An Architect's Adaptation to the Mass Production System: A. Quincy Jones's Tract Houses

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Abstract

This study identifies an architect's interpretation of the mass production system, and the public responses in the housing market, through the works of A. Quincy Jones. He provides an extraordinary example, in being successful in his efforts to envision professional architectural designs respecting the principles developed by mass builders. He proposed the post-and-beam system, and variations of the minimum plan in the plan layout, as the discipline in his guidebook. While his adoption of the post-and-beam system originated from criticism of the mass builders' houses following the regional modern architects, the methodology for layout planning was apparently based on the standardized guidance of the Federal Housing Administration. In his actual projects, the consistency of the structural system and the flexible application of the minimum plan showed a significant difference with those of mass builders. In particular, the modification of the minimum plan resulted in more attractive spatial experiences for the masses, with an open kitchen centered on the family living space. His post-and-beam structural system was also effective, in visualizing the connection between inside and outside space for outdoor living spaces. His architectural effort in considering the mass housing market envisioned ideal family living spaces for the public, with the application of modern architectural disciplines to the mass production housing market.

Keywords: A. Quincy Jones; mass production house; family living spaces; postwar residential design

1. Introduction

Mass production houses have occupied a large part of the housing market since the middle of the 19th century. However, it was in the post World War II period in the US that ready-made designs for mass production houses attracted the extensive attention of the masses. With the strong public interest for new homes, many visions of "the ideal house" were presented to the masses by the media, domestic advisors and home builders. These mainly aimed to convey two points: a futuristic dwelling, based on the technologies developed through the war; and an ideal environment for family togetherness (Mennel, 2005).

Architects also participated in envisioning their family living spaces with new technologies to the public. The Case Study House Program by Arts and Architecture magazine was one of the most famous cases showing the architects' attempts. It was in the pursuit of both experimental design principles following new technology and the preference of the masses.

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However, most architects' visions for new living homes were not successful in the market except for a few cases like the cooperation of A. Quincy Jones and Eichler Homes. Eichler Homes was a real estate development company in California between 1950 and 1970, introduced as a classic example of good builder's houses through the media.[1] A. Quincy Jones played a critical role for such reputation of Eichler homes with his partner Emmons, developing design strategies for low cost housing with Eichler Homes. He was awarded the National AIA First Honor Award for a low cost tract house design.

This study aimed to identify the architect's role in mass production house design. From the aspect of the housing market, efficiency in production and the good responses of customers are critical. However, it has been difficult throughout architectural history to find a balance between these virtues and the architect's professional abilities. Quincy Jones's low cost housing designs could be one of a few cases showing the successful balance between architects and the housing market in the era of the most active markets in the modern period and high attention of the masses.

To review previous research on the tract housing designs of the US in the middle of the 20th century in the architectural studies, researchers have mainly focused on the following three points of view: the

rediscovery of an ordinary architecture or everyday aesthetic (Schultz, 1997), the case study of vernacular architecture (Kelly, 1993), and criticism of the other side of American Postwar Modernism (Oakman, 2005). However, this study will approach the subject from the aspect of an architect's design strategy analysis more than the aesthetic, social, or historical aspects. In particular, the combination of the post-and-beam structural system and plan layout were mainly focused upon. This study is composed of three parts, as follows:

1) Summarizing issues of the tract housing designs of the post-war era from the aspect of family living, and their efficiency in construction and plan layout.

2) Identifying Quincy Jones's principles on designing tract housing through his own writing and publication, "Builders' Homes for Better Living" (1957)

3) Analysis following Quincy Jones's built tract housing projects from the aspect of the plan layouts: the Mutual Housing Association (1946); two prototype houses (1948, 1955) as universal tract houses; the Eichler home as his representative tract house design (1950-64); and two experimental houses (1956, 1961).

2. Issues of Tract House Design in the Post-war Era

2.1 Structural System

When architects focused on designs for mass production houses in the middle of the 20th century in the US, the prefab panel system was the most attractive construction method as a symbol of new technology. Especially Arts and Architecture magazine and the Museum of Modern Art were representative of devotees of panel construction.

However, the panel construction system could never replace the traditional 2" x 4" wooden framing system in the housing market. In the US, the mass production house market had been well developed since the late 19th century. Large mail order house companies like Sears, Aladdin or Gordon van Tines had well developed the standardized systems based on 2" x 4" wood frame construction methods. The mass production system in the post-war housing market was basically rooted in the heritage of the 2" x 4" system. With an advanced management system based on Fordism, traditional construction technology made for astonishing construction speed, which led to the great success of mass builders.

