FAMILY SOLIDARITY REVIVAL:
RESTRUCTURING LEBANESE CENTRAL HALL

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Family Solidarity Revival: Restructuring Lebanese Central Hall

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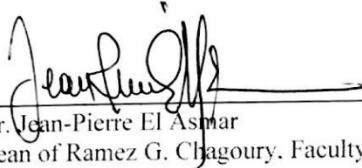
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Abstract

Social and political aspects in Lebanon were considered as an essential factor in Lebanese architecture style modification. The shift to modern architecture and design were the outcome of lifestyle's commercial events and foreign rules. In this prospect, many Lebanese architecture elements and prototypes waned as a result of this shift to modern architecture and change of lifestyles. One essential element/prototype was the Central Hall house, which was the social core of the Lebanese family. Thus, Central Hall, valued as a national Lebanese heritage, faded progressively, eliminating the central core of residential integrity where socio-cultural connection in families' reunion was directly affected (Shayya & Arbid, 2010). Trying to deal with the fading Central Hall structure and familial value status, this research questions the possibility of reviving and re-considering the Lebanese layout, and if so the how. Accordingly, this research aims to propose a spatial systematic methodology to detect potential "living space," inspired from our Lebanese residential Central Hall in terms of its social and structural aspects. The purpose of this research is twofold. The first is to ensure a better understanding of Central Hall background. The second is to propose a structural layout for "living" space. Researches as well as methodologies study will examine the Central Hall heritage, its origins and its interior structural modifications leading to its extinction throughout the years. In addition, research for related social and structural theories will serve as guidance to create a possible layout implementing "living" space in a Lebanese

contemporary socio-conceptual approach. Through social and structural theories, an approach will be studied and applied on a case study, which will be software tested in a final stage to demonstrate its validity. This research will target readers, especially Interior Designers and Architects who are not primarily productive in our situation, but a sign of foreigner's social position. This study will encourage them to re-evaluate their designed residential layout, enhancing the essential role of interior spacing in socio-connection between family members.

Dedicated to the memory of my Father…

whose love for family inspired me, and whose spirit enlightened my own

Acknowledgment

Based on this research experience, process and completion, I have come to the apprehension that the will and devotion indeed arrange the way; however, emotional support and motivation played as the fundamental material in getting to the finish line. I would like to thank my advisor, Ms. Dina Baroud, for her weekly supervision, availability, enthusiasm and her massive knowledge. I am particularly thankful for the help of Dr. Tarek Khoury through his referencing guidance, in addition to Dr. Robert Haddad for technical advice. Not to mention, special appreciation goes to the Basile family, whose time, kindness and support guided me throughout the case study process. Finally, I am grateful for my family and friends whose support stimulated my research dedication.

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1.   Introduction

In Lebanon, modernism in architecture and design were the outcome of political commercial events and foreign rules. In one instance, Ottoman rules, silk industry and the trade with European countries, emigration of minds and the return of architects, all influenced Lebanese architecture (Ragette, 1980, p. 8-10). Consequently, the post war modern architecture of Lebanon was noticeably marked by an Occident structure. The impact of modern aspects of developed countries was considered as an ideal platform toward evolution; however, it was also accused as a crucial process (McDonald & Méthot, 2006).

In fact, the process of the progressive alteration in Lebanese residential houses started, in one discussion, during French mandate with the emigration of native architect and their return back in a post-civil war era. Imported urbanism created in West, were the outcome of Lebanese independence and its cultural openness to foreign styles. Patterns were forced and imposed on our culture, reducing our heritage value and Lebanese identity while empowering urbanism (Al-Hagla, 2009). Thus, as functionalism was the main urbanism characteristic plan, residential areas were linked with the need for a massive amount of housing, and traditional Lebanese layout were reformed.

1.1 Problematic

The Central Hall house, is considered to be one of our national Lebanese residential structure that was marginalized and faded gradually, during French mandate. The reduction of Central Hall and introduction of new bigger rooms' concept were the consequence of modernization and art nouveau emergence (Davie, 2003: p.250-305).

Therefore, imported urbanism influenced Central Hall houses in structural layout, elimination the central core of residential integrity, affecting socio-cultural connection in families' reunion which was directly affected (Shayya and Arbid, 2010). Central Hall is one of our cultural identity, unique and distinctive compared to neighboring countries creating the living connection between all functional rooms.

The Central Hall is one of our national Lebanese heritage, which reflects our cultural identity, unique and distinctive compared to neighboring countries, as it is characterized by its typical symmetrical structural, where rooms are equally positioned from the both sides of the central space (Davie, 2003). Reflecting our Lebanese character, Central Hall is considered as the functional core for social and recreational activities, which defines family members, neighbors union, playroom for children as well as household activities (Davie, 2003). Located as a central buffer and a joint zone between wet and private sections of the house, the Central Hall represents the family cultural value reflecting Lebanese social character. Yet, with the return of immigrated minds in the late 19th Century, Central space was neglected and a new concept of room was implemented. Linked to Bourgeoisie families and hierarchy, a room was added to the house and fell under the name of "*living room*" (Rechavi, 2009). Cooper (1974) viewed the living room as the nuclear domestic space used by family members to communicate and express their identity. Moreover, the size of houses decreased as result of the growing allocation, and reduction in size allowed for fewer rooms turning living rooms into multi-purpose rooms, frequently minimizing them into a "couch" (D'heer, 2016). Modern houses lacked connectivity, and the living room was restricted into a singular space with no studied connection with other functional rooms resulting in a dead area only

accessible on purpose. The living room altered into a space with less interactions and social face-to-face meetings within a residential area (Cooper, 1974).

Furthermore, in a recent time, the recorded rate, at which social, economic and cultural digital alterations are taking place, have left people unsettled around their cultural heritage (McDonald, 2006). Increased exposure to technology through media has improved questioning authentic traditions' survival chances (McDonalds, 2006). With the technological evolution, the living room has become rather linked to TV. However, the rising number of home media appliances and the increased complexity of media interfaces modified our relationship toward the TV screen. Screen viewing is regularly combined with other activities, including media use. The presence of the smart mobile and the diversity of digital screens connected to Internet devices reconfigured our conventional understanding of the living-TV room, which no longer refers to a private family union place (D'heer, 2016).

In brief, Lebanese houses lost their importance due to socio-economic reasons of bourgeoisie families' lifestyles and imitation of foreign structures (Traboulsi, 2007). The modern interior and the western imitation eliminated the reflection of Lebanese families' character. The modern social lifestyle, the introduction of a dying living room and technology intervention left no room for a residential interaction, influencing the socio-family connection and communication.

1.2 Aim and objectives

Trying to deal with the fading Central Hall structure and familial value status, this research aims to propose a spatial systematic methodology to detect potential "living space," inspired from our Lebanese residential Central Hall in terms of social and structural aspects. This

systematic approach will allow to investigate the possibility to enhance family reunion in contemporary residential interior context. In order to reach the aim, four objectives are to be ensured:

1. To investigate structural Central Hall background in terms of social value and structural layout

2. To search for related social and structural theories concerning interactive and spatial communication.

3. To generate a spatial systematic methodology based on variable parameters related to social and structural theories.

4. To present a structural prototype explaining the spatial systematic methodology and illustrate it in a case study

1.2.1 Hypothesis

Accordingly, in order to enhance the family reunion, a spatial systematic methodology is suggested which relies on crossing theories and its application. Thus, secondary data concerning history and extinction causes is studied and analyzed. Moreover, the steady efficiency of a social system should drive hand in hand with the build-up of three parametrical structural guidelines, in terms of residential interior walls layout and reaching the needed approach for a spatial layout order. Thus, an approach entailing the social and structural context is generated. Social order based on Lebanese "reality" and family "solidarity" necessitates a structural one creating a living space able to re-enhance members' interaction and fortify families' solidarity. Members entering the intended region are intentionally arranged to experience a certain logical space which enhances inner-reunion. A greater level of aggregation is achieved through a stimulating structural

pattern of triangulation. Thus, in order to clarify the approach, social and strulogical space will be applied on a residential case study resulting into an example for further designers' application on other residents. Therefore, in order to achieve originality and present it through a solid example, a selected contemporary layout residence will be re-designed, where its family's "real identity" will be reflected through an analyzed interview. A theoretical prototype will be applied on its layout, which will be software tested on "Depth map X" to verify its credibility. A final prototype outcome is to be achieved, aiming to re-add a central "living" space stimulating face-to-face meetings, which triggers intended communication and allows familial social contact to be re-enhanced under the shadow of fading morals, values and family appreciation.

1.3 Chapters division

This thesis is divided into five chapters. After the introduction of the problematic and the aim, the second chapter: Literature Review will provide a detailed study of Central Hall background and failure, along with related social and structural theories. The third chapter: Methodology with tackle the data needed from Literature review, along with a studied case study on a Lebanese contemporary house, that once had a Central Hall spirit yet modifications changed central layout and value, allowing us to fulfill the third pattern objective application. In the fourth Analysis chapter, data collected from the methodology will be studied and analyzed in order to come up with the proposed prototype approach, which will be reflected and tested within the selected residence. Chapter 5 is the conclusion part where the prototype is explained and tested, objectives are reviewed, limitations are revealed, and recommendations for further investigations are

mentioned.

1.4 Value and contribution

As a final point, the gradual evolution of a social system has to be bound with a designed spatial Layout order merging social with structural aspects. A social interaction layout must be built. A final outcome example is to be built on both identity and reality of each residence. Thus, fortifying Lebanese solidarity requires a built environment as a field of communication that stabilizes members' relationship, in which it allows further complex social contact. This is where social theory of Parametricism, with its guidelines, explained in coming chapters are to be used in distinctive and structural process. Three guidelines are to be re-inspected in a particular case study, which allows to be an example for generated systematic approach application, which designers can follow in their further domestic projects stimulating inner-family interaction.

2.   Literature Review

Central Hall is expressed as the core of our Lebanese heritage and family essential. However, economic and political factors were considered as tangible influences for Central Hall modification, leading it to extinction. Therefore, this research aims to enhance family reunion through a systematic approach providing a spatial methodology to detect potential "living space" inspired from residential Central Hall social and structural context. In order to reach the aim, the historical, cultural and structural backgrounds of Central Hall should be examined. The first segment of this chapter will explain its origin along with its major role in building family connection. In addition, various phases in concept, name and structure will be clarified under the modernization segment, which reached Lebanon and its Beirutie urban planning. In the second segment, social theories are explained shedding light on the importance of self-being within a certain space and describing the essential guidelines experienced for creating the social ambiance that reflects the identity of a Lebanese family. In the final section, methodology will tackle structural approach based on the crossing of explained structural theories. Thus, definite social and structural guidelines are explained in order to establish the intended spatial systematic methodology re-creating a genuine pattern that is able to fortify the old family solidarity, which will be carried as an essential social aspect to base on.

2.1 Central Hall historical background: Name and Location

Our old Lebanese residential houses were designed to be a structural representation of our social relationships and cultural values (Choueiry et al., 2015). Between the second half of 19th Century and the first half of the 20th Century, the "Lebanese house" was well known in littoral cities in the Levant. Its name also fell under different names: "Neo-traditional," "Beirutie House," or "Three-Arched house" (Davie, 2003, p.11-12). The structure of the house, which was reduced to a cubic form and offered a unique central space, included three arcades representing the principal façade oriented to the North and fell under the name of "Central Hall house (Ragette, 1980). Outside Beirut, in Metn and Mont Lebanon, this structure was notably dispersed and reached Damascus – Syria; however, its highest frequency was only reached in Lebanon (Davie, 2003). Thus, Central Hall is steered to be considered as an authentic core of our cultural Lebanese heritage, a heritage at risk of extinction due to past and present influences on Lebanese morals (Makhzoumi, 2009).

2.2 From Liwan to interior Central Hall: Family and Functional core

Semaan Kfoury, in his book *Maison Libanaise*, investigates the foreign origins of Central Hall house accusing it of being of non-Lebanese origins. The historical facts are deducted, and Kfoury investigates the hypothesis of Italian influences by: Venusian or Roman origin. However, none of the studies seems to support a direct connectivity to Lebanon (Davie, 2003).

From a distinct perspective, the social historical phases can be marked in Lebanese houses transitions. The living mode establishes itself in response to specific

needs. Houses in Lebanon had their evolution from a rectangular house to a gallery house, after which it turned into a Liwan house, the main structure origin for our Central Hall (Ragette 1980). The Central Hall is evocated from the authority of bourgeoisie of affairs in rupture with social categories. The domestic architecture had a different habitation logic whereby the living space was fully constructed and open spaces like balconies and gardens lost their value with generations. The old and exterior central space, used for the enlarged family, faded and was replaced with an independent family union (Ragette, 1980).

With the invention of the intimate space, the exterior Liwan central space concept has its few modifications. In addition, the town was quite cold in winter, keeping rain was an important gain. The central courtyard was relocated to an interior hall. *Sofa,* or what is called couch characterizes the central hall. In this case, a symmetrical central hall area separates symmetrically the "dry" spaces: rooms from the "wet" spaces: kitchen and toilets (Davie, 2003). The Central Hall was then well protected from weather conditions and gained many cultural and familiar purposes, used for guest entertainment , house works, dining, and playground for children, as well as transition space between rooms, service spaces and the exterior of the house.

