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The Dynamics of Kitchen Adaptation Based on the Cultural Spatial System in Minangkabau West Sumatra

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Abstract: This article discusses the important role of the kitchen which can provide more value to living space through its adaptation. In this context, we are going to see from the perspective of a traditional kitchen at the rumah gadang of the Minangkabau society in West Sumatera. The spatial configuration of the rumah gadang follows the needs of women who have an essential role in their social structure and the kitchen appears to be the heart of women's activities. This paper argues that there are factors that need to continue to be applied so that in their development, traditional houses can adapt to a continuously progressing society. Based on the qualitative method, we observe the kitchen adaptation by comparing the condition before and after the house construction in Payakumbuh, West Sumatra. The result of the study indicates that the continuity of the socio-cultural values in the rumah gadang traditional houses can be preserved through the kitchen.

Keywords: rumah gadang, kitchen, gender, adaptation, cultural-spatial system

1. Introduction

Indonesian traditional houses have many variations reflecting the ethnic diversity in Indonesia. Traditional houses accommodate not only daily activities but also have spiritual meaning. Therefore, these traditional houses represent the cultural manifestation of their inhabitants' local values and identities. In their everyday lives, traditional people consistently use and adapt their cultural values and patterns of local customs. It becomes necessary in traditional houses to apply spatial planning, forms, structures, and ornaments^{1),2)}. The Minangkabau society of West Sumatra is one of the ethnic groups that use their socio-cultural system as guidance. They believe that their traditions are encompassing and adaptable to many aspects. Thus, this adaptation process can help accommodate changes in the future Minangkabau society³⁾.

The socio-cultural system that Minangkabau society has is a matrilineal system that people continue to believe in and use in many aspects, including constructing their houses. In Minangkabau society, women have an authoritative position. This matrilineal system places women at the heart of the social organization, giving them responsibilities for all household matters, such as perpetuating the lineage, designating members of traditional organizations, and determining inheritance. Also, this matrilineal system forms the basis for the design of the traditional Minangkabau house, known as *rumah*

gadang. A traditional house represents a notion of matrilineal kinship, with the spatial organization of the house illustrating the concepts of kinship and gender^{4),5)}.

Because of some aspects, the matrilineal system remains robust in Minangkabau society; therefore, this discussion will focus on their domestic space. While men wander overseas because of the *marantau* (wandering) tradition, women are constructed as the main actors in domestic life, influential in defining their domestic space⁵⁾. *Rumah gadang* illustrates the cultural-spatial system that consistently preserved the Minangkabau matrilineal system. The kitchen is one area in *rumah gadang* that became the sphere of women's activities and institutionalizes women's dominant role in domestic life. *Rumah gadang* also demonstrates the importance of the kitchen and its connection to everyday spatial practices and gender association^{6),7)}.

Various Minangkabau houses have been renovated and constructed in a more modernized form beside the *rumah gadang*. There is dynamic adaptation in its spatial system, based on Minangkabau's socio-cultural system, including adaptation to the kitchen. Thus, this study analyzes the kitchen adaptation in house construction that still preserves cultural values in traditional houses and examines its associations in everyday spatial practices with the prevailing cultural-spatial system. Based on the qualitative method, we observe kitchen adaptation by comparing the condition before and after the house construction in Payakumbuh, West Sumatra. This method

will discover the factor that continues to be applied so that the houses in their development can adapt to a continuously progressing society and still provide values like those found in traditional houses.

2. Rumah gadang as women's realm

In the article "The Social Construction of Space," Peter Blundell Jones criticized that the architectural practice of home in modern society has become driven by the market and less concerned with habitation. Modern society builds environments and houses detached from the inhabitants' social, cultural, or political values. The primary concern of house building is the spatial and economic aspects rather than the connection to social, cultural, and environmental. These conditions lead the researcher to believe that incorporating social and cultural values into domestic life is crucial to creating a better living environment⁸⁾. These values become highly essential in domestic space since they translate into various spatial dynamics in houses. The traditional houses have inherent social, cultural, and physical factors that influence their form and function. Traditional architecture can assist modern society in developing better connections between houses, society, and culture^{7),9)}.