Eventually architects concentrated on the variation of plan layout issue more than structure and construction[2], while mass builders retained traditional structural technology. In the housing market, the construction speed of mass builders became the efficiency symbol of modern new technology.

2.2 Standardization of Plan Layouts

Post-war tract houses were limited in the diversity of their sizes and room components for reasons of efficiency. According to Life magazine in 1958, most ready-made houses could be summarized as "around 1,200 square feet in area, with three bedrooms, one and a half bathrooms and a living room, costing between $12,000 and $17,000".[3]

In an effort to maximize available space, a certain tendency appeared in the plan layouts. The guidebook of the Federal Housing Administration (FHA), "Technical Bulletin No. 4: Principles of Planning Small Houses" shows the tendency clearly. In this guidebook, the plan layouts were systematized, demonstrating the enlargement process from the "basic plan", which was composed of 2 bedrooms with 1 bathroom, a kitchen and a living room. In this basic plan, 2 bedrooms occupied the rear part of the house, beside each other, while a kitchen and a living room were in the front part of the house, side-by-side. Therefore, the 2 bedrooms, a kitchen and a living room formed a 2 x 2 layout. Even in larger houses with more bedrooms, there remained the front-back relationship between bedroom zones and living room-kitchen area, in a one-story house scheme [Fig.1.]. Considering the influence of the approval of FHA on tract housing designs in the housing market, the suggestion of this guidebook was critical.[4] This basic plan was adopted widely including the first Levittown House model.



Fig.1. Plans of FHA and Levittown House: Red Zones for Bedrooms, Blue for Kitchen and Yellow for Living Room

2.3 Increasing Value of Family Living

In the post-war era, family living spaces were highly rated, in residential designs. Although family living had been an important issue in domestic spaces since the 19th century, it was in the post-war era that it became the primary condition for residential space design.

The multi-purpose room was a major space dedicated to family togetherness. This room was named differently as an all-purpose room, a recreation room, even "a room without name".[5] These names implied that the room could accommodate any activities of the family. According to Nelson and Wright (1945), the design approach for this room was to make a big universal space adding alcoves with supplemental functions.

In addition to the multi-purpose room, outdoor living spaces also became very popular family living spaces. In many advertisements, a symbol of modern living was a large glass window, which enabled the connection of interior space with outdoor spaces.[6] Outdoor living spaces were considered not as a garden space, but as a backyard deck space for family activities such as outdoor dining with outdoor cooking equipment.

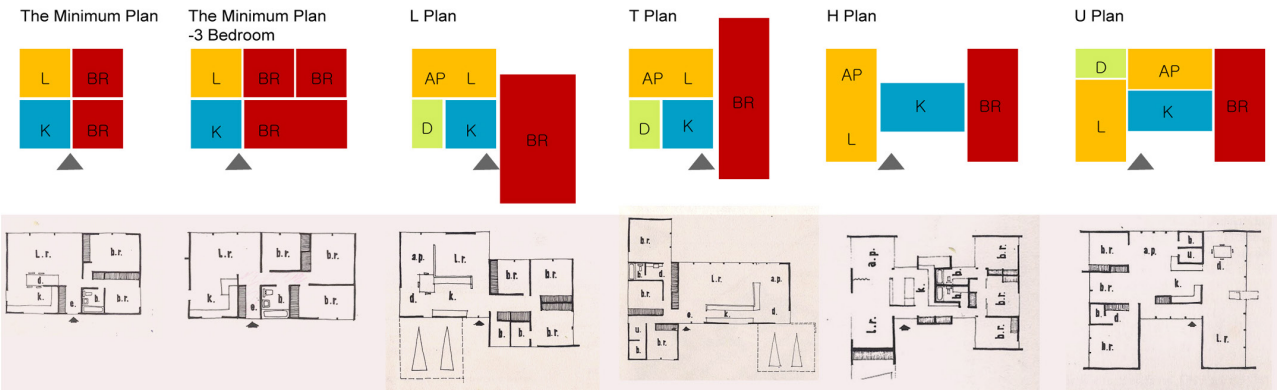


Fig.2. Development of the Minimum Plan in Quincy Jones's Guidebook, "Builders' Homes for Better Living": Red Zones for Bedrooms (BR), Blue for Kitchen (K), Yellow for Living Room (L) and All Purposed Room (AP)

3. A. Quincy Jones's Design Guides for Tract Housing: Builders' Homes for Best Living

3.1 Post-and-beam Structure

Quincy Jones advocated the post-and-beam structure in his guide book, while many other architects acclaimed the panel construction system as a replacement for the traditional 2" x 4" framing methods. He criticized the traditional system for the concomitant restriction of the size of wall openings, complexity of roof shape, and difficulty of continuous relationships between indoor and outdoor spaces. Instead, he highly rated the flexibility in space organization allowed by longer spans and no load-bearing walls in the post-and-beam system.