Unlike other countries, the Lebanese Central Hall was characterized by its symmetrical disposition that could slightly vary according to house areas (Davie, 2003). A central cubic form with symmetrical room's opening was characterized by three arches façade oriented to the north with the Mediterranean Sea view. A functional space for social and recreational activities was used to house many engagements and wedding ceremonies for their large spaces (Davie, 2003).
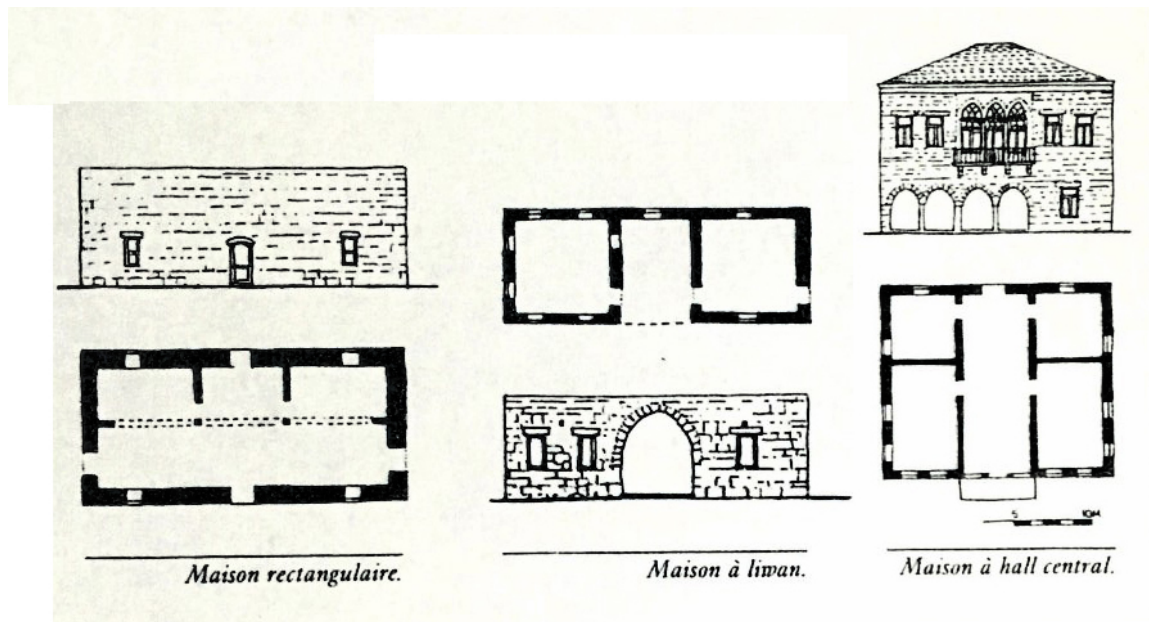
Figure 1: Lebanese houses Plans (Davie, 2003)

Central Hall was the family core, a good place to join members. In addition, the Central Hall offered the positioning, esthetically, between the bourgeoisie status and rural habitats. The old uncovered Central Hall house is perceived as globally not adapted and being extinct through multiphase stages as it was considered out of style in contemporary houses.

2.3 Central Hall three Layout phases and extinction

Among many reasons, the central structural Hall in Lebanese houses was expressed as the core of the Lebanese architectural heritage developed over centuries and reflecting political and cultural influences in a tangible form (Lahoud, 2008). However, Central Hall has passed through three different phases. The first phase was due between End of World War I in 1900 and the collapse of the Ottoman Empire in 1918, where the exterior stairway of houses were incorporated inside the buildings and the Central Hall

was subdivided into a living room, a salon and a dining room. In addition, the kitchen and bathrooms were located in a corner, dividing wet from private spaces (Ragette, 1980). Between the two wars and the French mandate, phase two was characterized by expanding service areas; the kitchen was bigger and a dining room was added. However, internal corridors were added to increase privacy in the Central Hall. The final phase, which was during the period of independence, the disintegration of family unit into a group of individuals, and the increase demand of privacy caused the discarding of the Central Hall and the separation of the three main areas: service-living-sleeping rooms succeeded (Ragette, 1980).

2.4 Urbanization and Central Hall fading

Lebanese historical phases influenced native perspectives and social experiences in variable ways, reducing Central Hall's importance in Lebanese housing plans. During the French mandate, France and other European countries gained influence on Lebanon (Goldberg, 2007). Young Lebanese students, especially Christian sponsored by the French Mandate, were offered fares to accomplish their studies in Europe, in particular "ECOLE DES BEAUX ARTS." Native Architects returning to Lebanon gained a modern western perspectives and were selected to build Beirut City after the civil war (Ragette, 1980). As a post war innovation, an urbanization plan was implemented in Beirut District (Al-Hagla, 2009). A westernized plan of local architects brainwashed by modern ideas, turned the district into a platform of concrete and non-Lebanese blocks. The plan is described with two characteristics maintaining modern architecture (Ruppert, 1999). The first one is functionalism, and the needed link to enormous amount of housing (Rowe &

Sarkis, 1998). The second characteristic is defined with the avant-garde, encouraging the fast production mode and technics, and to display a whole new set of habits, permitting it to afford the next stage (Hays, 1998).

Functionalism concept and the avant-garde are-supposed to be described as "modernity" and as the new capital. However, if such fusion between old and new buildings is possible in a well maintained program of mass-housing, the assertion of Beirut modernism's and the question for identity is not fully achieved (Hays, 1998). The Central Hall was faded progressively during and after French mandate. The reduction of central space and the introduction of the new bigger rooms concept were the consequence of modernization and the emergence of the nouveau art (Davie, 2003). These changes were dramatic, most notably, the switching from a Central Hall to a smaller "living room;" additional rooms were added, altering the layout of the house by creating spaces that have never existed. Each room had its door, which, when closed, effectively isolates the member from the rest of the family life (Davie, 2003). In another way, Davie (2003) affirms that a powerful typical sense of privacy was added to the house structure. Eventually, the modern interior influenced the socio- family connections and separated the parents from children's activity.

2.5 Living rooms and its changing value

As well as Central Hall family union, a new modern concept was introduced during the 19th Century changing the consistent family union and shifting it into a different perspective: the living room conserves, for a short term, the regular concept.

However, economic and technological transitions had also variable impacts in the living room concept's demolishment.

The middle-class multipurpose room, also known as the living room, made its first appearance in Europe and United States between the 17th and 19th Centuries, reaching Lebanon during the French mandate era. Its main function was the creation of a distinction, which shifts between a formal entertaining room, the parlor, and a space used by the household for work and leisure accomplishment. The living room is the modern image of domestic space used for certain impression creation. It offers the attempt to relate social, familial characteristics and values as social mobility and attitudes (Rechavi, 2008). A union space where communication of social bonds take place, and family identity and style is revealed to guests. In addition, Cooper (1974) affirms the living room as the nuclear core of the family, and losing it may result in losing family connection. Thus, preservation of our own culture, was taken into place. The density plans given to Greater Beirut offered a capacity to accommodate for thousands of inhabitants. The greatest opposition came from developers, wanting fewer lost spaces and more rooms resulting in the fading of the living room value (Hays, 1998). The size of the houses decreased as a result of the growing allocation of funds for domestic technology. The reduction of house size led to fewer rooms, resulting in merging the living room with other functional rooms as the kitchen (Rechavi, 2008). Living rooms lost their space, were minimized, and were re-defined as a couch, influencing family social bond.

In addition, under the echo chamber of 20th Century, technology gained many influences in shaping our perspectives toward daily needs. TVs and smart screens were part of these changes, which are nowadays available in each and every house. Therefore,

with the introduction of a TV located in the living room, the functional socio-aspect lost

its identity. Living rooms are linked to televisions converting their name to TV rooms

(D'heer, 2014). In our everyday lives, the TV is integrated as a viewing behavior,

explains McLuhan (2015), a sharp Canadian philosopher, who had a different perspective

in through which he clarifies how the Power of technology works dependently on

alternately grasping knowledge for it to enlarge the scope of action. It has been observed

that TV has been considered as the primary powerful medium for the global village

message (McLuhan & Gordon, 2015). McLuhan (1964) developed his idea in

Understanding Media: the Extensions of man, where his work established him as the

conceptual notion of the "oracle" of the new television age (Driedger & Redekop, 2008).

Thus, according to Beayni J. (2015), the TV entered each and every Lebanese house,

shifting it to be an essential element for a primary need. This is where interior family

members involved in the watching act are able to extent and rather be a part of an exterior

environment where distance is no longer an obstacle.

However, the intervention of mobile Internet devices in the TV room has

redefined the social uses of viewing. The complex nature between physical and

oral/verbal avoidance is highly recognized with the affiliation of multiscreen phones.

These smart technologies allow online sociability labelled as 'outbound affiliation,'

independent of a certain location, and led TVs to lose their value and, therefore, their

room value (D'heer, 2014).

Under the echo chamber of 20th Century, switching to a working family rendered

the house a shelter for busy life where time, price and technology have taken the primary

role of shifting lifestyles. TVs are now integrated in living rooms, eliminating living

room social and communicational function and reducing it to a singular passive couch furniture. Accordingly, some values linked to social bonding and union communication between family members have been demolished.

2.6 Lebanese fading familial values

Family cohesion and its solidarity is considered to be a notable characteristic within its members (Makhzoumi, 2009). However, the journey of migration involved splitting genuine values with foreign different ones (Makhzoumi, 2009). In addition, the discourses of modernity evoke diverse and multifaceted responses in Lebanese styles, as seen as western project that is a major threat to one's sense of family and identity (Ahmed, 2000). The Central Hall space was the socio-connection meeting of family members as well as representation for guests (Makhzoumi, 2009). Within the same residential area, and with the introduction of TV and multi-screens, members no longer meet, as their structural aspect were no longer built on communication but on functional areas urging the necessity to rebuild old conceptual connection.

Davie (2003) insists in his saying that the fading of Central Hall is directly linked with the family reunion failure. Within its interior central structure, all rooms were connected to a singular central position, where the parlor, the father, used to take his place. All movements and member's orientation had to be handed through the central space, which are depicted and controlled by the parents (Davie, 2003). With the fading of Central Hall, the emergence of living room was implemented in the house. The living room was considered as a modern western family meeting approach. However, no central

joining structure was studied nor given importance to link functional rooms together, leaving it with no space for social connection and reunion of family members.

2.7 Similar Central Hall case studies and relevance

It was necessary to examine different case studies concerning Central Hall revivals, where the first describes Architect's contribution in reserving Central Hall structural values, while the other two explain its Bioclimatic and sustainability, where creating a communicative space and boosting interaction could serve as guidance to establish the needed prototype approach.

2.7.1 Elie Saab Central Hall: Only few architects still insist on reviving the traditional spirits in their designs. The Venezuelan-born and Lebanon-based Interior-architect Chakib Richani (2009) claims in his interview for Architectural Digest magazine that the Lebanese spirit can be found in every residence; it only needs the will to show it. Rihani (2009) described the fading family value in houses, re-introducing it with the selection of a typical Central Hall as a renovated residence for the notable Lebanese fashion designer "Elie Saab." Rihani (2009) insisted on leaving the Central Hall structure intact as it reflects the central family core; however, an "old vs. new" spirit was added for the decoration. Thus, the approach's final outcome should provide a central space area able to conserve the same Lebanese spirit: a typical central space reflecting the Lebanese's houses uniqueness and identity.

2.7.2 Central Hall Climate value: In parallel to the Central Hall's interior socio-advantages, an advanced Seminar on Bioclimatic Architecture in the Mediterranean was held in June 2006 in Barcelona, where the Lebanese architects Sany Jamal and Aram

Yeretzian declared the importance of the Central Hall as a factor for reducing additive energy use. A central example in Beqaa was given as an example, where both architects declared that the central space's interior orientation toward the sea encourages a natural cross ventilation and an additional daylight level promotes a decrease in energy use (Yeretzian & Jamal, 2006). Thus, the possibility of sustaining its central orientation towards the sea in the final outcome could vary according to each house's contemporary layout; yet, it is preferable as it adds a climate protection and promotes an eco-friendly environment.

2.7.3 Domestic Gardens in Central Halls: Furthermore, expending eco-friendly plans, Jala Makhzoumi and Reem Zako (2007), investigated the role of urban domestic gardens to define whether plot is considered as an attachment or perceived independently from the house. Several central Halls were tested in the published article "The Beirut Dozen: Traditional Domestic Garden as Spatial and Cultural Mediator." Depth Map software was used in order to depict circulation in gardens, where Central Halls are perceived as a high traffic area in all twelve examples (Makhzoumi & Zako, 2007). Thus, the results, regarding gardens implementation, can serve as an affirmation for Central Hall high traffic structure to follow. Inspired from its interior, central space with singular entrances allows the achievement of a high circulation in its area gaining an increase in the communicative "living" space. Three case studies explained Central Hall's importance in both social and structural heritage value aspects, stating its essential role in the family's solidarity.

Lebanese families' solidarity is considered as a heritage that has an authentic role in building a nation's cultural identity known among all other countries. Within its social

context, architectural inheritance is a demonstration of one's cultural identity and our ancestors' family philosophy. This fact is a demonstration of our concrete evidence of ancestral beliefs and lifestyles, urging to link family and communities with their land and should not be dismissed. Therefore, fading social connections should be taken into consideration, in addition to similar and experienced social theories needed as a conceptual approach, that could be helpful to frame the guidelines that create the link between interior residential entities and family members.

2.8   Social Theories: originality, identity, solidarity and communication

Butterworth (2000) declares that interior structures are more than walls in people's lives. They are embedded with a deeper experience. A personal and cultural meaning, denoting private memories and interpersonal connection, which symbolize people's values and their sense of belonging where social theories represent the importance of self-being within a certain space explaining essential guidelines experience for creating the social ambiance needed. Four different social theories are selected and explained in details in the following paragraphs; yet, they are connected within the conceptual logic: re-integrating our identity.

As a basic necessity, residential spaces should cater for people's wellbeing. Each dwelling needs to provide its inhabitants with a sense of belonging and a reflection of identity and a place for both privacy and social interaction. This is where the first two theories of Baudrillard in his "simulacra theory" and Pallasma with his "task of design" intervene together regarding the concept of "self-identity" sense within a space. Moreover, on the one hand, we do not merely exist in a physical environment rather we

interact with it; therefore, functional space must enable us to recognize ourselves by reflecting our "real" character. On the other hand, designing residential functional structures with no link points would create a problem of isolation. Solidarity, reflecting our "real" Lebanese family character (Davie, 2003), begins within interior structuring reinforcing fading communication. A conceptual approach derived from the "logic of space" theory allows us to recreate "the bond," which new residential spaces are missing nowadays. In parallel, solidarity cannot be fortified from our built forms without a defined communication: social interaction in space. Thus, communication is studied through the forth theory of Parametric semiology, which is reinforced through three parametric guidelines of spatial experiences. As a result, encouraging room elements to come alive evokes reflection on identity, solidarity, interaction and movement, all of which are essential in the family members' union.

