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Abstract. The essay explores an updated application of Giancarlo De Carlo's participatory method through the renovation of a hotel timeshare in Gioiosa Marea (ME), which was used by one hundred and thirty-five families. The experience integrated sociological enquiry, metric-environmental surveys, and subjective and objective tools to meet the needs of users who wished to adapt the spaces to their new living requirements. The shared design produced flexible solutions, improving functionality and comfort, and renewing the link between space and people. The experimentation allowed clients to re-evaluate the architect's role as a social and cultural mediator in the development of living space, and the designer to develop a replicable method.

Keywords: Involvement; Transitional living; Spatiality; Shared design; Domesticity.

Reflections on the architect's social role

The new media and the recent advent of artificial intelligence are progressively distancing people from critical reflection on physical space. The habit of flatly reading places distances people from the perceptive knowledge of the dimension characterising architecture, namely space. The individual, limiting himself to passive observation, does not move and, by not moving, does not define the space, thus struggling to recognise its value. In this scenario, the role of the design architect loses its meaning, overwhelmed by other professions concerned with defining images, and the recipients of architecture seem increasingly incapable of recognising their housing needs.

The project, described below, borrows some distinctive features from the tentative design work carried out by De Carlo for the housing of workers at the TERNI steelworks in Terni, which led to the construction of the Nuovo Villaggio Matteotti, completed in 1974. The architect was supported by key figures such as Gian Lupo Osti, general manager of the steelworks, architect Cesare de Seta, and sociologist Domenico De Masi. The project utilised two primary tools, namely exhibitions and interviews. The exhibitions, organised to acquaint workers with an innovative approach to architecture, were two. The first exhibition aimed to highlight residential building districts within virtuous European contexts, while the second presented the typologies of apartments that resulted from participatory planning. The interviews with potential recipients of the housing, conducted by De Masi, served to collect the needs and opinions of the prospective inhabitants of the houses. The method was intended to be concluded with a collection of feedback following a period of the recipients living in their new homes; however, the change in management at TERNI prevented De Carlo from completing his experiment. De Carlo's methodology for the Nuovo Villaggio Matteotti, which he employed in various contexts, is characterised by a fluid approach based on trial and error, where each phase influences the subsequent phase and alters the conditions under which it was initiated, in a cycle centred on «the continu-

ous alternation of information, propositions and verifications» (De Carlo, 1970). The work presented in this essay constitutes an attempt to identify new and simple tools for the same purpose, namely a test of listening and interpenetration by the designer who maintains the central role of space and, therefore, the construction of the architecture.

Collective design experimentation

The design experimentation focuses on a former noble villa constructed on four staggered levels, historically serving as a summer residence. During the 1980s, the villa was subdivided into twenty-seven mini-apartments for shared ownership, which, at the time of the experiment, were owned by one hundred and thirty-five families. The apartments are primarily utilised during the summer months, with each apartment being shared by a minimum of three to a maximum of eight families, exhibiting diverse compositions and coming from various regions across Italy. The duration of occupancy varies, with each family residing in the apartment for a minimum of one week and a maximum of four weeks. Consequently, the population residing in the apartments during this period is characterised by significant heterogeneity. The exceptional nature of this condition made it possible to draw a parallel with the Nuovo Villaggio Matteotti, where the workers, albeit with different identities, shared the same basic needs. This was the spur to develop an effective method that could be replicated in similar conditions.

Framing, investigations, and surveys

The initial design phase entails a comprehensive analysis of both the existing conditions of the site and the client's requirements. This approach aligns with De Carlo's methodology, wherein he conducted a thorough investigation of the context, including the existing dwellings for workers at Villaggio Italo Balbo. Facing the Aeolian archipelago, the villa enjoys a pleasant panorama and is part of a rich agricultural landscape, featuring olive groves surrounded by Mediterranean scrub, while the coastal strip is characterised by a mighty promontory, which closes the natural basin overlooking the villa. Since its first configuration as a timeshare in 1985, it has undergone an interior renovation in 2000, during which all the furniture was replaced.