Traditional houses also serve as the emotional focus of social, ritual, and spiritual life. One example is the *rumah* gadang or traditional Minangkabau house. Rumah gadang, in its manifestation, is more than just a place to live; it is also a symbol of the existence of people and the embodiment of Minangkabau's social and cultural values, which include their unique matrilineal system. The family members who occupy the rumah gadang in the matrilineal system are saparuik (sublineage) or 'people from the same womb.' Therefore, one rumah gadang can ideally accommodate three generations of individuals descended from the same female lineage: saparuik described as Minangkabau society's "most significant functional unit"3),7). According to matrilineal traditions, living in the rumah gadang is passed down from generation to generation as the significant focus of everyday life in traditional Minangkabau society. Thus, the dimensions of rumah gadang represent the number of family members, particularly women, because a woman is given a biliak (bedroom) at home after marriage. If there is insufficient room, the mother must extend the house or build a separate traditional house. In essence, the space in the rumah gadang symbolizes the Minangkabau society, culture, and matrilineal system⁶).

In the matrilineal system, women predominantly construct spaces; there is a tendency for space to reflect and influence the way gender is constructed. The separation of gender roles in gendered spaces is associated with the separation of public and private spaces; men in public and women in private. Space is defined as a condition of social production, and gender relations in space are created by social, cultural, and spatial factors. Due to the matrilineal system, women's social status is

defined by the spaces that they occupy. The role of women is part of the social structure in the family, and this must be considered in spatial planning. In domestic space, there is one space mainly constructed by women and identified as the realm of women with the title 'heart of the home,' namely the kitchen. Whenever the domestic kitchen space considers its connection with gender, the kitchen space is defined as a zone of feminine subjugation^{10),11)}.

In her book, The Second Sex (1997), feminist Simone de Beauvoir argues that women's domestic chores are more painful than the torment suffered by Sisyphus (a figure from Greek mythology as king of Corinth) since house chores are continuous labor, which has no beginning and no end, clean becomes dirty, dirty becomes clean, and this cycle continues day after day. Women are commonly strangled in domestic space because she is the primary agent of domestication in the family. Women frequently play a more significant role than her husband and are accountable for creating social, cultural, and material values for their families 11,12. Here, the kitchen is seen as the center of activity for women. Through its development, the kitchen notion has always connected with women's activities who inhabit this space. It can affect changes in this domestic space, which causes the kitchen space adaptation^{13),14)}.

Rumah gadang as a traditional domestic space can be identified as the realm of women, not from a feminist perspective but from matrilineal culture. In this culture, domestic space is not a zone of feminine subjugation, but women have absolute power shown in society, culture, and spatial configuration¹¹. It is essential to explore the adaptation of traditional domestic spaces, particularly the kitchen, based on their connection to everyday spatial practices with the prevailing cultural system. Therefore, we will discuss how gendered spaces develop in the cultural-spatial system.

3. Gendered spaces in the cultural spatial system

Traditional houses, such as rumah gadang, nowadays had a tendency to be deprived of their purpose as dwellings for large families while gaining a new meaning as symbolic landmarks. Traditional houses are designed to bring together local people's values and ways of living. Therefore, rumah gadang's spatial planning function and concept are always dependent on everyday life practices and cultural systems. Because there are no specific guidelines in the design of this house, rumah gadang has different appearances, various names, and functions. It adapts to the necessities of each local custom in terms of size and form. The construction is not arbitrary; the decisions to build a rumah gadang cannot be made unilaterally but must be preceded by deliberation because the Minangkabau society lives in groups and respects the decision of clan leaders^{15),16)}. Space construction might well be characterized by the presence of a hierarchy in each space. The spatial configuration can establish a hierarchy between public and private, holy and secular, natural and artificial, the live world, and the mortal world¹⁷).

Rumah gadang's spatial pattern is divided according to the gender hierarchy in the Minangkabau society. The highest hierarchy is bundo kanduang, who has the primary authority in the household. As ninik mamak (customary leaders), men have a more social role, supervising and advising their children and nephews. This system eventually became the basis for their spatial hierarchy. Based on a solid matrilineal system, rumah gadang's spatial configuration highly values women's position and space. When a rumah gadang houses all lineage members, each biliak (bedroom) is assigned to a married woman. A boy who has reached adolescence begins the process of marginalization from rumah gadang by sleeping in a surau (a place of worship located not far from the cluster of rumah gadang) and focusing on learning to recite Koran and practice *silek* (self-defense). If they are married, the husband will sleep at his wife's rumah gadang. This tradition establishes the notion that the house is the domain of women, while men are seen as honored guests at their wives' homes^{5),18)}.