2.8.1 "Originality" by Baudrillard

Imported urbanism influenced Central Hall houses in layout structure, diminishing its central space and role, where socio-cultural connection in families' reunion was directly affected (Shayya & Arbid, 2010). The Central Hall is one of our cultural identity, unique and distinctive compared to neighboring countries creating the living connection between all functional rooms. Davie (2003) affirms that the Lebanese house is a family value, and the demolishment of the Central Hall house is an indirect shift to the acceptance of foreign influences and dominance. Under the shadow of westernization, local architects are described as modernly brainwashed by Western ideal images (Tabet, 1998). Traditional Lebanese aspects are being replaced, imitating foreign

styles under the name of modernization and evolution influencing our family and cultural values and connections. In order to maintain realism, Jean Baudrillard a sharp critic of contemporary society, culture and thought, usually considered as a major expert of French postmodern theory, explains the risk of imitation in his theory: Simulacra, and describes Urbanization as a pattern production and duplication of reality. Baudrillard (1994) explains that people now, claiming to have a modern spirit and are drawn into a new era of simulation, in which social reproduction whether defined in information dispensation, communication, or styles bonding replace the real production as an organized form of society. In our era, labor, and in our case, Lebanese designers, are no longer a force of authentic productions, but they replaced themselves with a "one *sign* amongst many." Instead, our houses have turned their streets into the "hyper reality" of simulations in which western images and spectacles replace the concepts of identity production and Lebanese contemporary societies.

In a similar fashion, Baudrillard (1994) continues with his "strong simulacrist," that in the media and the consumer societies, people are trapped in the production of unrelated images and simulacra, which have less and less connection to an outside or external "reality." In our case, designers reached an extent that all western concepts of the social, whether political or related to designs, are the ideal "reality" and must be followed, that the reality by itself no longer seems to have any meaning losing its value. Catching others' realities and reproducing them dissolves their "reality," and implement fake realities; for instance, in unrelated territories, dissolves its meaning and creates a space where no identity is reflected, full of dull fake apartments under the echo chamber of "modernity."

2.8.2 "Identity" by Pallasma

Our designs must reflect, materialize and preserve ourselves, our connections of ideas and images of our ideal life. This is the aura that Pallasma tries to provide in his book *The Eyes of The Skin*. Pallasma (2012) claims that the timeless task of design is to create a combination of embodied and lived experienced symbols which express and organize our being in the world. Everything we create must enable us to distinguish and remember who we are: our own identity; it's the permanence of our own being placed into a world, and a world placed within me. As such, this would be a complete representation of cultural and value orders and familial interactions building the identity (Pallasma, 2012). "Architecture communicates itself to us as a unique response to a particular location" (Abel, 1997, p. 195). The apparent identity of habitat within our civilizations is where architectural landmarks embody the image of a certain society at a precise period (Lahoud, 2008). Therefore, the revival of our cultural heritage must follow our Lebanese background and reflect our own identity and native family members' character to remain "real": Identity must be integrated within the space designed.

2.8.3 "Solidarity" in logic of space

Obviously, human beings living within a certain society are considered as spatial phenomena (Hillier & Hanson, 2005). Therefore, a society does much more than simply exist in a certain space. A certain space must reflect its living character along with fortifying their inner connection. In such space, people are arranged to be located in relation to each other with either a greater or a lesser level of aggregation or separation,

stimulating patterns of movement and encounter, either dense or sparse within a certain group which we can call spatial order (Hillier & Hanson, 2005). Different types of social formation can appear requiring a spatial order. That's how we read a certain space and anticipate its lifestyle by reflecting our own character. However, the most far reaching modifications in a society's evolution are usually either tangled or led to deep alterations in spatial forms. Yet, the problem of our designed spaces is that "designed" environment does not "work" socially (Hillier & Hanson, 2005). Consequently, mismatching creates social problems that might not exist if well structured. The problem of isolation, caused by the new urban transformation based on fast work lifestyles and Mass-Housing, came to existence (Berry, 1977). Assumptions are that separation and self-union were the new evolution concept for an evolved society (Talen, 2006). In this situation, the need for a proper theory of the relations between society and its spatial dimension is acute. The social theory of logic of space would account first for the relations that are found within the space: "people in-space" and the arrangement of the space itself; therefore, the two guidelines would generate the product space in which a living society/family works and reproduces itself within its union. Interior spacing is a certain conceptual work for organizing experiences of connection, and a tool for representing the space of a cultural character and identity (Hillier & Hanson, 2005). A new aspect to relations between social solidarity and space is developed with the duality between inside and outside space (Bratu et al., 2014). A solidarity, empowered by the level of interaction and communication, which will be tested in the final circulation stage, is rather trans-spatial between its members to the point where it develops a deeper and a more homogeneous

interior structuring the space in order to enhance its connection.

2.8.4 "Communication" in Semiology Parametricism

The word solidarity, described in Logic of space, lies in the local reproduction of a structure recognizably identical to other members' character of the group. A solidarity within a space is built on the union principle and intercommunication (Hillier & Hanson, 2005). Therefore, Parametric Semiology, a rule-based variation based on the re-foundation of the order built in an environmental space, claims that designs made are all communication designs. Our built environment, structured by all different and complex background of territorial divisions, recreates an information-rich platform of communication (Schumacher, 2016). Designed spaces, public or private, are considered as spatial communication. Participants are places in precise constellations respecting a certain communication situation. However, similar to any other attempts of communication, a spatial one can be accepted or rejected as the space can be entered or exited. Thus, by entering the space it implies accepting the communication attempt. The semiological parametricist logics establishes orders within the designed space, giving the opportunity for making inferences. Three terms describe the societal function framing a communicative interaction: Organization, Articulation and Signification (Schumacher, 2016). Three socio-interactive aspects are to be explained and considered as a structural guideline to define the proposed outcome within the Lebanese cultural identity.

The gradual evolution of a social system is directly linked with the build-up of a designed spatial order. Thus, social order necessitates a spatial structural order. A social involvement requires a built environment as a field of impression that stabilizes

members' relationship, in which it allows further complex social meetings and interaction. Identity, solidarity and communication served us as the key terms taken from socio-cultural theories, which can provide us the logical and social guideline to build with. In order to fulfill a finalized end product, a real structural approach is to be studied in the next chapter. For a "real" Lebanese reflection, a typical structural aspect, along with a defined pattern has to be elaborated in parallel creating a complete design outcome.

2.9   Structural Theories: Parametricism in its three guidelines

The expansion of each society takes place hand in hand with the growth of its habitat, which can be considered as an ordering frame (Schumacher, 2016). The spatial order of the human residential habitat is linked with instant physical organizing apparatus that has power to either separate or connect social members and force their movement activities. The three Parametric semiology guidelines used for this structural section spell out design societal function: the framing of communicative interaction. In order to achieve a structural customized pattern based on the interactional theory explained in social theory, three guidelines are offered in Parametric semiology in order to accomplish a complete prototype. These guidelines tackle the pattern form, functional identities of pattern elements and the inner circulation between them. Accordingly, distinct related theories are merged and explained in order to finalize each guideline.

According to Schumacher (2016), guidelines can be subdivided into three related subtasks: Organization is based on the pattern linking the distribution and positioning of spatial elements, Articulation is built on the composition of morphological identities that

stimulate the functional elements building our interior outcome aiming to organize, and Signification consists of the physical means of barring element units and connecting it via an interactive circulatory channeling (Kanaani & Kopec, 2016). These three structural mechanisms can, in delicate cases, function independently of all perception and can, therefore, succeed without including articulation aspect. In parallel, following the statement that each structural design has to be built on a parametric communicative design (Schumacher, 2016), Schumacher's Vienna University project is explained in order to better understand the application of the three parametric guidelines. The next part will illustrate how organization, articulation and signification are articulated within the case study scope, and how a similar guidance approach will be applied in the systematic prototype approach.

2.9.1 Parametric Case study: Vienna University of Applied Arts

Schumacher (2016) explains in Vienna University project the importance of communication and claims that each structural design should trigger interaction. Thus, physical mechanisms should be operated through the three guidelines: Organization, Articulation and Signification. In theory, each guideline works independently; however, all three meet in structural perception. Therefore, organization is based on a combining pattern joining all university functional spaces together. According to Schumacher, a joining pattern is needed in order to confront all areas through a "face-to-face" contact, where none can be neglected. Accordingly, articulation consisting of function's identity and number are then elaborated as five college departments, four living zones and two shared spaces to be joined. Moreover, facilitating the participants' active movement

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orientation restrains the level of complexity in the patterns cells. Thus, signification should facilitate the participants' active direction in order to reach an overall interactive unit. Giving intended social actors certain information about a given bound triggers communicative interactions. It initiates a certain invitation to participate in a framed social situation empowering the relation (Schumacher, 2016). Thus, the designed space is considered as a spatial communication, where participants are controlled to navigate, passing in specific constellations, which are relevant with respect to the anticipated communication situations (Schumacher, 2016). Distributing the living spaces inside framed zone places enables students to walk through its passage where departments, considered to be a low communicative areas, are located in between, increasing the level of interaction and, thus, communication. Schumacher (2016) links the level of interaction with the level of communication by describing active bodies: living spaces as "cognitive agents" reviving the passive bodies: departments.
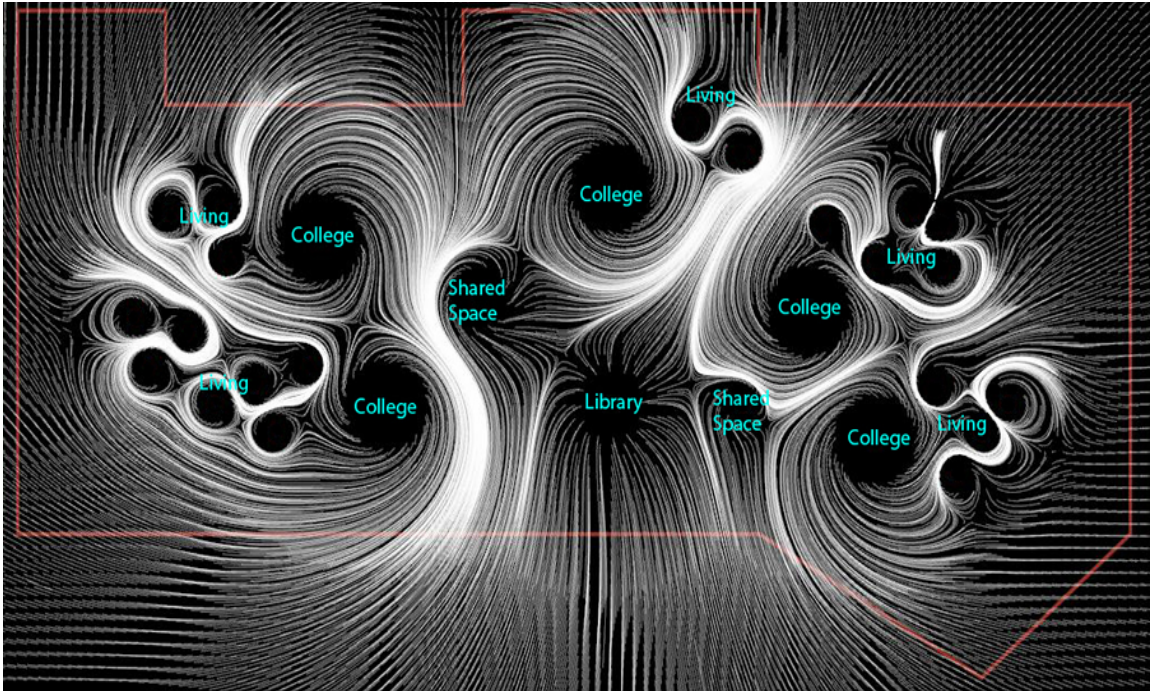
Figure 2: Parametric Semiology: Semio-field, master-plan with program distribution (Schumacher, 2016)

2.9.2 Parametric case study application in research

When it comes to residential areas with both public and private interventions, the restriction to plain organization without articulation is to eliminate the facilitation of participants' active navigation and to constrain the complexity level under social communication pattern. Articulation assumes cognition. Thus, the "active bodies" described by Schumacher, which play the role of "cognitive agents" reviving a space, are, in our case, the most visited rooms of each family. Passages are also studied through certain logic of singular passage forcing students to reach a certain destination through a firm direction reviving "passive bodies." It procures residential member's perception of functional spaces and comprehension, thus facilitates the participants' active orientation. The distinction between organization versus articulation is built on the alteration between dealing with passive and moving active bodies. These two registers

transmit in articulation and reveal the organization function, which makes the organization role apparent (Schumacher, 2016). The Parametric semiology three characteristics concept approach can be directly linked to three similar structural phases in order to be applied. The articulation phase is to identify the "active" most wanted functional room's identity. However, dwellings is characterized by the public and private homogenous combination, which Center Hall focused on. A noticeable segregation of the different functional areas is obvious, mainly between the service, the social and private areas. Thus, the separation of the private sector of a habitat exposes a clear intention to preserve family intimacy and union, engaging a greater importance on each family member and their individual privacy (Pereira, 2006). The totally separate service sector, which usually includes the kitchen, laundry area and the maid's bedroom, is set in the part with a less prestigious level of the house, the back/side wing of the buildings, located apart from the domestic living area. The distance separating the two partitions reinforces the social hierarchies patent in the organization of internal space (Pereira, 2006). Thus, when it comes to Organization phase, a defined pattern linking the functional aspects of the dwelling has to be established in an equal importance level. Consequently, the "face-to-face" pattern proposed by Schumacher is not applicable as two sections: Front vs. Back sectors are to be distributed apart. Thus, in order to revive a central core, a conceptual theory created by William Whytes recreates in his "triangulation" pattern approach reviving the social solidarity of the "logic of space" theory mentioned in the second chapter. William Whytes describes a phenomenon called "triangulation." Triangulation explains a way, space technic that promotes a social bond between two, three and more, units or persons, and encourage third parties to interact with each other

even if they weren't part of the combination from the very start. Triangulation consists of an affirmative social relationship where two parties get connected through a definite structure of a triangle joining three different elements. A primary movement of tension is perceived where a third party gets to be present forming a triangular association (cited in Kenwyn, 1989). Moreover, triangulation proceeds to Secondary movement of tension were two singular triangulation forming six parties get attached through two facing triangulations, and a completed triangulation turns into an opposing coalition. Therefore, social interaction between dwelling members is fortified through a solid structural pattern connecting all three areas' functional spaces. Pattern can have a singular primary tension, secondary or a complete triangulation allowing a repetitive patterns outcome. Triangulation consists of two types of interactivity: affirmative relationship and tension-filled relationship where none of them gets to be ignored or disengaged as shown in Figure 3.