The post-and-beam structure for residential design was not a special feature for Quincy Jones. It had been a local architectural tradition in the California region as seen in the works of Schindler. Steel frame houses in the west coast area were also understood as the reinterpretation of such local heritages (Jackson, 1989). Many architects in California, like Raphael Soriano, Craig Ellwood and Pierre Koenig, publicized their steel houses for single-family houses. However, Quincy Jones was one of the architects who applied the post-and-beam system to low cost mass production tract housing, even including the steel frame house (X-100 house). Regarding the structural system, Quincy Jones concentrated on the spatial issue of flexibility, rather than revealing the new construction technology itself.

3.2 The Minimum Plan and Its Developments

In his design guidebook, Quincy Jones showed several examples of typical plans for tract house designs. Although all the sizes and layouts were different, these plans had a similar layout organization, rooted in his "minimum plan". It was remarkable that such an approach was very similar to the FHA guidebook, which showed the "basic plan" and its development process.

The minimum plan was composed of 2 bedrooms with a bathroom, kitchen, and living room, forming a 2 x 2 organization, like the basic plan of the FHA. However, there was a difference in the distribution of rooms. Jones's minimum plan displayed a left-right division from the entrance, contrary to the front-back division in the basic plan of the FHA, in the relation between the bedroom area and the living room-kitchen area [Fig.3.]. This difference came from the location of the living room, which in Jones's minimum plan, was at the rear part of the house, behind the kitchen.

Despite this difference, the development process was based on a similar methodology, in maintaining the relation between the bedroom zone and the kitchen-room area. Like the development process of the FHA plans, Jones's more complex plans, like his T and L plans, also retained this left-right relation. Moreover, most plans also kept the front-back relation between the kitchen and living room. The kitchen was at the entrance, while the living room was at the rear part of the house [Fig.2.].

Regarding the living room location, Quincy Jones commented on the advantages of the connection of the living room to the private rear garden. The basic plan of the FHA revealed the conceptual relation between private area for individuals, and public area for the whole family. The living room was located in the front area of the house facing the road, as the public space for the family. However, this layout resulted in privacy issues in the aspect of real life, in that family activities were exposed to the road. Therefore Quincy Jones placed the living room at the rear part of the house, instead placing the bedroom near to the road with small window openings for privacy [Fig.3.].

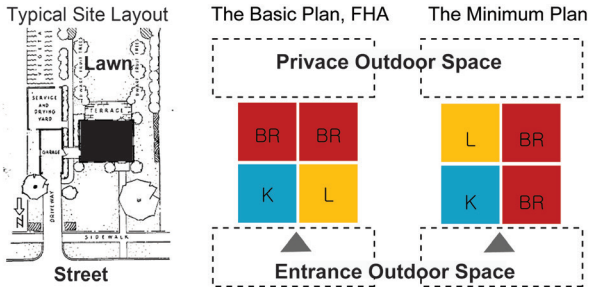


Fig.3. The Basic Plan (FHA) and The Minimum Plan

In his guidebook, he also suggested two different kinds of room for family living, which were the parlor (the living room in his plan drawings), and the all-purpose room. These rooms were differentiated from each other according to the activities in each room. The living room was for neat activities, like reading or for guest reception, while the all-purpose room was for all kinds of activities, including being together with the children. In particular, he pointed out the children's accessibility to the all-purpose room, and visual connection from the kitchen to this room, for the mother's supervision of the children.

A differentiated living room composition into his minimum plan was easily found in more complex forms. In his L and T plans, the all-purpose room with the living room was found in a similar organization as the minimum plan. His U and H plans were major variations in the location of the kitchen, combined with the entrance area [Fig.2.]. This could afford a more delicate relation between the all-purpose room and the living room, which were basically differentiated, while still being partially connected to each other (the U plan).

4. Quincy Jones's Tract Housing Projects

4.1 Early Projects

In early projects, Quincy Jones shows the various trials for organizing plan layouts, while the post and beam structure had been consistently introduced since the first project.