In a continuation of the practice of utilising exhibitions and interviews initiated by De Carlo, condominium meetings were employed as opportunities to highlight the project's potential and stimulate debate. An email address was set up to gather requests and opinions in both free form and as responses to questionnaires. The method is implemented precisely with tools that, by exploiting current technologies, shorten the distance

between clients and designers, and allow design phases to be continued, with the aim being gradually adjusted throughout the process. The De Carlo method is complemented by a survey of the interiors, which is a means to understand the space's use. A questionnaire was sent to them with the aim of getting to know the clients with whom the project would be designed, and of later understanding whether there was a correlation with the needs of use. The results showed that the families who use the apartments are couples over sixty with children and often grandchildren, but also couples without children or young couples with small children. The level of education is high, the people are all from the south of Italy, with a strong peak from Sicily, and all of them have been multiple owners for over thirty years (Tab. 1).

An analysis of the data, in addition to the narratives shared by clients during meetings, reveals that the Villa functions as a retreat for the multi-owners. It is perceived as home. Like the anthropic survey, the metric and photographic survey operations were carried out in several phases, and were essential for drawing up the questionnaires to be submitted to the clients and for the development of project proposals. The initial survey was conducted immediately following the conclusion of the summer season, with the aim of observing the arrangement of furniture within both interior and exterior areas. This approach enabled the observation of how the spaces were utilised. Chaos reigned in the apartments, opening the sofas and chair beds meant not knowing how to put away the decorative cushions and covers. Closing them meant having to make and unmake the bed every day, and find a place to put away the pillows. Such difficulties made most people opt to always leave the sofas and chair beds open, cluttering up all the rooms. The chairs, positioned at the sides of the beds, were used to place everything on them, but not to sit on them. Hence the need for bedside tables, for suitable spaces to store objects and clothing, and for understanding non-use of the internal dining table. However, in addition to a considerable general degradation of the villa, two fundamental needs could be observed on the outside, namely the need for shelter from the sun, noticed in the spontaneous appearance of beach umbrellas in front of the apartments and due to the use of the external dining table, and the desire to enjoy the denied panorama, given that the large shared terrace on the third level was closed on the sea side with a ca. 1.50 m high wall, which blocked the view. Everything observed, including the position of the furniture, was reported in the survey drawings so that it could be useful for proposing new usage solutions (Fig. 1).

The twenty-seven mini-apartments were found to have a surface area between 15.00 and 37.50 square metres with a variable configuration that sees four apartments develop in a sin-

Category	Data	%
Family composition	- Over 60s with children and grandchildren	75%
	- Childless couples	10%
	- Younger couples with young children	15%
Geographical origin of commissioning parties	- Sicilia	56%
	- Campania	4%
	- Lazio	10%
	- Emilia Romagna	2.5%
	- Puglia	2.5%
Education level	- University or higher	72%
	- Secondary school	28%
Time-share purchase period	- Before 1985	62%
	- Between 1985 and 2000	35%
	- After 2000	3%
Villa usage frequency	- Every year	85%
	- At least 3 times in the last 5 years	6.5%
	- 1 or 2 times in the last 5 years	6.5%
	- Never	2%

gle space with bathroom, only one composed of a living room/kitchen, two bedrooms and bathroom, and twenty-two with a living room/kitchen, a bedroom and bathroom. Thirteen of the latter are similar in type, and will be referred to later as bilo-standard, while the remainder are all different from each other. The first means of communicating with the clients was that of collective interviews during which needs and inconveniences emerged. A committee composed of three members elected from among them was established with the task of having more immediate communication with the designer.

Initial results and data analysis

It is clear from the preliminary research that the changing needs in terms of home use are linked to changes in society over the last fifty years. Individualism has reduced the desire for interaction with neighbours, and the reduction in the time available for summer holidays has increased the demand for comfort. Furthermore, it should not be underestimated that until the years when the structure under study was converted into a hotel timeshare, families were still quite large and very often shared small spaces daily, whereas today young couples with one or two children are used to living in larger, more comfortable environments.