The involvement of the matrilineal system in rumah gadang's spatial configuration also becomes the basis for space division based on the cycle of women's lives. The house's primary focus on women's activities is seen as a natural characteristic. When women inhabit a place, it is necessary to examine not just gender aspects but also situational factors, age, and user relationships⁴⁾. The distinctive distribution pattern in rumah gadang is initially recognized based on the status of women in the family; the youngest and recently married women are assigned to anjuang, while other women and their married partners are assigned to biliak. Bundo kanduang (oldest woman) preferably sleeps in the biliak close to the kitchen, but if there is no biliak available, she sleeps at the pangkalan (tiang tuo/central pole), symbolizing her position as the oldest woman. As shown in Fig.1, the women's movement in rumah gadang is shown according to their fertile cycle, differentiating between the old and young fertile cycles. Young or newly married women have restricted movement around the anjuang or biliak, but older women can dominate movement across the room. The eldest woman led the kitchen, with the younger women obligated to help¹⁹⁾.

Therefore, the cultural-spatial system is established; with the front of the house from the inside—which is an open space—acting as a social space, formality, and respect; as well as a living room, dining room, bed for children, occasional for visitors, and a hall for ceremonies. For this reason, the front of the house is designated as the male area of the household. On the other side, a partition in the back divides the area into small compartments about three meters wide and four meters long; this is a bedroom for female members, particularly married women, and

their children. The rear part of the house's interior belongs to the women because it is considered private and sacred^{5),6)}.

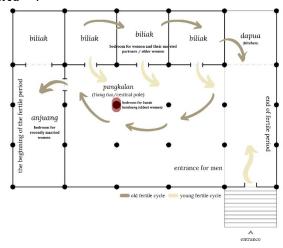


Fig. 1: Floorplan of *rumah gadang* Bodi Caniago: The cycle of women's movement based on their fertile phase. Source: Reproduced floor plan based on Tjahjono, 1998

To illustrate how the cycle of women's activities influences space development in rumah gadang, we will look at two different types of houses, Koto Piliang and Bodi Caniago. This distinction begins with the government system, with Koto Piliang known as having a bureaucratic system, and Bodi Caniago, known as having a democratic system. The most notable distinction is in the anjuang and floor level; Koto Piliang has two separate anjuang sticking out on both sides of the house, but the Bodi Caniago has only one. As for floor level, Koto Piliang has a different floor height indicating hierarchical people, whereas Bodi Caniago has the same floor level in all rooms; which shows that leaders and people in the society have the same status. Despite being of different types, the division of space in this house is identical. The spatial configuration of private and public spaces is separated according to lanjar (the division of space in a longitudinal direction based on the pole). Lanjar are classified into four types: lanjar biliak, lanjar dalam, lanjar tengah, and lanjar tepi. Each lanjar has a particular purpose that cannot be altered. Because of the prevalent customary system, women's occupation zones are not represented in all lanjar. (Fig.2) This condition appears to be supported by circulation and access intended for women's comfort and privacy. Minangkabau women are dedicated to the kitchen in their daily activities; the kitchen becomes an absolute occupation for women, as though they begin and end their days in the kitchen¹⁶).

The layout of the entrance also supports this situation; women have different access to the house by the back entrance, directly connected to the kitchen area. Even for daily activities, women always go around the house to enter or leave through the back stairs access so that they do not interfere with activities on the *lanjar tepi* (the front *lanjar* from the house, a place for honorable guests as well as a place for male guests in traditional ceremonies). The

kitchen is directly connected to the lanjar biliak (a row of biliak for the bedroom), and the layout of this area prioritizes women's privacy so that they are not bothered by the presence of guests or males who are not close relatives. From a woman's perspective, this area may be compared to the center of the existing hierarchy when the eldest woman is ideally positioned next to the kitchen. (Fig.2) The term 'kitchen' is derived from 'hearth' and refers to the center of activities of domestic life. The hearth, which was not initially a space, develops into a 'room,' a place for socializing, cooking, and eating. This space is what we now refer to as the kitchen¹⁷⁾. The Minangkabau society has a different perspective on the kitchen; it is not a dirty room that must be separated from the home, but the kitchen, which they name the dapua, plays a more critical function according to local customs and becomes more than merely a functional space^{5),16)}.