(1) Mutual Housing Association (MHA, 1946)

The MHA was Jones' first tract housing project, located on rolling terrain with 160 houses. Initially 28 plan types were presented and 8 plans among them were actually constructed. In these 28 plans, only a few like h104 show the minimum plan organization, while some plans of h107 and h108 show the modification of the minimum plan as the bedrooms were arranged linearly. Linear plans were more apparent in the plans of h101, h102, h103 and h109. However, the location of the living room remained behind the kitchen, linked to the private back garden.

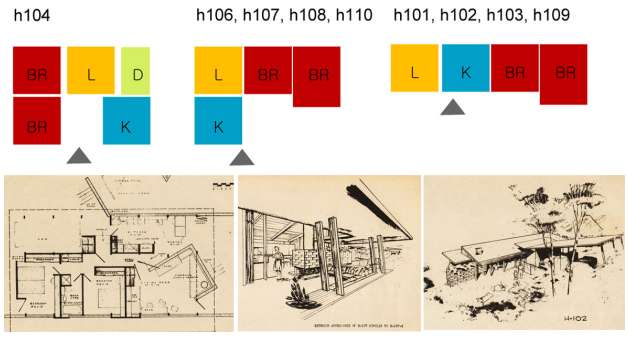


Fig.4. Three Plan Diagrams (above), Plan Drawing (below Left, h106) and Sketches (h107 and h102) of MHA Brochure

The diagonal elements like a rotating terrace were also another difference from the minimum plan [Fig.4., h106]. These diagonal elements were found not only in the plan but also in exterior forms. Sloping columns and an inverted sloping roof form were matched to the diagonal walls, intensifying these architectural expressions [Fig.4. h107 and h102].

The linear plan layout and the diagonal architectural features were compatible with the sloping terrain condition for this project, both functionally and visually. The layouts followed perpendicular lines to the slope, and the slopes of the roof and columns were matched to the form of the terrain. These elements were rarely repeated in later designs.

(2) San Diego House (1948)

The San Diego House was a prototype design which was intended to be built in any lot within the San Diego area if any local contractor wanted to build them.[7] The San Diego House was requested by local builder, H. C Hvistendahl, for a low cost house of only 1,000 square feet, with 2 bedrooms. This project was renowned as a successful example of an architect's low cost house design.[8]

In plan layout, the San Diego House showed an apparent 2 x 2 organization, with the left-right relation similar to his minimum plan. However, unlike his minimum plan, a living room was located on the front part of the house facing the public road despite an access to the side of the house from the road [Fig.5.]. Therefore, in relation to the road, it is more similar to the basic plan of the FHA. However, he made a barrier for the privacy of the outdoor living space connected to the living room. This plan can be seen as a compromise between his minimum plan and the basic plan of the FHA, from the aspect of the privacy of the family living spaces.

This house was a wooden structure with post-and-beam system. The structural framing was emphasized in interior spaces, with different colors for the beams [Fig.5. Right].

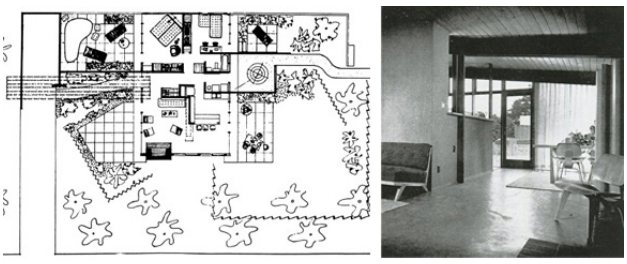


Fig.5. Plan and Interior View of the San Diego House

(3) Ladera Project (Published in July 1951 and April 1952)

The Ladera Project was one of the early designs for Eichler Homes. This project was also for a rolling terrain, similar to the MHA. In response to the site condition, however, skip floor plan types with modification of the minimum plan were adopted for this project. Despite the level differences of the skip floor, Quincy Jones tried to keep the left-right relation

between bedroom zone and living room - kitchen area from the entrance area. Also, the kitchen faced the front yard, while the living room was located at the rear part of the house in House 303 [Fig.6.].[9]

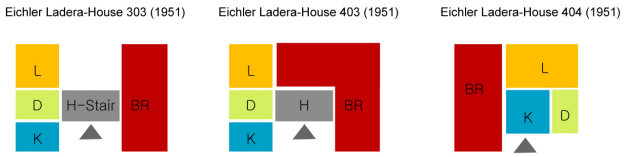


Fig.6. Plan Diagrams of Ladera Eichler Homes

(4) #319 (December, 1952), #429 (November, 1953)

#319 and #429 were also early Eichler Homes designs published in Arts and Architecture Magazine. #319 shows a linear living room zone with the appearance of the all-purpose room. Instead, bedrooms are moved into the front of the all-purpose room. By this movement, the living room, the kitchen and the all-purpose room could form an integrated space facing the private garden. In #429, a project that was a year later than #319, the minimum plan organization became apparent, moving the bedroom zone into the side of living zone again [Fig.7.].