Figure 2. Transforming affirmative relationships into opposing coalitions.
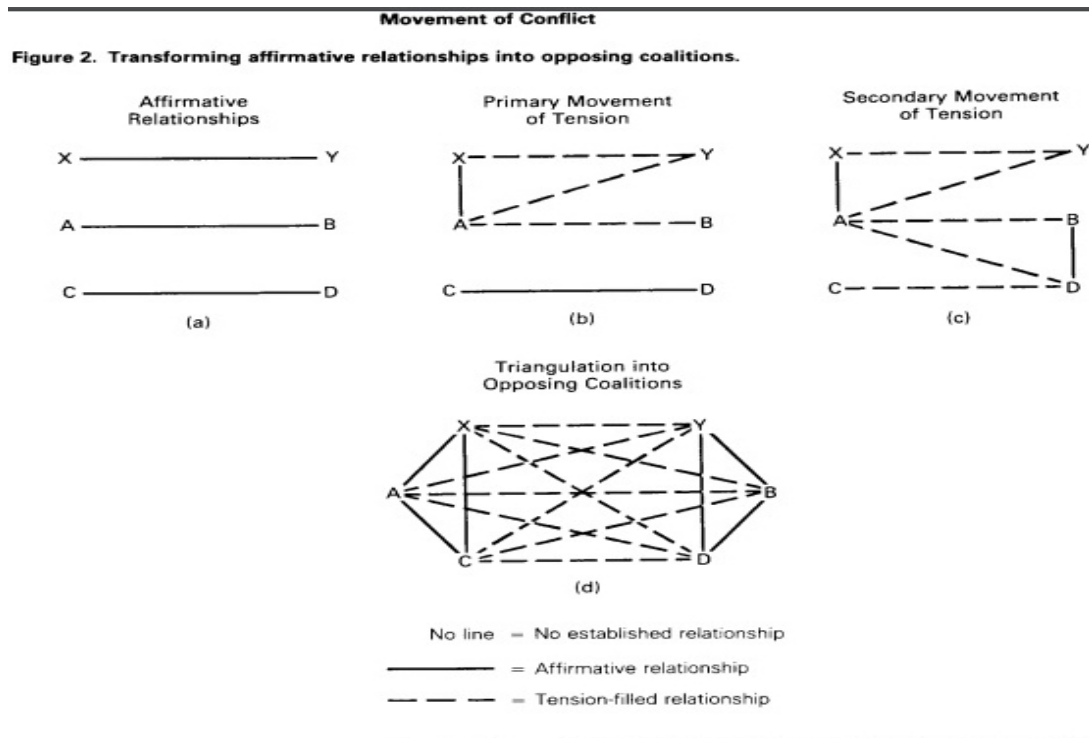
Figure 3: Movement of Conflict (Smith K, 1989)

Third phase includes Signification. This stage is the circulation channel in which studied structural design focuses on members' orientation in movement between elements. Circulation areas in dwellings are the product of their location within the system and the relationship link between the social, private and service areas of the first phase. The larger the level of circulation areas, the larger it consists of areas in the inter connections between the different functional sectors (Can I, 2016). The most distinctive characteristic in this phase is the fact that the new dwelling denotes low control values. Thus, low passage frequency signifies that the spaces are mostly of different alternative passages and that the degree of prominence of all the functional units-rooms are, as a point of passage in relation to the surrounding areas, similar instead of having a very high circulation control level and while others are very low (Hillier & Hanson, 2005).

Thus, a communicative plan is the repositioning of passive functional aspects in a habitat into an interactive joining layout. Therefore, the aiming central space is to be centered between the "active bodies" described by Schumacher, symbolized into a graphical conceptual representation showing central space location vs. active bodies' identity retrieved in a later stage.
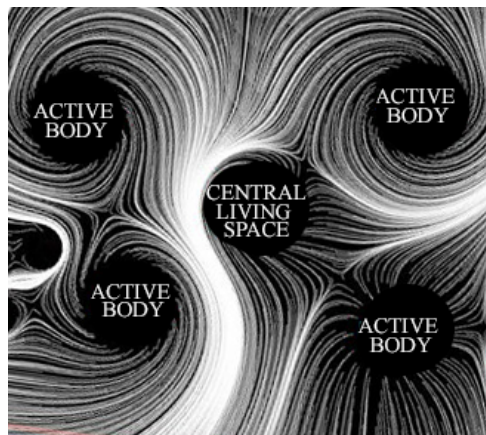
Figure 4: Active bodies vs. Central space

In addition, for a residential context, the social "logic of space," followed by Schumacher, explains a structural solution for residential spaces in order to control movement and shift it into solid wanted areas. It consists of the analysis of a subdivided cell, which refers it to a certain space. Unit-room is expressed in either "alpha" or "gamma" cell. The relation between the two premises is the number of entries in which "gamma" cell has one and "alpha" has two. On the one hand, the "gamma" equivalent of the "alpha" enclosed cell is the unit with only one access from the carrier. On the other hand, the "alpha" open unit cell is the cell with more than a singular access from its carrier. The translation into a representative graph of a gamma is more forward than it is with an alpha. Every interior of a cell is reflected into a circle with its relation to the outside represented as lines linking it to the others. Thus, the unit with only one entry can

be conceptualized as a circle with a line; however, the unit room with more than an access is represented as a circle with two passage lines. The carrier for any structure is the space outside represented as a circle and an inside cross (Fig. 5). Figures 5 and Figure 6 show the type of relation alpha and gamma can create. Therefore, circulation in the Signification phase can be controlled and managed through the "logic of space" cell type management in order to select the needed interactive position and level.
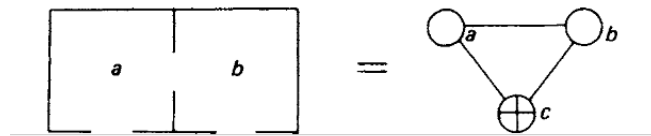
Figure 5: Alpha – Gamma Representations 1 (Hillier & Hanson, 2005)
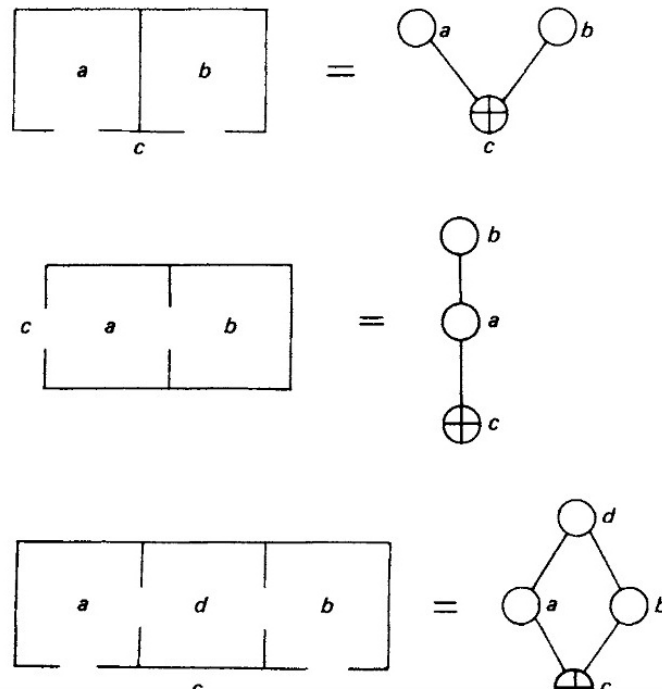
Figure 6: Alpha – Gamma Representations 2 (Hillier & Hanson, 2005)

Thus, through the principles of parametricism taken as a conceptual approach, three structural premises were extracted. Chris Abel (1997) emphasizes the idea by saying that human identification with a certain habitat presupposes that its space has its own "character." Structural and social theories must go hand in hand in order to create the functional room character needed. Therefore, the logic of spacing and patterns is to be served as a guideline that would shape the center character of the place forming the family's personality by using data collected from precise methodologies.

3. Methodology: Approach and case study application
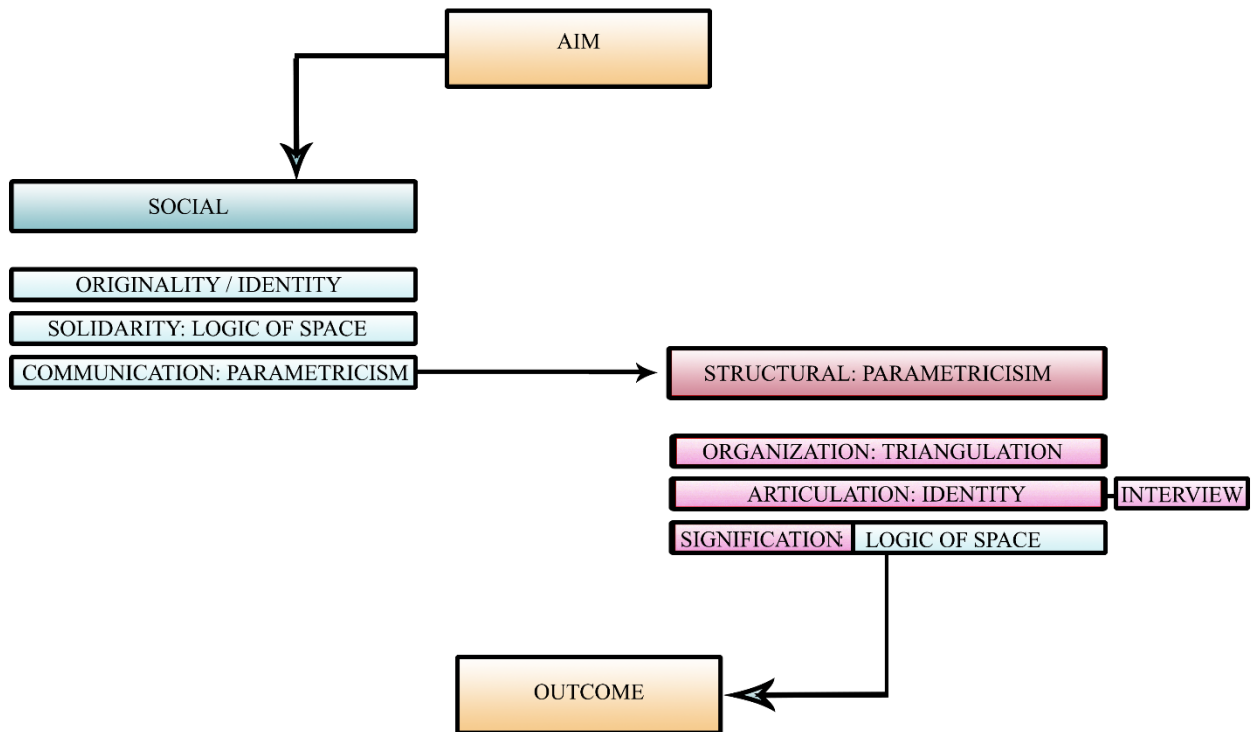
Figure 7: Social Vs. structural- the Spatial Systematic Methodology

A communicative plan is the reflection of functional aspects combined into an interactive joining display (Lahoud, 2008). The spatial systematic methodology outcome (Figure 7) is the combination of selected social and structural theories tackling the identity and communication explained in the last chapter. However, a case study is to be selected in order to be applied as a prototype approach in a residential context offering an example for designers to base on for further residential application.

3.1 Systematic Approach: Social and Structural guidelines

Starting from the ideal "Originality" of Jean Baudrillard criticizing contemporary

designers and replacing them in a "one *sign* amongst many" term, where the reality by itself no longer seem to have any meaning, this research seeks to revive and enhance the Lebanese family's identity within the designed space. In addition to reality, Pallasma's (2012) theory of identity, in which he claims the timeless task of design in reflecting the true uniqueness of its inhabitant, can also be applied. Therefore, final outcome must enable us to create a combination of embodied and lived experienced symbols, which express and organize our identity in the residential space. Reflected in a Lebanese context, Lahoud (2008) states that family values in the Lebanese culture are considered to be the genuine character of Lebanon's identity. The Lebanese family's function is associated with the value of integrity and solidarity between its members. Thus, solidarity, which defines the reproduction of Lebanese identity, lies in the local reproduction of a structure recognizably identical to other members' characters of the group. A solidarity within a space is built on the union principle and intercommunication (Hillier & Hanson, 2005). Consequently, the gradual evolution of a social system must go hand in hand with the build-up of a designed spatial Layout order. Social order necessitates a spatial structural order. A social interaction fortifying Lebanese solidarity requires a built environment as a field of communication that stabilizes members' relationships, in which it allows further complex social contact.