Open collection of information and model projects

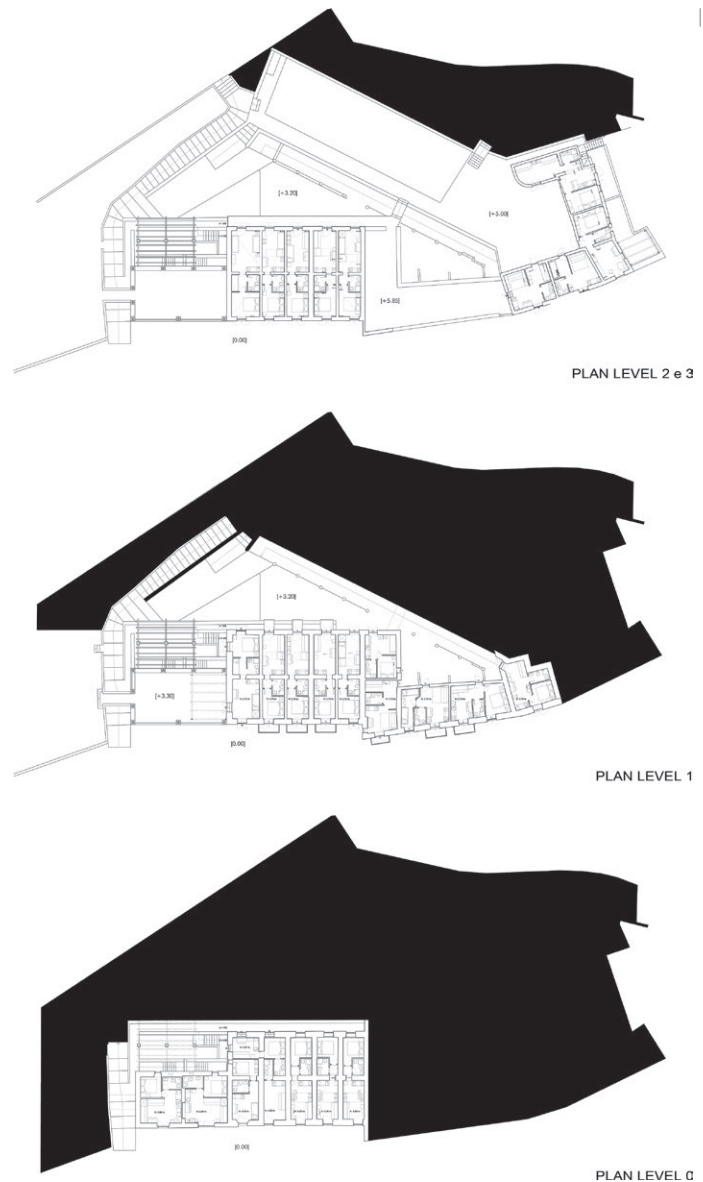
In this phase, an email address was set up for the experiment, and the multi-property owners were invited to send their thoughts on the renovation of the apartments. The possibility of having the designer as the only interlocutor freed the clients from the judgement of the others. Feedback was collected over a fixed three-week period, after which design directions could be defined and make decisions on how to proceed with both the design of the spaces and the involvement of clients. The considerations received showed a strong emotional involvement, and were effective in getting the project off the ground. Two key points emerged, precisely, the inconvenience caused by the presence of architectural barriers, and the poor func-

tionality of the existing furniture, combined with a general request for a careful evaluation of the cost-benefit ratio. Several of the owners described the furniture solutions adopted in the first project in the 1980s as better. These items were later replaced. So they were asked to send historical photographs that might be useful in reconstructing the rooms. These showed that the first furnishings were more organised and organic than those found during the surveys. Everything, from the beds to the kitchen, was made of the same material, veneered chipboard, leaving the wood in its natural colour, which gave the rooms a uniform appearance. The furniture was also built in modules, including the single and double folding beds. It was determined that the original modules, which were still present in the rooms, would be preserved through restoration due to their efficiency. To reuse the furniture that had been piled up inside the apartments, it was deemed necessary to carry out a precise survey of the same, both photographic and metric, to catalogue the pieces and create an inventory. The furniture was categorised by type and quantity, and the data compiled into tables useful both for project development and site management. During the design phase of the rooms, the furniture, restored and painted white, was moved to the apartment where it had been found.

The first plans were drawn up with the information gathered. After analysing the characteristics of all the mini-apartments, three similar mini-apartments were selected and their design was used to show the timeshare owners the new organisation of the space and the choices they intended to make in terms of furnishings, so that they could discuss and develop a strategy for refining the design and applying it to the other apartments (Fig. 2).