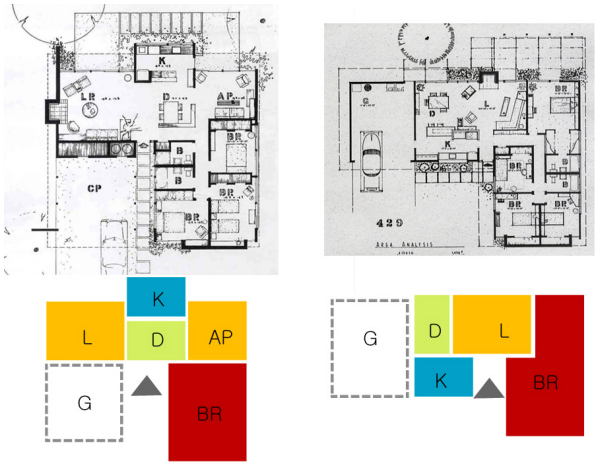


Fig.7. Plans and Diagrams of #319 (Left) and #429 (Right)

4.2 Settlement of the Minimum Plan in the 1950s

(1) The House that Home Built (THTHB, 1955)

THTHB was also another prototype design like the San Diego House. It was aired through the NBC television show "Home" on February 28, 1955. This program intended that any local builders, who were attracted by this house on the show, could build the house under contract. THTHB was a 3-bedroom house of 1,680 square feet, which was a moderate size for a tract house at that time. Although the bedroom zone was elongated, the relation between the rooms of the minimum plan remained. On one side of the house, there was a bedroom zone, while a kitchen was near the entrance, facing the road, on the other side of the house. Behind the kitchen there was a living room, with a large alcove for an all-purpose room.

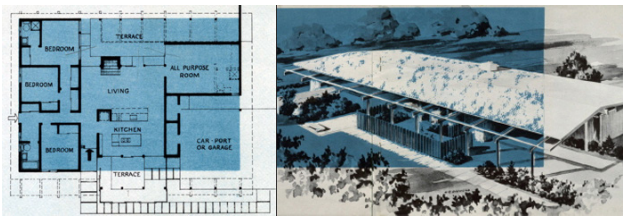


Fig.8. Plan and Exterior View of THTHB

Like the San Diego House, this house was a post and beam structure. Moreover, the beams were more distinctive, because they extended to the outside as frames, behind the wall covering the outdoor living spaces in THTHB [Fig.8.].

(2) Green Meadow (August 1954)

This project was also an Eichler Homes design. Most variations of plans were more clearly rooted from the minimum plan (JE 2, 21, 14). The variation came from the shapes of each area, and the locations of the all-purpose room and the garage. In JE 15, with an all-purpose room added to the living room, the basic relation between the rooms almost remained. As well as the Green Meadow project, many projects in the middle of the 1950s, including JE 15, JE 35, MC 55 and THTHB, were almost identical to each other in the aspect of bedrooms-living room-kitchen relations. Eichler Homes plans in the San Mateo area in the 1950s were also minor variations of these plans, like the shapes of each area, and the location of the garage and an all-purpose room [Fig.9.].

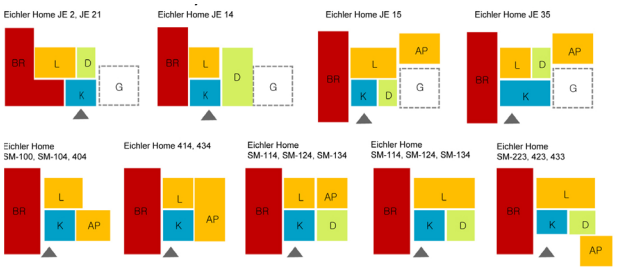


Fig.9. Plan Diagrams of Eichler Homes in the 1950s: Green Meadow (above) and San Mateo (below)