Therefore, Parametric semiology explained in the social literature review, claiming that designs made are all a communication design, is to be used in these three guidelines: Organization, Articulation and Signification. The Organization phase, is chosen to have the triangulation pattern of William Whytes, in which the primary movement of tension is perceived, where a third party gets to be attendant forming a triangular association (cited

in Kenwyn, 1989). However, this pattern will be applied in the interior Lebanese context in order to join functional rooms together. Therefore, inter room's solidarity is assured by creating the central space where the living zone will be provided. Following the second guideline, Signification, this phase consists of circulation between functional rooms, which will be established following the social "logic of space" that explains a structural solution in order to control movement and shift it into solid wanted areas. The Logic of space consists of the analysis of a subdivided cell between alpha and gamma, whose alpha defines two or more entrances for a single space; however, gamma is restricted to one. In this case, our intention is to create a high central traffic in the central living space. Thus, the logic solution created for a high traffic space is a joined area of "gamma" cells and has to be provided (Hillier & Hanson, 2005). Therefore, when selecting functional rooms to join, accessibility openings must be "gamma" singular entrance and must be directed toward the needed space controlling a more frequent access; consequently, higher interaction between family members emerges. Articulation, the third guideline, consists of recognizing the function of the room's identity. Lahoud (2008) affirms that Lebanese families share the same values; however' each has its own background, beliefs and character. As such, in order to provide a typical social identity described in past theories and to remain "real," Articulation creating the final triangular pattern should vary and follow each family's character. Thus, a case study could be observed.

3.2   Case Study: Articulation Interview

The "Beirutie" house, the other name for the Lebanese Central Hall, reflects the Lebanese unique symmetrical structure, where a central space with a Mediterranean sea disposition,

is joined by equal number of symmetrical rooms from both sides. "Beirutie," which expresses the typical Lebanese structure and which is stated as a fundamental aspect of our Lebanese heritage and family's reunion aspect,is not intended to express the Beirut region only (Lahoud, 2008). On the opposite, Beirutie houses, available in various Lebanese regions, reached their highest frequency in Mount Lebanon. Beirutie houses are also available in Turkey, Damascus and Egypt. Central Halls were also available in Iran residences; however, they were named under Mian Siara, as central equal spaces were shifted and faced the Arabian Sea (Lahoud, 2008). Authentic, perfectly symmetrical Central Halls were built during the French mandate. Yet, economic and political factors became tangible factors for Central Hall modifications, leading it to their extinction. As mentioned in Chapter Two, it is between the two wars and the French mandate that Central Hall was characterized by expanding and adding functional areas essential for our contemporary living style. Service areas, such as the kitchen, became bigger, and the dining room was first introduced. The final phase, which is the period of independence, witnessed the collapse of the family unit transforming it into a group of individuals. An increase of privacy demand led the role and function of the Central Hall to be discarded, and the separation of the three main areas, service, living and sleeping rooms, succeeded (Ragette, 1980).Therefore, the aim of my case study was is to enhance Family reunion through finding a typical Central Hall house that has had an altered layout throughout the years, where the authentic central space lost its genuine location, function and importance in order to fit our contemporary lifestyle.

3.3   "Basile" Renovated Central Hall House in Kesserwan:
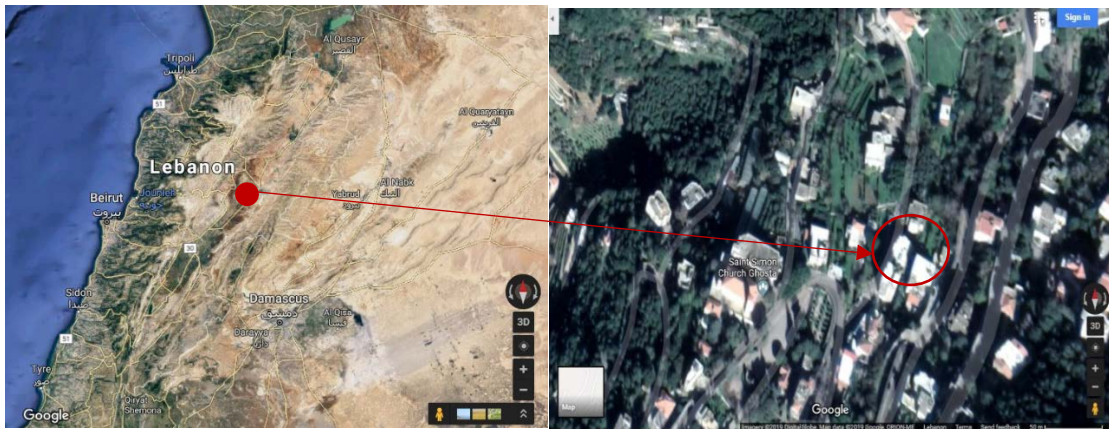
Figure 8: Basile's house Location captured on Google map

With its French social and commercial familial impact, Yousef Mansour Basile, half French/ half Lebanese, bought the typical Beirutie structured Central Hall from the well-known political "Khazen" family, based in Kesserwan, during the French mandate in early 19th Century. A typical Central Hall layout located in Ghosta, Kesserwan, was bought back then; yet, in the second half of 19th Century an added residential space was added. The authentic Central Hall house was reshuffled, and an additional space connected to the old one was added. The current owner of the house is Mr. Jose Basile, along with his wife Mrs. Jacqueline and three celibate sons, Vincent, Clement and Christian. The Basile house had recognizable social values related to the French mandate era and was considered as an inherited social and family treasure from their precedent. This house, with a modern layout, carries a neglected important space, where its members lost its value. Using the house's contemporary modern layout, a case study will be conducted in order to revive an interactive space, inspired from their lost Central Hall

space, which can enhance the family's member connectivity and solidarity.

3.3.1 Thematizing and feasibility

The spatial systematic methodology shown in the first section of the
Methodology chapter (Ffigure 6), is to be represented and implemented in this case study.
The final structural layout outcome is only a representative example for designers to
better understand the systematic approach process in order for them to follow and apply
independently on other residences, not to mention that outcome reached is unique for
Basile's family and cannot be applied on other families. Each family character and
identity has to be reflected, interviewed and modified according to the intended
contemporary house layout. In addition, due to the limited time and in order for each
house to have its typical reflected identity, one case study was selected and studied by its
members. Conditions in this case study offered me the feasible environment in which my
data could be collected. First, the fact that it is owned and inhabited by a well-educated,
bourgeoisie family, added the social value for the case. In addition, since all the family
members still live in the house, this would expand my data knowledge and cover the
complete family study. Moreover, selecting a restructured and modified old typical
Beirutie house would add the challenge to detect the lack the central space had, and,
therefore, try to recreate a modern more feasible pattern that would attempt to reintroduce
Central Hall social familial faded value.

3.4 Methodology: singular Face to face Interview

In the previous chapter, secondary data collected regarding the Central Hall background, along with social and structural theories of concept and space logic, are to be reinspected and applied in our Lebanese context. Thus, missed Articulation data concerning room's identity to be implanted in the triangulation pattern explained in structural theories in Chapter Two, are to be collected manually in order to ensure a reflection of our contemporary Lebanese families' identity selected in our case study. The selected methodology is the Interview.

3.4.1 Purpose

Due to the limitation of time and the amount of precise data needed, an interview is chosen as a feasible methodology for the following reasons. Having the same Lebanese identity, each family has its unique character (Mc Ginn, 2013); therefore, the pattern could change reflecting each family. Along with my research in academic secondary data, the aim of this interview is to collect missed information concerning the residential most functional rooms visited by family members in order to fill the second Parametric semiology guidance, Articulation, allowing to identify the missed residential units in which triangulation pattern is trying to join.

3.4.2 Selecting population and Pilot test

For a complete accurate case study, the methodology should tackle all the sample (Evans & Jones, 2011). Therefore, the five family members will be interviewed for a full

and precise structural target: Jose and Jacqueline Basile – Parents, Vincent, Clement and Christian Basile – Children.

3.4.3 Structure

A consent form was presented to each member before conducting the interview to make sure participants are aware of the aim and purpose of the study. The consent paper stated that the short interview will be voice recorded in order to detect missed written information for transcribing purposes.

The Interview was chosen to be semi-structured/open ended in order to give the participants and myself the chance to be open for new spontaneous questions.

Type of questions: The questions chosen are were varied from specific to general, and the same questions were for each individual. Questions proceeded with the introduction of member's identity, then varied from every day activities to more precise questions tackling specific room and inner activities, in addition to general opinions about the house and their private perspective toward the modifications.

Advantages: Individual interviews will provide each member their own private time and allow them to be comfortable with open questions. Starting each interview with a small introduction of the interviewee is to affirm each member's identity. Questions tackling participant's daily activity is to assume the time spent in family gatherings and to provide the interviewee with the identities needed for every family's pattern; in addition general questions help identify every member's point of view toward the changes done and can add a different perspective to the designed space.

3.4.4 Limitations and disadvantages

Due to the lack of time, one case study prototype outcome can be considered as deficient to understand the spatial systematic methodology implementation, as each family can vary in terms of recommendations and house layouts. In addition, due to amount of five participants, questions are restricted. Therefore, information given will not tackle personal opinion and perspective toward the entire research. In addition, different meeting times for each person should be scheduled previously making it more time consuming for the researcher. The layout of the house must be available in order to study the functional rooms and finalize the prototype pattern. However, the layout plan is not found due to house age condition and modification. Measurement data will have to be taken manually and drawn in AutoCAD software adding another time disadvantage to the research.

3.5 Designing the questions

THESIS: Interview

Between the Interviewee: and   the Interviewer: Julia Mikhael

Type: Semi- Structured
SUGGESTED QUESTIONS: Concept and thesis idea is to be explained before each interview.

> Identity citation/ status: I am Julia Mikhael conducting this interview with ( ) who is ( ) in order to collect necessary data needed for completing my thesis research.

1. What are your daily activities/routine?
2. Approximately how many hours/day are spent in the house and do you usually spend them with your family or do you prefer to stay alone? Why?
3. The functional areas in your house are: bedrooms, living room, corridor, dining room, kitchen, bathrooms and storage room. Can you re-name the rooms from the most till the least visited in a normal daily activity?
4. Can you describe your house in few words, in term of social and structural aspect?
5. How do you evaluate the modifications done to the old part of the house?
6. If you had the chance to add a certain space to the house, what function would it be?

Thank you for participating.

These questions are divided into five segments which each will serve me as information, either to confirm literature and review findings (question 1-2-4-5), or to help me customize the articulation of the three missing identities with a high traffic functional rooms. Each segment is given a proposed title which is related to the information character that will be retrieved. Semi- structured Interview is segmented into the following five sections.

Part 1: Identification

   Identification will serve to confirm the interviewee's and interviewer's identity for listener and to assure that consent form is signed confirming acceptance to use paroles as primary data for this study.

Part 2: Personalization

   Personalization is to identify personal background in question 2, that can serve to assume answers that could differentiate following knowledge and perspective along with restructuring questions' idea or by adding more clarifications for certain idea terms. In question 3, quality time spent at home can serve as reflection of our contemporary Lebanese families' identity and a validation for the working family shift mentioned in Chapter Two. In addition, question 3 served as a confirmation that the interviewer is an active member inside the house specified allowing to ask question 4.

Part 3: Articulation data

   Question 4 serves as the main tool for fulfilling the needed data. In order to revive a central space following the Triangulation pattern, three functional rooms are to be joined. The room's identities are shifted and modified regarding each family member's character and interest. Question 4 will provide the identity of functional room with the highest interest and accessibility.

Part 4: Social and structural opinion

The purpose of question 4 is to evaluate the family's attachment to their house and the importance of its heritage. In addition, question 5 confirms to listeners that modifications were done to the old Central house and that a new structural part was added altering traditional Central Hall circulation and layout by asking for their personal opinion in this question.

Part 5: New perspective

Question 6 is open for members from different ages and backgrounds to express their opinion by mentioning new proposed ideas for their house that could serve to find structural lacks in order to fix and reflect their comfort in the proposed layout.

3.6 Conducting Research

a. Structure: A consent form was distributed in order to declare their permission and to assure that data retrieved from their interview is confidential and used for research purposes only. All five family members responded to the interview after signing the consent form. Interviews were conducted on different dates and times based on their availability. In addition, the structure and dimensions of the house were taken manually on paper along with photo observation using a smart phone. (Consent forms and questionnaires are found in the Appendix).

Dates: Dates varied between January and February 2019.

Vincent and Clement Basile were interviewed on Sunday 27 January at 5:00-6:00 pm.

Mr. Jose, Mrs. Jacqueline and Christian Basile were interviewed on Sunday 3rd of February at 4:00-5:00 pm.

Location: All members preferred to conduct the interview at the house, in the living room.

b. Feedback: Respondents were able to answer questions with an average time of 5 minutes 40 seconds. Some questions were restructured as meaning was not clear, especially in question 4 when social and structural aspects were asked to be evaluated. More time was spent on answering opinion questions in questions 4 and 6. Mrs. Jacqueline struggled in the English language; as we were in the first question, she kindly asked to delete the recording and switch to either French or Arabic, the language which was chosen for her interview.. Results were positive; respondents answered the questionnaire fully and took their time to answer.

c. Advantages of interview as methodology

Time and cost effective, interview is needed the five family members, thus, it can be taken in few minutes yet re-structure and retrieve specific yet enough information needed for the research.

3.7 Method of data analysis

Part 1: Identification

- Family member's identity and status is introduced.

Part 2: Personalization

- Confirmation that the interviewee is an active member inside the house specified allowing me to ask question 4.

- Re-evaluation and comparison of Literature Review validation concerning our Lebanese contemporary families and the shifting toward a working one.

Part 3: Articulation of data

- After calculating the averages of the most visited rooms, room's identities are filled in a triangulation pattern

Using the logic of space theory, rooms were to be studied for possible number of entrances, position and partition within the contemporary house. This stage is the circulation channel stage in which, using the contemporary layout, a proposed studied structural design will focus on members' orientation using the three functional areas with the highest activity, in movement between these elements. To attain a larger level of circulation, areas in the inter connections between the different functional sectors are to be studied through "alpha" and "gamma" aspect (Hillier & Hanson, 2005) described in Chapter Two. It is by enhancing the three "alpha" opened unit cells toward a certain space resulting in a higher inner traffic space.

Testing the possible final outcome in the Space syntax program confirms or neglects the traffic level of members' circulation.

(Relevee of layout plan available in appendix).

Part 4: Social and structural opinion + Part 5: New perspective

Confirmation of a heritage attachment to their house in addition to lacks in its structural

aspect should be taken into consideration when designing the proposal layout.