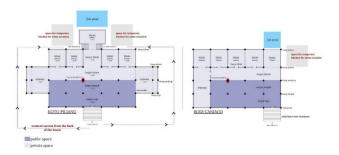


Fig. 2: Site plans of *rumah gadang* Koto Piliang and Bodi Caniago. Source: Authors' documentation.

4. Practice and adaptation in spatial organization of *rumah gadang*

The value of the kitchen space itself can be shaped by societal perceptions, cultural habits, and even the most basic everyday practices. In rumah gadang, there is a connection between gender and activities. When we see from everyday life patterns, women dominate activities in private spaces (cooking, serving, childcare, pounding rice, etc.), whereas men dominate activities in public spaces (welcoming guests, deliberations, etc.). When an occasion is held in rumah gadang, the engagement of men and women differs. Men are entirely engaged in establishing connections with guests and close relatives, having very little involvement in private activities (event preparation), specifically for women. However, it appears that women's involvement in public activities is increasing, given that most events necessitate the supply of a significant amount of food. Thus, the gotong royong (mutual assistance) system actively organizes neighbors to participate because people have their own sociological structure and values, and each neighborhood has a unique sense of togetherness and collaboration, known as neighbor's kinship. 20) The numerous activities of women that always circle the kitchen make it possible to argue that the value of the kitchen space cannot be detached from women's engagement.

We will try to see things from different perspectives. First, from the perspective of customary, there are traditional ceremonies that celebrate the life cycle in the Minangkabau society, one of which is the baralek pernikahan (wedding ceremony), which is considered a stage of the life cycle. The women and the kitchen play a crucial role because the baralek pernikahan is traditionally held entirely at the bride's home from start to finish. During the baralek pernikahan, there is a unique custom in food procurement; cooking activities are carried out by the woman who owns the house (induak bako) and is supported by neighbors. Because of the tradition of communal living, community participation becomes highly essential. Weddings are frequently conducted on a massive scale (baralek gadang), and the open space next to rumah gadang's central kitchen is utilized as a temporary kitchen to extend the area for cooking and preparing food. Therefore, the kitchen takes on new value and meaning in this context, becoming more than just a space for cooking but also a place for social interactions²¹.

Women are naturally placed in the kitchen due to strong Minangkabau customs; in this space, women are assessed for their crafts, skills, and cooking ability. Thus, under the matrilineal system, the kitchen is seen as a domain that may enhance and mold the character of Minangkabau women as protectors of family harmony. The kitchen notion is also influenced by the perception that Minangkabau society believed about an unmarried female. Cooking abilities, the delectability of the food, and the cleanliness of the kitchen are the criteria for enhancing a girl's qualification for marriage. As a result of this circumstance, women as wives and homemakers are needed to acquire cooking abilities, which their husbands view as appealing. According to their proverb, "kanyang paruik, kanyang mato, dan kanyang hati," which implies that a kanyang paruik with a full stomach appreciates the meal given by his wife. Kanyang mato, was pleased to see his wife's neatness and cleanliness. When a wife is courteous and pleasant to her husband, it is kanyang hati. These three factors, they believe, will lead to the household's harmony²²⁾.

The kitchen is also a symbol of a family's economic capability; a common phrase says "dapuanyo indak barasok," meaning the kitchen does not produce smoke; thus, if in such a state, it is associated with the family's low financial situation. The kitchen value may be produced not only from a societal perspective but also from the habits of each household. The Minangkabau people believe in "speak after thirst, discuss after eating," which applies to dining activities done with family. Women have a dominant role in preparing, serving meals, and dining together. Eating activities are intended to initiate communication amongst family members; thus, the kitchen integrates with the lanjar biliak and lanjar dalam (a particular room for closest relatives). For elderly women, the kitchen can also function as a living room "sambil berdiang nasi masak," or when cooking and welcoming guests. Aside from being a preparation room, the kitchen also serves as a storage area, a serving area, and a gathering place for family members²²⁾.