4.3 Integrated Outdoor Spaces

(1) The Atrium Plan in Eichler Homes (1960s)

The atrium space was incorporated in Eichler Homes in 1958, and became an important element in the 1960s. In atrium plans, there still remained the left-right relation between the bedroom zone and the living room-kitchen area on most plans. However, the all-

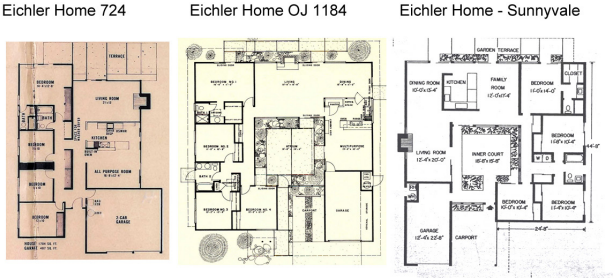


Fig.10. Plans of Atrium Types: #724 (Left), OJ 1184 (Center), Sunnyvale (Right)

purpose room was relocated in front of the kitchen. With an elongated bedroom zone, the new layout of the kitchen and all-purpose room created a developed entrance area, which became an enclosed outdoor area, an atrium space (compare #724 at Lucas Valley and OJ 1184) [Fig.10.].

In the atrium plans, the locations of living room, kitchen and all-purpose room were relatively flexible. The kitchen was incorporated with the all-purpose room in some plans, like Sunnyvale [Fig.10.].

(2) Experimental Tract House Design: X-100 (1956) and Case Study House #24 (1961)

X-100 and Case Study House (CSH) #24 were designed for special programs. X-100 was a steel structure house by Eichler Homes to propagate that a steel structure could be used for a family living space. CSH #24 was only one community design with 260 tract houses for the Case Study House program. Both houses were relatively larger than usual tract house designs. The X-100 house was 2,226 square feet in area, with 3 bedrooms, and CSH #24 was 1,736 square feet, with 4 bedrooms.

The X-100 showed a unique plan layout. This plan was composed of three linear zones that were parallel to one another. The utility core was located in the middle layer, with the interior garden spaces. The layout of bedrooms was on the front part of the house, facing the entrance road, while the layout of living room and all-purpose room remained in the rear part of the house with the open kitchen, creating a long linear open space.

In CSH #24, the garden spaces were also created inside the wall. This house was planned to be partially below ground, with earth mounded around three sides. The elevated ground level was intended to be for privacy, because of the high-density condition of the tract homes. In plan layout, the living room, kitchen and all-purpose room were located in the front part of the house, while the bedroom zone was located in the back. Originally the location of the living room in the minimum plan was considered for the connection to private outdoor spaces. However, the interior gardens enabled the living area to afford its own private outdoor living space. As a result, there is no longer a reason for the living room to keep its position [Fig.11.].

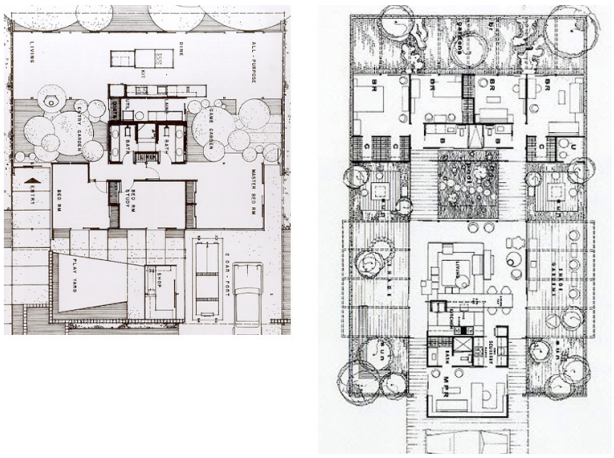
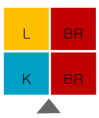
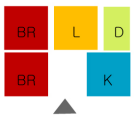
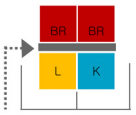
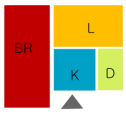
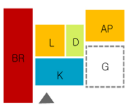
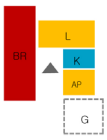
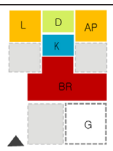
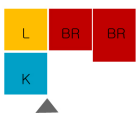
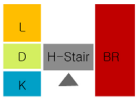
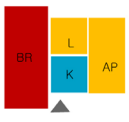
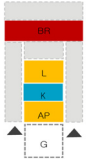


Fig.11. Plans of X-100 (Left) and CSH #24 (Right)