First project questionnaire and outdoor project

At this point, some multi-owners were sceptical about the veracity of the data collected. To change their minds, it was decided to use an objective approach that could be verified immediately, namely a questionnaire with clear instructions for the first stages of the work. Indeed, if the debates during the condominium meetings and the collection of information via email were non-scientific and, therefore, refutable methods, the questionnaire served as an incontrovertible objective tool, bridging the gap with the dialogues conducted by De Masi with the TERNI workers. The participants were invited to express their opinion on the colours to be used for the façade, with a view to enabling the clients to quickly observe the results of their choices, thus reinforcing the impression that their opinion had been given consideration. In the case of the New Matteotti Village, discussions with the workers revealed a lack of confidence that the things said would be considered. The



questionnaire was also used to gather input on the type of furniture to be used, so that everyone, even those not present at the discussions, could have their say. The results of the questionnaire were summarised in tables and shown to the principals during the meetings.

The colour combination used for the sea-facing façade was the one chosen by 66% of the clients out of the three alternatives proposed, but for the upstream side the colours preferred by a further 20% were used, so that almost everyone felt their choices were respected. This strengthened their confidence in the experiment. The colours proposed recalled the palette of the sunset, the blue of the sky and the sea, the orange of the sun together with the green of the vegetation, achieving a result in harmony with the surroundings (Fig. 3 e 4).

The design of a furnishing system

For the purposes of his project, De Carlo developed five types of accommodation from a 90 x 90 cm matrix, which varied across

02 | Longitudinal section: flat type

03 | Waterfront view with the colours chosen by most clients

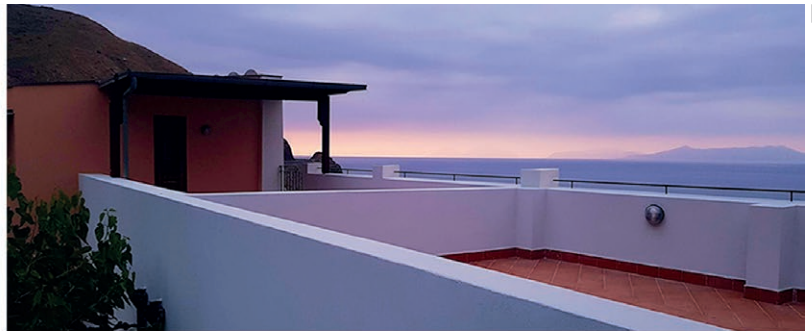
04 | Photo of the villa at the end of the renovation work. On the left the sea side elevation, on the right top the terrace with the parapet lowered, down three types of single bed



| 02

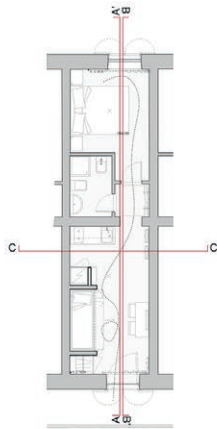
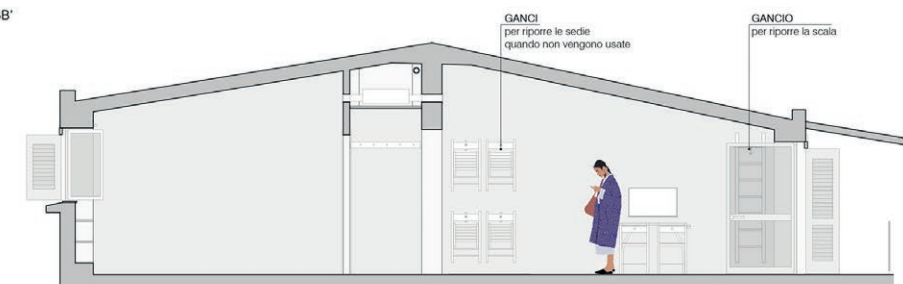
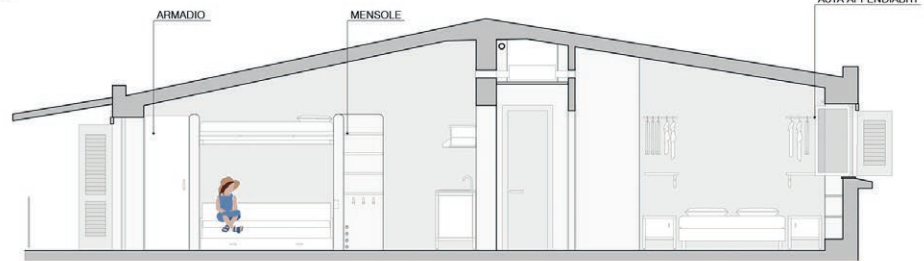