The numerous everyday practices are responded to, and an adaptation process occurs in the construction of the gadang environment. According surrounding environment, the yard is inexorably linked to rumah gadang; there are various facilities associated with the practice of homes, such as rangkiang (warehouse for various agricultural commodities, main rice), lesung (tool for pounding rice), and fish ponds. This facility complements the role of the kitchen in rumah gadang so that the kitchen is more than simply a tiny space for cooking but is related to activities in the yard of the rumah gadang. The position of the kitchen is very diverse; it depends on the system and influence of the prevailing customs in the environment around the house; in general, the kitchen is located at the back, but what distinguishes it is whether or not it is separated from the main house. The placement of the kitchen in the back takes into account the women's realm; the women's room in rumah gadang place at the back because it is considered private and sacred, so the kitchen is placed adjacent to the biliak or women's bedroom to make it easier for women to access their activities 16).

Some elements in rumah gadang have been modified to meet the kitchen's needs. Each dividing pole in the construction of rumah gadang has a particular purpose: the tiang dapur (kitchen pole). This pole separates the main room from the kitchen at the back of the building. The *tiang dapur* is the busiest area in traditional rituals for delivering food from the kitchen to the main room in rumah gadang. (Fig.2) Its location determines the kitchen's position; if it is merged with the main home, the kitchen is merely connected to the door. Meanwhile, if it is separated from the main house, a kitchen staircase integrates with it. This accessibility is one of the most critical aspects of the kitchen space; in some rumah gadang, the distance between the entrance and the kitchen door is varied. Rumah gadang Koto Piliang usually has access to the entryway, both in front and behind the kitchen. However, Bodi Caniago has only one entrance, from the front, back, or beside the house; thus, the stairs to the kitchen and house become one. (Fig.2) The rumah gadang kitchen layout follows practically identical cooking, food storage, and cleaning kitchen equipment; what makes a difference is how the house's inhabitants adjust to adapt and fulfill their space demands^{16),22)}.

5. The continuity of value

As mentioned previously, some factors influence the development of kitchen values. One of them is a social phenomenon in a certain socio-economic and cultural context. From here, each individual will be affected and took benefit from the social structure in their environment and will use it based on their personal interests. In this context we are going to see from the perspective of a traditional kitchen; everyday life practices, cultural-

spatial system, and its relationship with female subjects, also the everyday activities that occur in a place, contributing to the construction of characters and identities for the place. The involvement of everyday activities and emotional values in a place produces a variety of meanings and memories.^{23,24)}

If these factors assist modern society in developing better connections between houses, society, and culture, then any modern housing in the future will be more responsive to the demands of its inhabitants in terms of emotional value, rather than simply a place to live. The value of this traditional kitchen will go on as long as it is manifested in the dynamics of everyday life practices and its cultural-spatial associations. In West Sumatra, where several rumah gadang are still used as the primary dwelling, they carry out the adaptation process; most residents have constructed their dwellings in a more modernized design beside the rumah gadang. One example is a house in Payakumbuh that has undergone renovations by slightly altering its traditional house and constructing a more modernized house next to the rumah gadang. This traditional house is still carefully maintained and renovated regularly for the same reasons; the value symbolizes the owner's status, prestige, prosperity, and success. This practice demonstrates how those who still hold to a strict cultural-spatial system adapt to evolving times. (Fig.3)



Fig. 3: A house in the district of Lima Puluh Kota,
Payakumbuh, West Sumatra, has undergone renovation and
mass addition with a more modernized form. Source: Authors'
documentation.

Synchronization of the space happens with the need for a larger space; the development of a new space is carried out according to the owner's preferences. The preference here is a person's tendency to choose, which can be influenced by internal factors, such as family and individual tastes. Also external factors, the environment, ²⁵⁾ Initially, the infrastructures. household environment consisted of only one rumah gadang Bodi Caniago. The renovation was executed with the primary goal that the house can still be inherited by the next generation of children and grandchildren in the future. The space is expanded by including a more modernized house style that connects to the original rumah gadang. The form of the house had changed significantly, with a combination of traditional and modern elements. There are some changes that we discover in this house's spatial planning. As shown in Fig.4, the kitchen is located near the entrance of the original house as the heart of domestic activity, and women dominate this space. It is also connected to several service spaces, including bathrooms, fish ponds (raised for family meals if necessary), access to a small yard next to the house, and a hencoop beneath the rumah gadang. However, the kitchen in rumah gadang moved into the new house, with a position a little further away but still linear from the initial position. Several rooms at *rumah gadang* were refurbished, and three *biliak* were combined into one open space but remain as *lanjar biliak*. They construct two entrances based on the owner's personal needs; the main entrance is designated for guests, and the back is restricted to the owner's family members, particularly women.