Table 1. Structure and Plan Layouts for the Tract House Designs of Quincy Jones

	Disciplines in the Guidebook	Design Projects						
		Early Projects (1946-1952)			Development of Standardization (1950s)		Consideration of Outdoor Spaces (1960s)	
		MHA	San Diego House	Ladera Eichler Home	THTHB	Eichler Homes in the 1950s	Atrium Plans	X-100 and CSH #24
Plan Layout								
	Minimum Plan (M.P)	h104: Development of M.P	Basic Plan (FHA) - Securing the privacy of the outdoor space facing the living room	Development of M.P	Development of M.P with All-purposed room	Development of M.P	M.P modification creating the entrance space	X-100: internal outdoor spaces
								
		h 106: M.P modification responding to the site		M.P modification within the skip floor plan		Development of M.P	M.P modification for integration of the outdoor space	CSH#24: internal outdoor spaces
Structure	Post and Beam							
		1) Emphasizing different color schemes 2) Extending the beams behind the exterior glass wall to the outdoor living space					3) Beams traversing the indoor and outdoor spaces	

Both projects were post and beam structures. In X-100, the structural frame was also emphasized with a differentiated color scheme in red. Moreover, the long spans of steel structures could effectively afford interior garden spaces, with skylights through the opening of the roof. In CSH #24, although the project could not be built for budgetary reasons, the post-and-beam system was easily found in the model. Structural frames were the dominant feature, covering all the spaces of the house, across the inside and outside [Fig.12.].

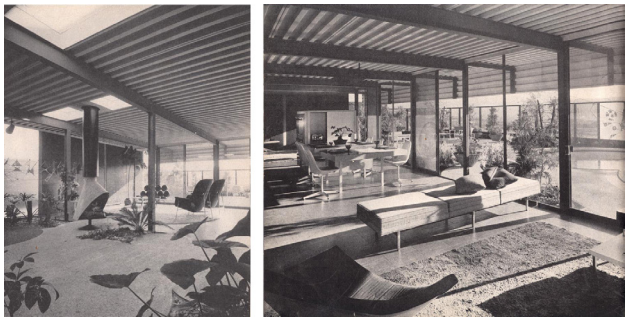


Fig.12. Interior Views of X-100: Internal Outdoor Living Space (Left) and Exposed Beams (Right)

5. Spatial Experiences of the Family Living Spaces in Quincy Jones's Tract Houses

5.1 Relation between Indoor-Outdoor Living Spaces with Post-and-beam Structure

The post-and-beam system had been adopted in almost all his tract house designs since MHA, his first tract house [Table 1.]. Also, this structural system was a prominent interior feature for its distinctive color in most of his projects. It was not only in the interior space, but also outside of the house where the structural elements were found, because the beams extended beyond the wall. These extended structural elements were useful for functionally defining the outdoor living space. Moreover, it enabled the interior spaces to create a continuous relation from inside into the outside space, visually following the beams penetrating through the glass walls. The beams passing across the inside and outside were more powerful in the atrium plans. The atrium space was an outdoor space for private family living, in which the function of the interior space conceptually was flowing out. The beams traversing inside and outside enabled the change of this conceptual sense of the space into perceptual experiences that integrated the inside and outside spaces, with visual continuity [Fig.13.].

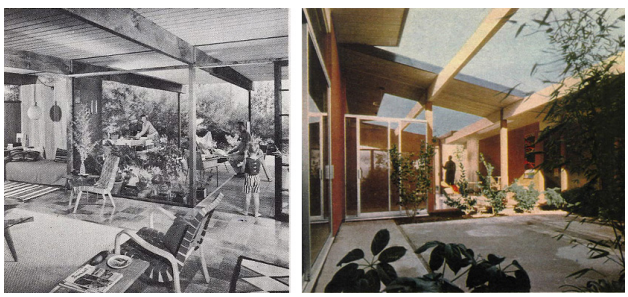


Fig.13. Outdoor Living Spaces with Post-and-beam Structure

Such visual experiences were critical, considering that the experiences of interior spaces were presented to the masses through published images, including magazines and sales brochures. The visual integration between inside and outside spaces was effective, in envisaging the outdoor spaces as an extended family living space from the interior.