3.8 Reflection

Time Limitation: Time taken to re-transcribing the five interviews during their average of

6 minutes each. Learning new software "space syntax" in order to test the final outcome.

Old Structure Limitation: The current layout plan was not available due to the age and

historical background of the house . Manual measurement data had to be taken and drawn

using AutoCAD.

Interviewee limitation: Effort was put in conducting the interview according to members'

time and location availability. In addition, some family members had problems with the

English language, which rendered their answers short and restricted. Double the average

time was also required for Mrs. Jacqueline's interview as translation from Arabic to

English was necessary.

The interview was conducted only for family members as the case study is restricted to

Basile's family, which is considered as an example completed to better understand the

systematic approach process for designers to follow.

4.   Analysis

In this chapter, analysis will be settled into three related divisions. The aim of this chapter is to offer designers, willing to apply family's systematic approach, a better understanding of its process. Moreover, the Basile family's interview answers are used, compared and integrated in previous proposed theories. Following Can I (2016) and Schumacher's (2016) statements linking the level of circulation with inter-connections stimulation, the final layout outcome adding the "living" space is to be designed as a high traffic platform enhancing interactions within the house. Thus, division one will show the results and explain in details each member's answers, along with a quick conclusion and reflection on each segment. Division two explicates the data mentioned in each conclusion and describes the method of how it's going to be implemented resulting in the final proposed layout. Division three will test the final outcome along with the contemporary layout using the "Depth Map X" program showing the difference in traffic circulation, which will assert or refute the proposed outcome.

4.1 Layout Drawings
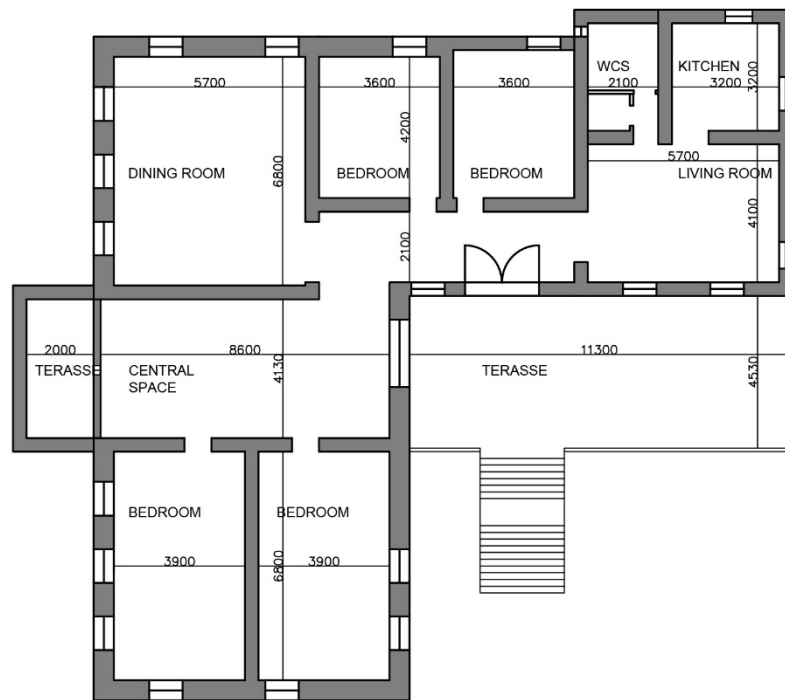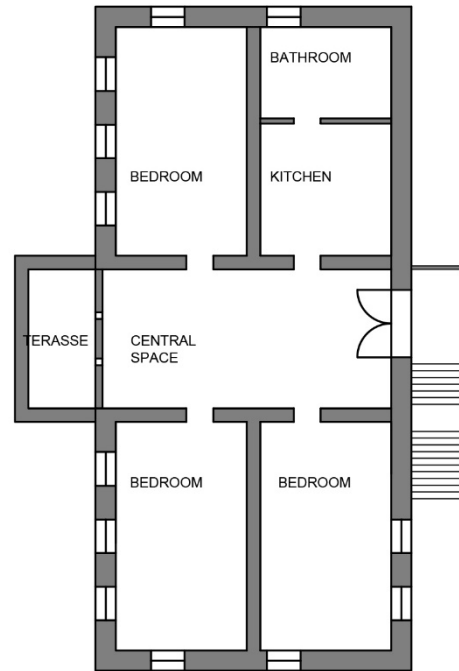
Figure 9: Auto-CAD old VS Contemporary layout plan

During the interview visit, data on history and manual measurements were collected by hand. These drawings are drawn on AutoCAD with real dimensions and structure.

In the first half of 19th Century, during the French mandate era, Mr. Yousef Mansour Basile, half French/ half Lebanese, bought the typical Beirutie's structured Central Hall from the well-known political "Khazen" family. Figure 8 shows the old Central Hall, which was characterized by its authentic structure. The hHouse was divided into four rooms and a bathroom, and the kitchen was located on the north east side, as wind circulation was studied. In addition, the triple arched side was rotated and faced the sea side view, along with a perfect symmetrical central shape with two openings on each side for four different rooms. Furthermore, the stairs were positioned on the other opposite side leading straight to the Central Hall entrance. Therefore, having a perfect symmetrical shape, sea sided triple arches facing the sea view, along with an opposite stair leading to Central Hall (Lahoud,2008), early 19th Century Basil's house earned the title as a typical Lebanese Central Hall house. However, this authentic layout was altered and modified to be adapted into the current layout, which Basile's family are living in.
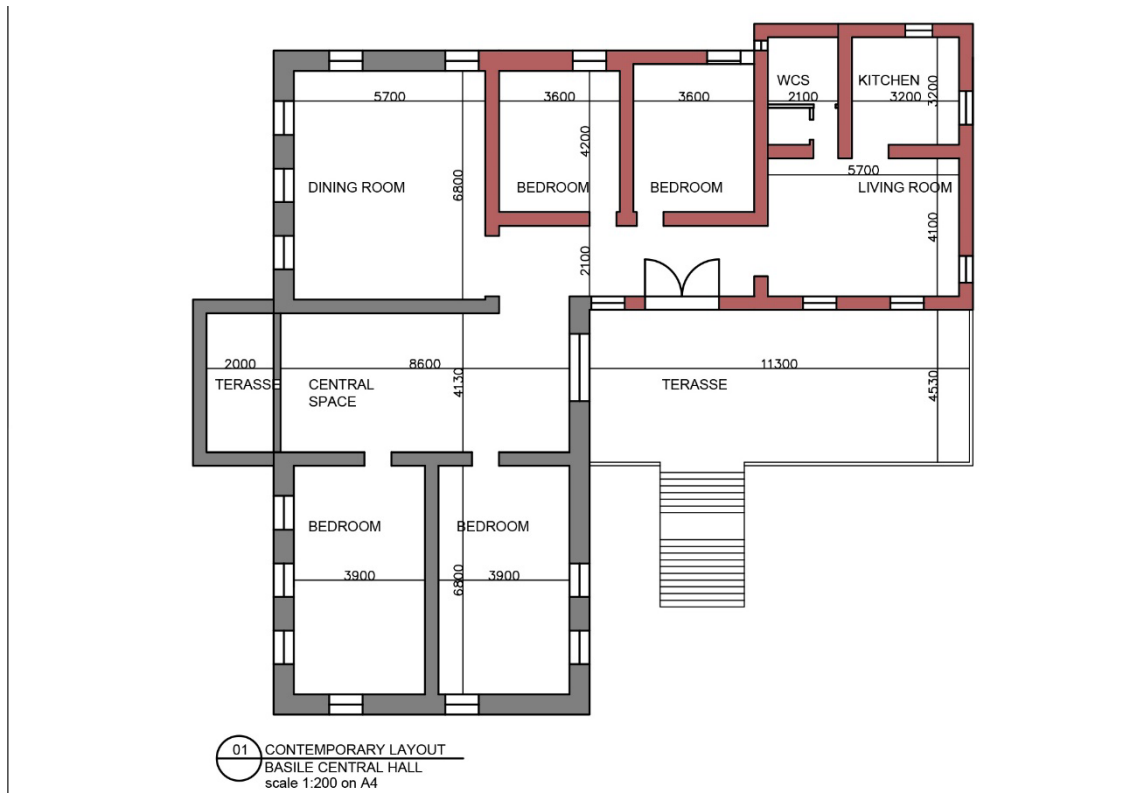
Figure 10: Added space – Basile's contemporary layout

In the Second half on 19th Century the authentic Central Hall house was reshuffled and an additional space, colored in red (Figure 10), was combined with the old structure.

Stairs were relocated to adapt the new layout. The kitchen, along with the bathroom, was moved in the same north-east direction; however, an added living room, a dining room and an extra bedroom were added to the house. The central space was used as a simple passage to reach two of the intact bedrooms. The entrance was repositioned as a central aspect to face bedrooms connecting all functional areas, yet, directly facing the two new bedrooms.

Basile's ex-Central Hall is considered to be a definitive confirmation of Literature review data concerning Central Hall fading process:

The Central Hall was faded progressively during and after the French mandate. The concept of the reduction of central space and the introduction of new bigger rooms were the consequence of modernization and art nouveau emergence (Davie, 2003). These changes were dramatic, most notably, the switching from a Central Hall to a smaller "living room." Additional rooms were added, altering the layout of the house by creating spaces that have never existed. Each room had its door, which, when closed effectively, isolates the member from the rest of the family life (Davie, 2003). In other words, a powerful and typical sense of privacy was added to house structure.

The current layout deprived the Basile family from the familial experience of the typical Central Hall and authentic layout. This contemporary layout frame drawn in Figure 8 will be used in the final analysis stage in which a new layout will be proposed as a final outcome. The suggested plan will be tested and compared with the current one by using "space syntax" program that projects the measured high traffic circulation areas and identifies it via a colored layout graph.

4.2. Interview analysis

Interview questions are sub-divided into five titled parts.

Part 1: Identification

The purpose of identification is to gain listener credibility confirming interviewees' identity along with their acceptance in performing the interview. In each

five interviews, paroles started by citing the interviewee's name, their family status along with mentioning that consent form is read and signed and the fact that all information given will be confidential and only used for this research.

Part 2: Personalization

Personalization is retrieved through questions 2 and 3. The purpose of personalization in question 2 is to be informed of each member's daily routine that allows to identify personal background and job, that can, in an early stage, alert the researcher of the possibility of not comprehending some technical words in questions 4 and 5, which are directly related to Architecture. Furthermore, question 2 can also serve to confirm or deny the Literature asserting that Lebanese families were shifted into a working family resulting into a lower level of interaction.

In addition to the confirmation of an actual availability inside the house, question 3 is asked by giving approximate hours spent at house providing interviewee's validity and room functional activity. Moreover, question 3 is combined with a sub-framed question urging to confirm the availability of family importance and the urge to enhance connectivity by asking if hours are preferred to be spent alone or with family

Answers

Table 1: Personalization

Basile Member's Name	Job status	House availability	Alone Vs. Family
Mr. Jose	Product manager	Available	Family

Mrs. Jaqueline	Housewife & restaurant owner	Available	Family
Vincent	Architect	Available	Both
Clement	Sales and Marketing manager	Available	Family
Christian	Physical Therapy	Available	Family

Analysis

Five out of 5 are considered to be employed and have a working status, confirming Literature Review finding and problem. Under the echo chamber of 20th Century, switching to a working family transformed the house into a shelter for busy life where time, price and technology has taken the primary role of lifestyles shifting decreasing family interaction.

Furthermore, 5 out of 5 of members are personally available inside the house, which allows to retrieve activity status with the highest traffic rooms asked in question 4. Moreover, 5 out of 5 confirm, by picking Family time, the intention to have a familiar attachment that expresses Literature findings that family cohesion and its solidarity is considered to be a notable characteristic within its members (Makhzoumi, 2009). The Lebanese family union heritage has an authentic role in building a nation's cultural identity known in all countries.

Conclusion and reflection

Literature findings concerning shifting the Lebanese family to a working one, along with family values and importance, are confirmed through personalization. In addition, a full member's personal availability was completed, which qualifies question 4 concerning room's activity to be accurate. Questions were answered easily and no clarifications were needed.

Part 3: Articulation data

The purpose behind question 4, which asks members to cite the rooms in order of most to least visited in a normal day activity, is to serve as the main tool for fulfilling the Articulation data guideline. Answers are listed in a table showing the number of votes. Averages are then calculated in order to pick the three rooms identity with the highest votes. In order to revive the central space spirit, these three rooms will be set following the triangulation pattern of William Whites, in order to be joined resulting in a high traffic center.

Answers:

Table 2: Articulation

Basile's Members	Living R.	Bedroom	Corridor	Dining R.	Bathroom	Storage R.	Kitchen
Mr. Jose	2	1	5	4	6	-	3
Mrs. Jacqueline	3	2	5	4	6	-	1
Vincent	4	1	6	2	5	7	3
Clement	2	1	4	3	6	-	5
Christian	3	1	5	2	6	-	4
Average	2.8	1.2	5	3	5.8	7	3.2

Analysis

All members answered the ranking question. The average was calculated, and rank one was earned by the bedrooms confirming that families preferred to have more privacy, which is mentioned and confirmed in the literature review.

 Each room had its door; when it is closed effectively, it isolates the member from the rest of the family life (Davie, 2003). In another way, Davie (2003) affirms that a powerful and typical sense of privacy was added to house structure. Eventually, the modern interior influenced socio- family connections and separated the parents from their children's activities.

Following our first parametric guideline, in which Triangulation serves as a solution for a connective solid pattern joining three functional identities together, a central space with an increased traffic circulation could be achieved. Therefore, throughout the abovementioned question, the three highest ranking rooms are collected, in which the articulation phase can be achieved by joining these identities together and, therefore, placing them in the three corners of the organization phase with a typical triangulation pattern. Hence, the central space between these high activity rooms will consist of the area with a higher traffic circulation, in which the living room will be relocated accordingly in order to reestablish the fading inner-communication and empower its family solidity. It is worthy to note that the dining room is mostly visited not only for its eating table function, but for its silent and private location referring to Christian's answer:

 "Because I, I study in it, euh… I feel, I feel like euh... comfortable in it."