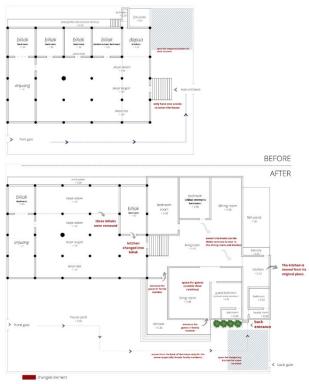


Fig. 4: Site plan before and after undergoing renovation and mass addition with a more modernized form. Source: Authors' documentation.

This new spatial configuration shows that the spatiality of traditional houses cannot be merged with the spatiality of modernized houses as a whole; it is proven that the values carried may not be consistent. This condition is identified from the original house's spatial organization, which applies its cultural-spatial system by a hierarchy in each space based on gender. However, the new house spatial organization does not attend to the hierarchy of gendered space but only distinguishes between private and public spaces. Overall, the space in the original house is still a defined space for women, yet this value has shifted slightly in a more flexible way in the new house, with men becoming more likely to intervene in this house's activities. In the space configuration of the new house, it appears that they are still attempting to maintain the feeling of the old house, the house as a women's domain. Nevertheless, it does not follow the house's traditional spatial system throughout the adaptation process; instead, it applies the women's movement cycle, and the new house spatial arrangement represents the cycle.

The new house has two entrances, with the back door designated for women to enter straight into the kitchen. The dynamics of kitchen construction happen; the adaptation is still based on the main factors-women, everyday practices, and the cultural-spatial system—that makes the kitchen space's values continuous. Although the position of the kitchen is different, they still placed the kitchen as the realm of women; in their everyday lives, women who inhabit the house are using the kitchen for cooking or simply socializing. Even the oldest woman in the household positioned her bedroom near the kitchen to ease her movement. She frequently prevents men from intervening; her restrictions are related to her status, which remains the authority of the inherent matrilineal system. The kitchen is the most adaptable space in *rumah gadang*. Because of its nature, the kitchen is the most public space among all existing spaces and may be relocated and applied in a new spatial configuration of the house. Whenever the kitchen is moved apart from rumah gadang, it is discovered that the circulation remains constant, providing the same feeling and value to the space.

The socio-cultural value of the rumah gadang is still preserved in every adaptation process, with the central aspect focused on women and everyday activities in their domestic space. The kitchen-which is still impacted by the matrilineal system in the process of adaptation—is the area that can preserve the socio-cultural value of the rumah gadang. In this case, when the original space of the rumah gadang remains unchanged, and the kitchen is separated, the space formed between the kitchen and the former house space can be occupied by different rooms suitable to the owner's needs which women still hold authority. Although the values of the rumah gadang slightly change when applied to the new spatial arrangement of the house, through the potential of the kitchen space to represent the value, the continuity of socio-cultural values in the rumah gadang can be continued and preserved.

6. Conclusion

Rumah gadang has a cultural-spatial system connected to their matrilineal system, which creates a gendered space; this gender relation exists in Minangkabau society's socio-cultural aspects. Thus, the spatial configuration of the rumah gadang follows the needs of women who have an essential role in their social structure; because of the matrilineal system. Whenever a larger space is needed, adaptation is always adjusted to their local custom and inhabitant's needs. The local society's cultural context dynamics will contribute to creating an efficient response to daily needs. Based on the observations, it was discovered that the kitchen is an essential aspect to consider when implementing rumah gadang's cultural-spatial system into the design of a new house.

The kitchen appears to be more private than other spaces; however, it is the most public. Moving the kitchen apart from the traditional house will not be a problem since the kitchen has a dynamic social and cultural value, demonstrating the value of the domestic space. The feelings and values of the kitchen will continue, the

kitchen will still become the realm of women, and it will be defined as a private social space in the future.

Further research is needed to examine this adaptation because it will be different in each household. We can see the potential for space adaptation here, but there is no distinct gendered space hierarchy in its implementation. The kitchen is the most public and adaptable space, and it can be adjusted to the arrangement of the spaces in between. Adaptations that happen provide the feeling and value of this space, which will make the house feel like a home.

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