5.2 Interior Living Spaces in the Variations of the Minimum Plan

In his early projects, the minimum plan organization was often modified by responding to the conditions including the topography. However he still kept the connection between the living room and the outdoor spaces with privacy. The organization of the minimum plan was more apparent, especially for the location of the living room in the designs of the mid-1950s. However, this organization was broken in the atrium plans, and the two experimental plans. Due to the internal private garden, the location of the living room was not restricted to the rear of the house as in the minimum plan [Table 1.].

With the free location of the living room, the kitchen also did not remain at the location of the minimum plan. Originally, the kitchen in the minimum plan had been paired with the living room at one side of the house. In atrium plans, X-100 and CSH #24, the location of the kitchen was moved to the center of the family living space. In his early projects, like #319 of Eichler Homes, the kitchen was spatially open to other family living spaces. With the relocation of the kitchen, a more spatially integrated kitchen reappeared. While the kitchen was partially open to the dining area in #429, the atrium plans for X-100 and CSH #24 were completely open to the other spaces, at the center of the family living space.

Although the concept of the open kitchen had been known at that time, the FHA was at first negative to the open kitchen because it could threaten the comfortable living environment for the family. However, the open kitchen became more popular with the notion that the kitchen could be a management place for the domestic realm. The idea was spread that if she worked in an open kitchen, the mother could join the family activities, or she could also take care of the children. Although Quincy Jones introduced the open kitchen in his very first projects, he attempted to maximize the



Fig.14. Open Kitchen and Atrium Space in Sales Brochure

spatial openness of the kitchen with its free location. This family living space centered on the open kitchen was also visually presented to the public through images in the media [Fig.14.].

6. Conclusion

For mass production house designs, efficiency, economy and the preferences of the masses could not be disregarded. How to converge the architects' own ideas with market-oriented systems was critical. Quincy Jones's works for tract houses demonstrated various approaches for a balance between the architect's design of new spaces for modern living, and the well-established market systems.

The typology of the plans based on the minimum plan in his guidebook was an effort for standardization of the plan layout, following reference to the methods of the FHA. However, this depended on the architect's interpretation of standard layouts. Quincy Jones's earlier projects and the experimental projects were cases in which the architect's differentiated design elements intervened strongly in the predetermined rules. Although it could not be concluded that Quincy Jones was more familiar with the market-oriented system in the middle of the 1950s than in the earlier phase, his first tract house project, MHA was full of distinctive features that corresponded to the local site condition, compared to the Ladera project for Eichler Homes in similar site conditions. The plans in the middle of the 1950s displayed a more apparent organization of the minimum plan.

While his projects in the middle of the 50s concentrated on standardization, his later projects focused on the visual experiences of the spaces, including the atrium plans and the experimental houses of X-100 and CSH #24. The open spaces centered on the kitchen, and the integrated interior and outside spaces were published, featuring the development of the plan layout, and the architectural expression of the structural systems. These visual experiences were effective in presenting attractive spaces for family living for the masses, which was the most important social issue for residential designs.

For Quincy Jones, the structural system with post-and-beam was a consistent design element inheriting the regional modern architectural tradition of California. Despite the spread of the panel construction system, he adopted the post-and-beam system with large windows, which resulted in a continuous indoor-outdoor mediation that was attractive to the masses at the time.

With the consistency with the structural system, and the flexible application of the standardized planning system with his own interpretation of the FHA guidelines, Quincy Jones brought an architect's design of tract houses to the housing market of that time. With a proper budget, his residential spaces contained attractive qualities for family living, like outdoor living, and the continuous and appropriate spatial relation between kitchen, living room and family room, centered on the open kitchen, which were sheltered under the distinctive structural grids of the post-and-beam system.

Quincy Jones's designs could be summarized as the architect's effort to provide attractive spatial experiences to the masses, created through his faith in construction technology, and strategies of planning methodologies for the mass production system and the housing market.

Notes

[1] Eichler Homes received awards from many institutions and magazines, including the National Association of Home Builders of the US (1954), American Builders' Magazine Award (1958). Life Magazine (1953), House and Home (1958), and McCall's Magazine (1958).

[2] Arts and Architecture June, 1945, pp.26-31.

[3] LIFE, September 15 1958 "The US needs more livable homes".

[4] Wright (1989), pp.240-261.

[5] Nelson and Wright (1945), pp.76-80.

[6] Thomas Hine, The Search for the Postwar House in Smith (ed. 1989), pp.83-106.

[7] http://www.eichlernetwork.com/article/house-home-built

[8] Quincy Jones was awarded the National AIA First Honor for this project in 1950.

[9] Some cases with almost 2 stories were far beyond the minimum plan, like 302.

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