Which confirms the living room's location to be in a private and familial space.

Conclusion and reflection

The identity of the three rooms to be used in the second analysis part are: the four bedrooms, the living and dining rooms, while privacy concern was highlighted. All family members answered clearly the three first ranks, although the other were slightly not precise as they forgot all functional rooms available. Therefore, reminding them of unmentioned rooms was a must in order to complete the ranking. Almost all members neglected the storage functionality by stating zero activity in it.

Part 4: Social and structural opinion

The purpose behind question 4, which asks members to evaluate their house in concerning the social and structural aspects, was to indirectly grasp a sense of their historical attachment toward their house. Moreover, by adding structural terms, members could realize their layout lacks and speak more about their structural hassles that could serve as a guideline for the plan to be proposed in the future. Question 5, which asks for their opinion about altering the old layout in late 19th Century, is to test member's ability to comprehend modifications; this would allow the researcher to present the proposed plan as an option for a possible future project.

Answers

Table 3: Social/Structural opinion

Basile's Members	Social	Structural
Mr. Jose	Inheritance from grand father	-Reshuffling the house in a modern style -Re -locate bedrooms far from entrance -Encouragement of private-public sectors division
Mrs. Jaqueline	Old heritage house	-Re-locating the bedrooms -Separation between public/private area as living room is in the public section

Vincent	Old Heritage combined with a modern style attachment	-Encouragement to add private section and enlarge it
Clement	Heritage attachment	-Re-locating his bedroom far from the entrance
Christian	Heritage attachment	-Re-locating the bedrooms - Encouragement of private-public sectors division as a must

Question 5: As for this question, 5 out of 5 members, with no exception, had the same answer, which encouraged the layout modifications (refer to analyze: Layout drawings) by describing the new part addition as an extra space for their house.

Analysis

As mentioned in Table 3, on the one hand, all members have the family and heritage sensation and attachment. However, this attachment is only reflected socially. On the other hand, all members have shown encouragement for privacy and modernity in terms of a structural layout style that conflicts with the Central Hall spirit mentioned in Chapter Two: During final phase, the period of independence, the disintegration of family unit into a group of individuals, and the increasing demand of privacy rendered the Central Hall discarding and separation of the three main areas, service, living and sleeping rooms, successful (Ragette, 1980).

Furthermore, all members had agreed on private/public inconvenience. The current layout drawn in Layout drawings shows bedrooms being located right in front of the entrance door, in addition to having the living room in a public space near the kitchen where the family's privacy is not offered. Therefore, Clement and Christian complain of the need to close their bedroom doors in order not to have any direct contact with guests (Appendix: Clement-Christian Interview).

Conclusion and reflection

New guidelines are to be taken into consideration when designing the proposed layout. A private and public separation and a relocation of rooms must be studied and provided.

However, as mentioned in Part 1: identification, terms as social and structural are not well understood for majors that are not directly related to Architecture. Therefore, more clarifications were required for the four members, except for Vincent with an Architect status, in order to provide the answers needed.

Part 5: New perspective

The purpose behind question 6, which asks about the functional identity of an extra space in the family's house, was to give the members the opportunity to express their opinion, which could assist as a new guideline to find structural lacks in order to fix and reflect their comfort in the proposed layout.

Answers

Table 4: Opinions

Basile's Members	Opinions
Mr. Jose	No added space needed, only re-structuring the private/public sectors.
Mrs. Jaqueline	Add a Guest room different from living room
Vincent	Add a second private living room
Clement	No added space, turning living room and bedroom into a private section
Christian	Add a new private bathroom

Analysis

In question 6, 4 out of 5 members mentioned that the living room should be relocated or another one be added in a private sector. Therefore, the central space, which will be identified as a new "living" space, will be designed in order to be positioned in the private area of the house. However, Christian added a new perspective by enquiring a new private bathroom, as he mentioned that the actual one was far and located in a public section. Therefore, full privacy is necessitated in the designed private sector.

Conclusion and reflections

Almost all members had the same opinion that an extra space should not be added; however, re-shuffling and/or adding a private living room could serve the researcher as the location key in "central living" space location. In addition, a private

bathroom is to be taken into consideration. All members answered question 6 with no clarifications needed. Members were thanked and greeted at the end of each interview.

With the answers of the members of the Basile family, a reliable case study can be established. Family cohesion and its solidarity are tested within the family members as they face structural problems within the functional spacing of their actual Layout. Articulation data concerning the three identity of the rooms is collected in order to check organization patterned phase, in addition to other personal recommendations. All data will be elaborated in the next stage, through the design phase in which a pattern will be created and implanted in our case study creating Basile's proposed structural Layout outcome.

4.3. Data Implementation in Design

In order to create the proposed structural Layout, which aims to recreate a central living room able to amplify the level of inter-communication between their members' interactions, a pattern is to be customized, reshuffled through actual built layout and structured with minimum modification. This process following the implementation can be reshuffled following each and every family member's opinion and character, as the three identities of Articulation can be altered. Thus, it's the role of each designer to study the family's atmosphere prior to implementation. In this research, and subsequent to our Basile's case study, and as shown in Personalization of Part One Analysis, the literature of Chapter Two approaching the shift of Lebanese families into a working family has been confirmed. In addition, the family's value and importance is established, which can be directly associated with the value of integrity and solidarity between its members.

Thus, solidarity which describes the Lebanese identity, lies in the local reproduction of a structure identifiable to other family members' characters. A solidarity within the space is built upon the union principle and intercommunication (Hillier & Hanson, 2005). Consequently, the gradual evolution of a social system, going hand in hand with a designed special layout, necessitates the special structural order explained in Chapter Two. The spatial order of the human residential habitat is linked with instant physical organizing apparatus, which has power to either separate or connect social members and force their movement activities.

Therefore, the first two Parametric semiology guidelines: Organization, which is based on the pattern linking the positioning of spatial rooms, in addition to Articulation, aiming to identify the morphological identities of indoor rooms, are to be established in design.

4.3.1 Organization: When it comes to the Organization phase, a defined pattern joining the room space aspects of the dwelling has to be established in an equal value level. William Whytes, in which the primary movement of tension is apparent where a third party gets to be connected forming a triangular association (cited in Kenwyn, 1989). In the Plaza project, Whytes (2010) states that in order to have an effective radius place, it should consist of joining accordingly three best used blocks. Whytes (2010) states that the reviving spirit within a space is directly linked with the distribution of its function in between. Outdoor and indoor, Smith (1989) theorized relationships between two parties, individuals or groups, in triangular manner rather than dyadic terms. Thus, in a relationship emerging between two parties (X and Y), there is always a tendency for (X)

to draw a third party called (A) into the encounter. This triangle is formed with one

insider pair (X-A) and isolating Y from the original bond with X. On one hand, the

pairing strengthens X, but on the other hand it puts Y into a comparatively powerless

position if the pairing is linear in the first place. However, undermining the original X-Y

relationship by confronting an opposite position of (A) can reevaluate the dual relation by

creating an affirmative triangular pattern, which enables to reconnect X-Y and

alternatively be linked equally (Smith, 1989).

Movement of Conflict

Figure 2. Transforming affirmative relationships into opposing coalitions.
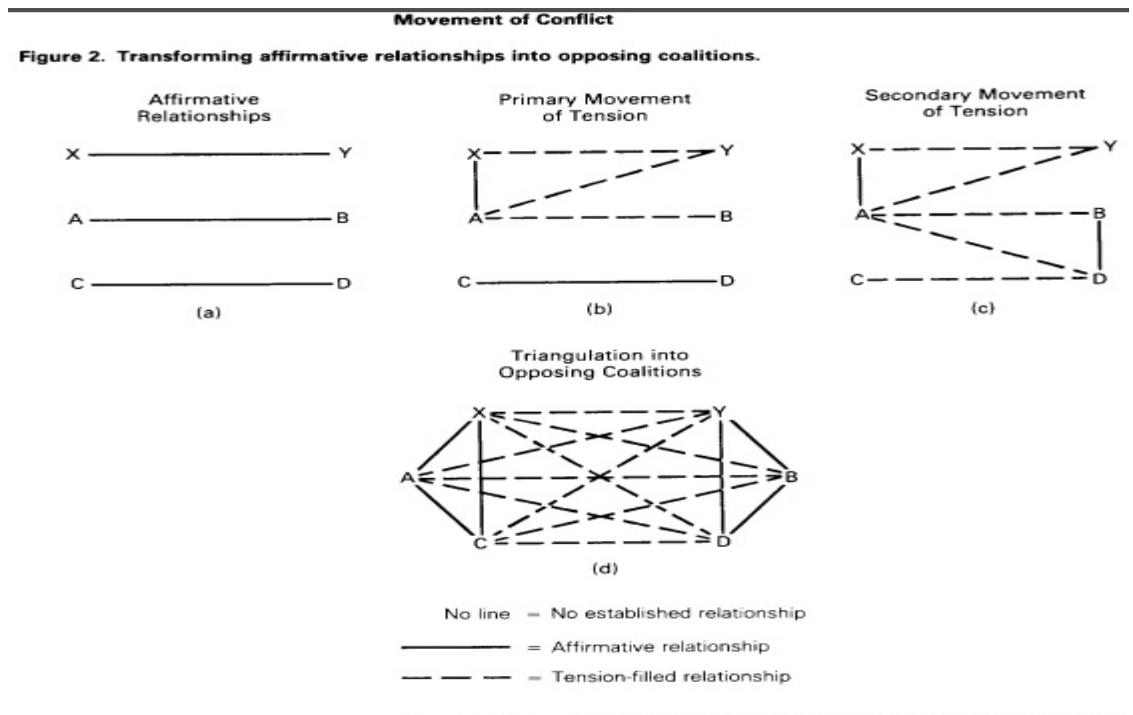
Figure 3: Movement of Conflict (Smith K, 1989)

4.3.2 Articulation:

In order to choose the area where the pattern is going to applied, dimensions as well as the current sea disposition are to be considered and followed. Basile's house is divided as follows:

Figure 11: Contemporary Basile's Layout with dimensions and sea side position

House Analysis: Basile's house is clearly divided into a dual space, where the entrance has a major effect on dividing the house into two sections and a middle zone facing it. In addition, a difference in dimensions is noticed with an 18.5 m VS. 7.7 m. Furthermore, according to the Climate case study on Central Hall explained in the literature review chapter, Yeretzian and Jamal (2006) support Central Halls facing the sea, for their ventilation, light and climate enhancement resulting in a decrease in energy use. Thus, all

contemporary criteria encourage the disposition of the working patterned space in the left side of the house.

Lahoud (2008) confirms that Lebanese families share the same morals; however, each has its own background and unique character. Thus, the Articulation phase consisting of recognizing the function room's "real" identity was the main aim of Basile's previous interview. Articulation creating the final triangular pattern will tackle, following Whytes' process, the rooms with highest activity ranks. Whytes provides different patterns regarding the number of identities willing to be joined. Each family could vary the room's number needed regarding their character and social life, which could consequently vary the triangulation pattern type. However, sticking to our Basile's case study and members' interview, the results of Table 2 show Basile's three functional rooms: Bedroom, Living room and dining room. However, in our case study, 4 bedrooms are to be linked with the other two functions in which the living room will be assured through a central space where the living zone will be provided.

Nevertheless, primary triangulation pattern combining three units is not enough to combine the five functional rooms. Therefore, Secondary tension shown in Figure 3 is to be followed. Ensuring members' answers in the last opinion part by demanding a relocation/ restructure of a new private living room, in addition to research's aim to re-unite family members in a central most visited spaces, indorsed the proposed pattern to be followed:

Secondary triangulation in which (X) (B) (C) and (D) are the members' existing bedrooms; therefore, with minimum change, it is better to keep their location as is.

(Y) is chosen as the dining room, is to be located in the middle of the house in order to be positioned nearest to the kitchen's right position according to the house's structure.

The living room, placed as a central space between these Living-high traffic functional units, is to maintain the central spirit. The proposed triangulation pattern is the following:
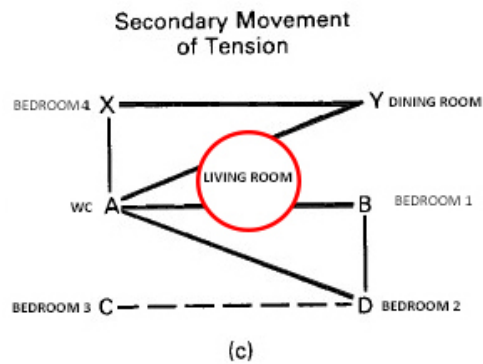
Figure 12: proposed Secondary triangulation identities
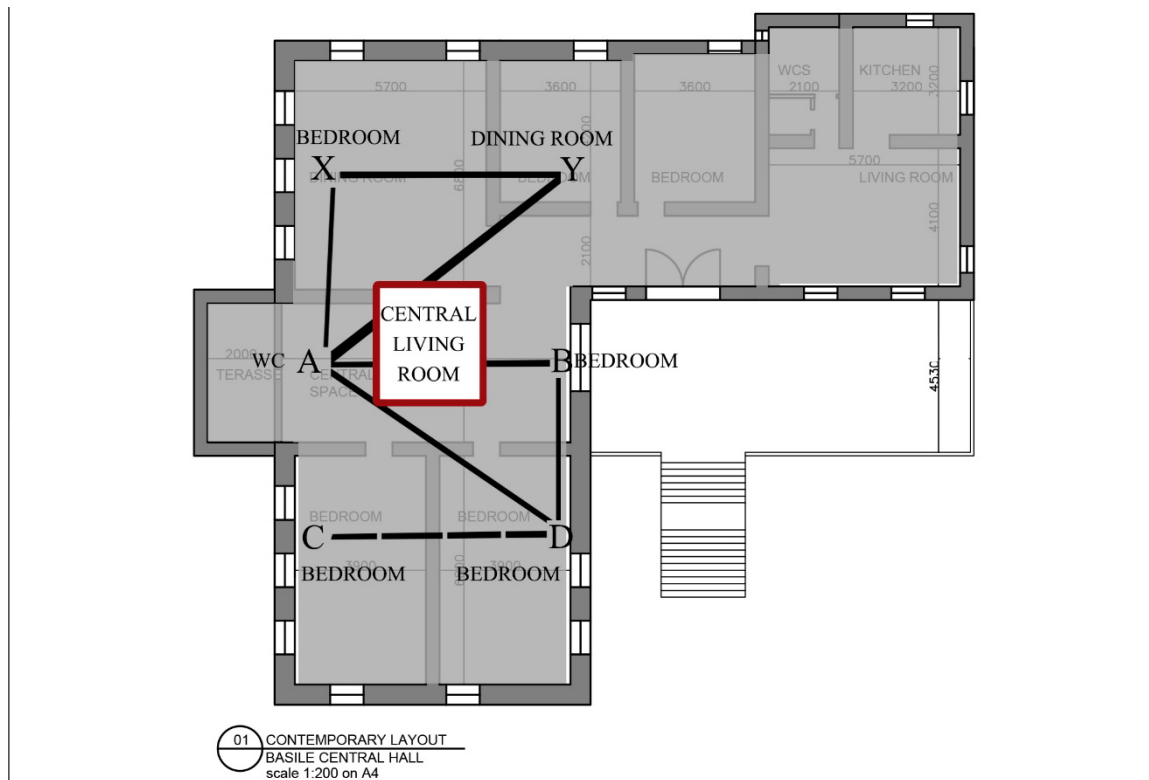
Figure 13: Application of triangulation pattern on the left side of Basile's layout

