights*, 58–59. As another ETH tutor, Tobi Stockli, noted in 1977, this emphasis on architectural design at the school was partly a reaction to a preceding period dominated by other approaches. Reported in Donlyn Lyndon, "Architectural Education," *ILAUD: 2nd Residential Course Urbino 1977*, 71. Although not stated here, this included the sociologist Lucius Burkhardt's influence on the school in the early 1970s. See Irina Davidovici, *Forms of Practice: German–Swiss Architecture 1980–2000* (Zürich: gta-Verlag, 2018).

33. De Carlo, "Introduction," *ILAUD: 2nd Residential Course Urbino 1977*, 5.

34. De Carlo, "Annex 1: Further Notes on Participation with Reference to a Sector of Architecture Where it would Seem Most Obvious," in *Leuven Seminar*, 71–78.

35. Schreurs, Smets, and Janssens, eds., *Leuven Seminar*, 12.

36. Marcel Smets, "How a Participatory Approach of Design can Nevertheless Result in Authoritarian Planning," *ILAUD: 2nd Residential Course Urbino 1977*, 149.

37. Letter from Marcel Smets to Giancarlo De Carlo, 24 October 1979. ILAUD Archives, Biblioteca Civica d'Arte Luigi Poletti, Modena. Box: Correspondence.

38. Julian Beinart, "Three Research Studies on Participation," *ILAUD: 1st Residential Course Urbino 1976*, 51.

39. See Edward Robbins et al., "The Client in Architectural Education: Three Interviews at M.I.T.," *Journal of Architectural Education* 35, no. 1 (6 August 1981): 32–35.

40. Tunney Lee, "Notes on Architecture and Social Justice," *Participation and Re-use*, 35–37.

41. Charney, "Confrontations in Urban Architecture," 101; Tunney Lee and Lawrence Vale, "Resurrection City: Washington DC," *Thresholds*, no. 41 (6 August 2013), 112–21, www.jstor.org/stable/43876503.

42. Building on Polanyi's theory, sociologist Harry Collins differentiated between "collective" tacit knowledge, which cannot be made explicit because it forms a web of complex reference points within a community, and "relational" tacit knowledge, which could be made communicated explicitly in theory but remains tacit in practice due to social forces. Harry Collins, *Tacit and Explicit Knowledge* (Chicago: University of Chicago Press, 2010).

43. ILAUD would turn more explicitly to the issues of eclecticism after 1981. See Giancarlo De Carlo, "Multiplicity of Language vs. Eclecticism," in *1982 Year Book: Multiplicity of Language vs. Eclecticism* (Florence: Sansoni Editions, 1983), 121–24.

44. Janssens, "In Order to Discuss ILAUD," 169.

45. McKean, "Week by Week."

46. Otero-Pailos, "Architectural Phenomenology and the Rise of the Postmodern"; Mark Cheetham and Linda Hutcheon, *Remembering Postmodernism: Trends in Canadian Art, 1970–1990* (Oxford: Oxford University Press, 2012).