| 03



| 04





the three floors of the buildings, thereby generating fifteen different combinations. It is evident that a schematic system is required to adapt to the nuances of the clients' needs and create harmonious variables. To embrace the principle that guided this approach to the organisation of interior space, a furnishing system was designed that could adapt to the differences between the apartments but that would give a unified image. The handcrafted system uses solid steamed beech strips with a 45 x 45 mm section, assembled with screws and bolts, without the use of special joinery joints. This system gave shape to the single beds – in three types – the double beds, the bedside tables, the wardrobes, the kitchens, and the lamps. To complete the system, a series of wall cupboards were designed with doors in ash block, painted in matt white to match the walls (Fig. 4).

Design and creation of the first flats

The first apartments to be designed and built were thirteen of a similar type. The flats are structured around a masonry system consisting of a wardrobe, a bunk bed with a pull-out, and a compartment that hides the fridge, which together with the kitchen unit defines the first room. The bedroom makes use of the existing bed, with the addition of bedside tables and open systems for storing clothes, as well as reusing, where possible,

the restored original furniture. The projects were presented to the timeshare owners prior to their implementation in the form of tables with a plan comparison between the actual state and the project state and sections (Fig. 5).

Forced work stoppages and new project opportunities

The pandemic caused by the spread of Covid-19 brought work to a halt. During the months of standstill, listening activities continued by email and telephone, and during the summer season of 2020, the first completed apartments were lived in, and inspections were carried out during the use. It was revealed that, to accommodate the clients, it would have been necessary to broaden the range of possibilities. Consequently, further design solutions were developed for each apartment – two or three – and choices were made by taking into account the requests. Most people wanted closed wardrobes rather than open storage solutions. The design alternatives were accompanied by questionnaires (Fig. 6), this time for each apartment with specifics. Each timeshare owner received a document with a short text explaining the design alternatives, the questionnaire and commented graphics to help answer the questions. The graphics included the floor plan, survey, and design, and at least two sections for each design alternative,

QUESTIONARIO 2

1. Indicare la soluzione progettuale che si preferisce tra le due proposte:

PROGETTO 1	PROGETTO 2	INDIFFERENTE
TAVOLE n° 51, 52, 53	TAVOLE n° 54, 55, 56	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NOTE [inserire eventuali commenti o proposte alternative]:

2. Indicare l'arredo che si preferisce per la camera da letto:

opzione 1	opzione 2	opzione 3	indifferente
COMODINI + MENSOLE	COMODINI + MENSOLONE UNICO	MOBILE + MENSOLONE UNICOUNICO	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NOTE [inserire eventuali commenti o proposte alternative]:

3. Quanto ritieni importante avere il sesto posto letto?

☐ NON IMPORTANTE ☐ POCO ☐ MOLTO ☐ INDIFFERENTE

L'esito di questa domanda potrebbe apportare modifiche al progetto che saranno debitamente comunicate e saranno oggetto di altra breve consultazione.

4. Quanto ritieni importante avere il frigorifero a colonna con congelatore?

☐ NON IMPORTANTE ☐ POCO ☐ MOLTO ☐ INDIFFERENTE

L'esito di questa domanda potrebbe apportare modifiche al progetto che saranno debitamente comunicate e saranno oggetto di altra breve consultazione.

Grazie per aver risposto ai quesiti posti

as well as drawings of furniture alternatives for the bedroom (Fig. 7). The impracticability of conducting direct comparisons between each client and the designer when reading the drawings resulted in the identification of effective methodologies that could facilitate comprehension of the project. This included the addition of descriptive captions within the drawings, which were found to be an effective means of communication. The remaining flats were also designed and built using the outcome guidelines.

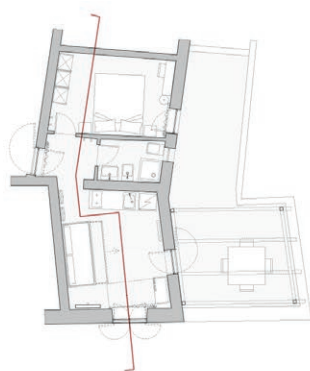
Outcomes and implications

The economic difficulties experienced by some multi-owners because of the pandemic resulted in the cessation of the project, with certain elements being omitted. In particular, the existing kitchens were retained, and the additional furniture required by the results of the second questionnaire was not provided. It is unfortunate that this condition has also had a negative impact on the perception that some have had of the tentative design. While many were receptive and appreciative of this opportunity, some felt misled and betrayed. The continuous exchange and transparency with which the project was operated meant that the client placed a trust in the designer that went beyond the execution of a good project. This resulted in expectations concerning project implementation, which depends on a series of other factors not controllable by the designer, the first being economic data.

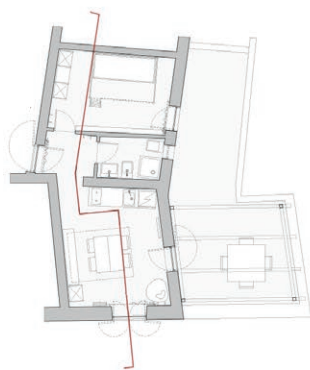
Methodological considerations

This experience has demonstrated the efficacy of participation in guiding projects, especially in scenarios involving multiple clients. The tools used, including meetings, questionnaires, data collection, historical photos, project sheets and descriptive texts, have proven beneficial. Questionnaires have given clear results, but the preparatory phase is difficult. This phase involves making lots of documents for each project. In the future, it would be better to use meetings to talk about the projects, and then do the questionnaires right after. This would ensure questionnaires only contained the questions. The production of a unique furniture system as well as the design variants were winning solutions, while the establishment of a committee did not bring any benefit to the work. It is evident from the findings of this experiment that there is a clear synergy between the utilisation of subjective and emotional involvement tools, such as interviews, and the open communication of needs, and objective tools, including questionnaires. It is imperative to emphasise that continuous communication between all parties and regular updates for the client on the project's progress are indispensable elements. In this way «the designer organizes and gives spatial form to the client's needs and commits himself to ensuring that the materialization of the work occurs in the most competent way, with the maximum correspondence between ends and means» (De Carlo, 2004, p. 32).

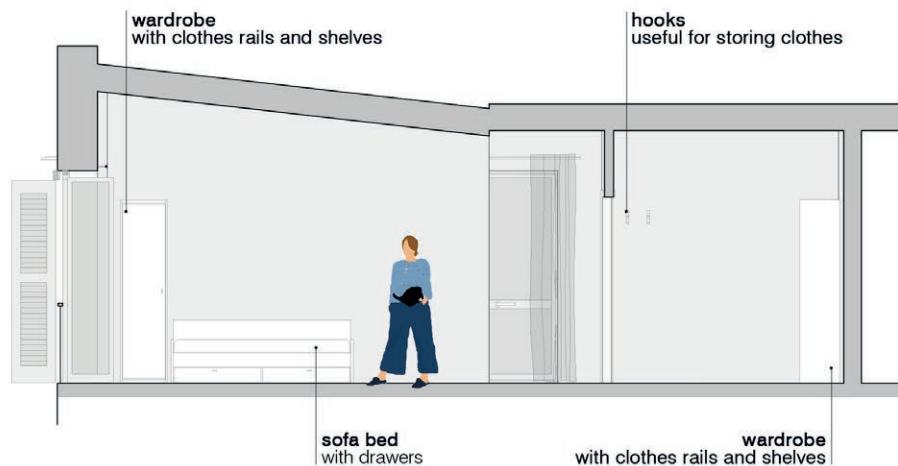
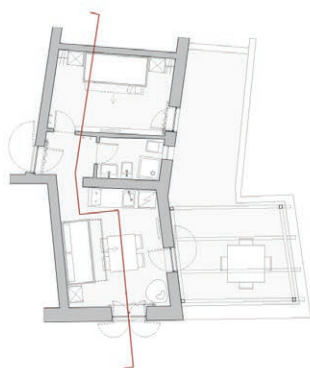
07 |



FLAT 119, DESIGN 1



FLAT 119, DESIGN 2



FLAT 119, DESIGN 3

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