4.3.3 Region Structure: According to Goffman (1959), a successful house layout is the one in which the Public and Private sectors are combined in separate sections. This concept is an interior's must application in modern houses and taken into consideration when structuring walls of house's and functional positions, which had a minor importance in old houses. However, following our case study and as mentioned in the structural opinion in Table 3, all members agreed on private/public inconvenience, complaining that their actual layout has no division between these two sections. Therefore, a new guideline has to be followed and checked before locating the pattern in the layout reshuffle. Goffman (1959), a Canadian-American sociologist who is considered to be one of the powerful American influential sociologists of the Twentieth Century, examined private and public spaces and describes social interfaces reflecting

people's interactions within a certain space in time. Goffman (1959) insists that places, in which individuals interact, have to be divided into sections that can be named as "front" and "back" regions. Front regions are sub-named under public spaces in which performances usually take place such as the living room and dining room. However, ''back regions,'' sub-named under private space, are where familiar intimate performances take place such as the bedrooms and bathrooms. Korosec (1984) claimed that sections in a residential areas need to be restructured with opposing polarities of mentioned spatial regions. Korosec (1984) describes both sectors following the psychological meaning as visible vs. secret, work vs. leisure and private vs. public in which a certain dwelling grows into a fused entity. The combination of modified dwelling conditions, in addition to adaptation of values, resulted in creating a multipurpose living room combining the public and private aspect. Thus, the space division overlapping with the behavior detachment allow for the same living space to provision multifunctional functions. Goffman (1959) offered the option of having the same living space being used as a front or as a back region depending on guest availability condition.

However, in our case, members complained of guests visiting, which changed the living room into an all-time public space leaving no room for an intimate space gathering. Therefore, a living room has to be added in order to be located in the front area section along with bedrooms allowing members to gather in a private manner. In addition, according to Goffman (1959), dining rooms are considered to be back region partitions. Consequently, the dining room, voted as number 3 for the most visited placed, has to be placed as a side room, fronting the back section region.

Hence, the first step of layout is to be divided into Front region: kitchen, public living

room, dining room and Back region: bedrooms and a private living room, in addition to a

private WC based on Christian's demand, all fused according to the main entrance

location. Region sectioning is to be structured as the following (Figure 14):
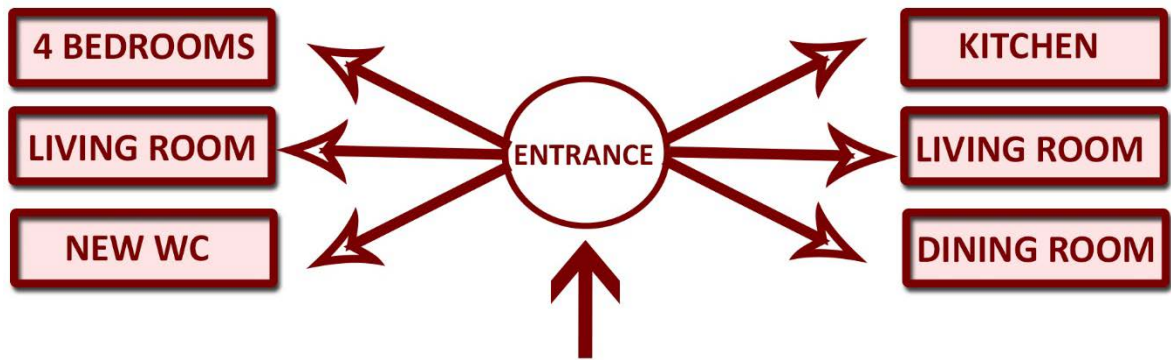
Figure 14: Region division proposal Layout

Figure 14 shows a region division to be followed, subsequent to the existing entrance and

corridor. Thus, the Front region is considered to be placed on the right side as the existing

kitchen, sanitary and drainage equipment are previously available. In addition, an existing

public WC and public living room are to remain for guest Front sectioning. Nevertheless,

the dining room, which is considered to be a Front region room as well, is to be

reshuffled in order to be a "middle zone," joined with the previous secondary

triangulation proposal, which is considered to be part Front region. Therefore, in order to

complete the Front and Back functions, the dining room is to be placed in the middle

region between the two house sections. Thus, the functional patterned Layout, including

Figure 12, proposed the triangulation pattern, evolved accordingly as Figure 15 indicates:
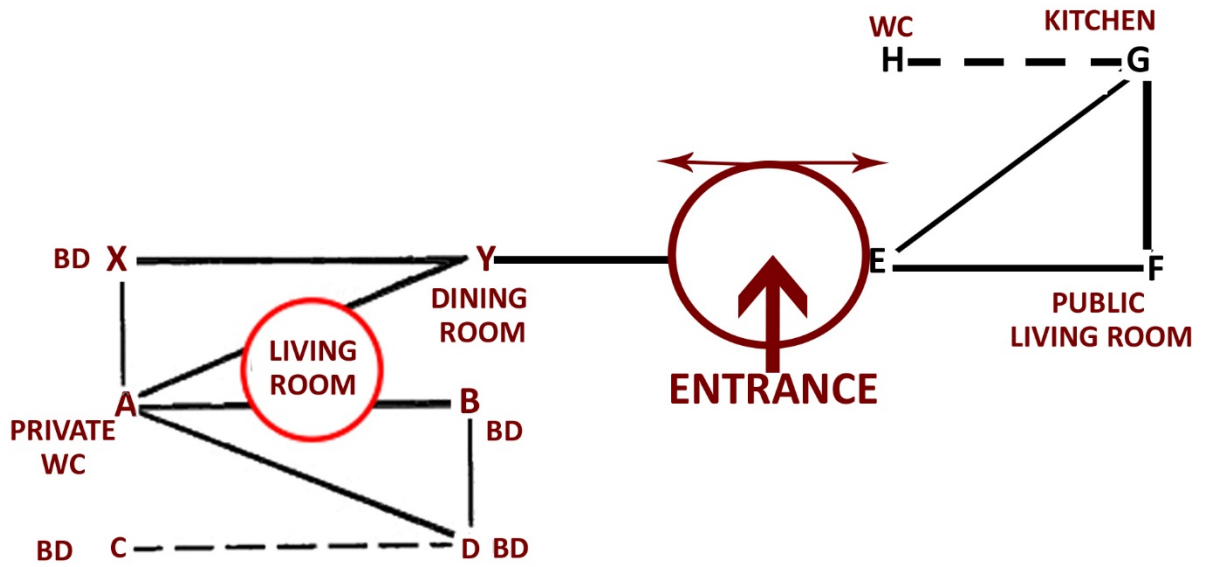
Figure 15: Pattern regional division
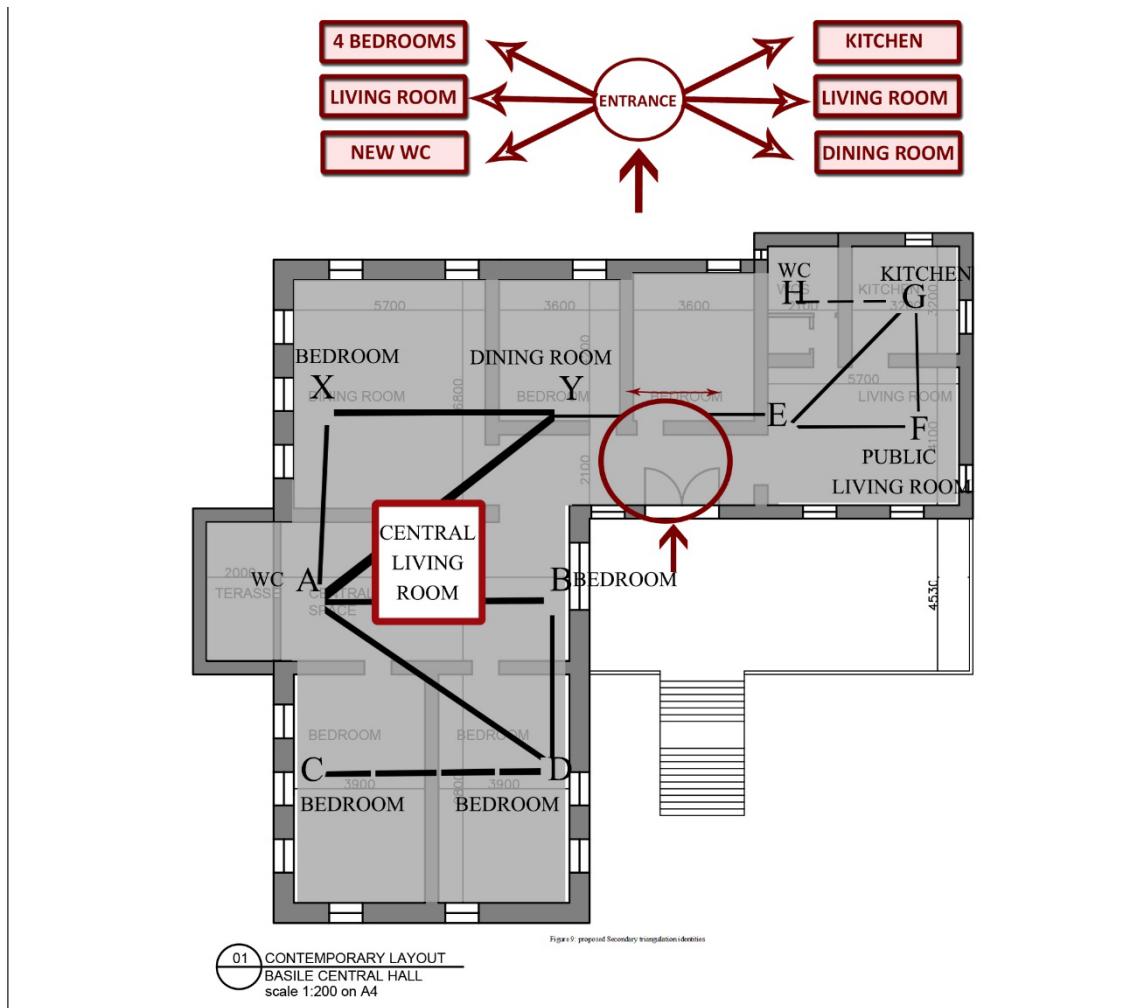
Figure 16: application of regional pattern division on Basile's Layout

4.3.4 Signification: The Signification final guideline phase comprises of the inner-circulation between the residential functional rooms. In order to control intended circulation, the "logic of space" explains that this method is a structural solution, which will be chosen in this design to control the members' movement and their orientation and to shift it into the living solid area. The circulation of each house could vary according to the initial interior structure and their functional intentions.

Thus, following our Basile's residential case study, our aim is to restructure a private living space with a high central traffic circulation. Implementing the logic of space method could vary in each and every house regarding their initial structure and their functional room selections.

However, our case is based on the analysis of mentioned subdivided cell, which reflects our highest ranking rooms. The Unit-rooms, the four bedrooms and the dining room, are then expressed in either "alpha" or "gamma" cell. As explained in Chapter Two, the "gamma" cell is the equivalence to the "alpha" enclosed cell but with only one single access from its carrier. Yet, the "alpha" is considered to be an open unit cell with more than a single access from its carrier. Therefore, in order to control members' movements and shift them into the solid wanted area, the signification guideline will be customized according to social "logic of space" method, which examines the structural solution to be adapted in Basile's dwelling. In the pursuance of representing it through a certain pattern figure, each interior of a cell is reflected into a circle, and its relation to the outside is then represented as lines linking it to the other interiors (refer to Figures 4 & 5): alpha-gamma representation – Chapter Two). In this stage, the circulation channel is studied to control the members' orientation in movement between the three triangulation elements as explained in Figure 11. The circulation areas in Basile's dwelling is the sequence of the location of the room within the triangulation system and the inner-link between the intimate private and service public areas. Thus, the higher level of circulation in the aimed private central area are, the larger the inter connections intentionally designed between these functional rooms (Can I, 2016). Accordingly, low passage frequency areas indicate that the visited spaces are commonly accessed from

different alternative passages instead of one (Hillier & Hanson, 2005), which shows that

the degree of prominence between Basile's actual rooms are, in term of passage, all

similar. However, the communicative plan representing our intention is assured through

the transpose of the passive functional aspect, the actual living room, into a private

interactive joining layout based on the members' demand. Hence, the logic solution to be

created for a high traffic space is a joined area of "gamma" cells, which has to be

provided (Hillier & Hanson, 2005). The logic of space cells representation, following

previous triangulation pattern, then becomes applicable as shown in Figure 17:
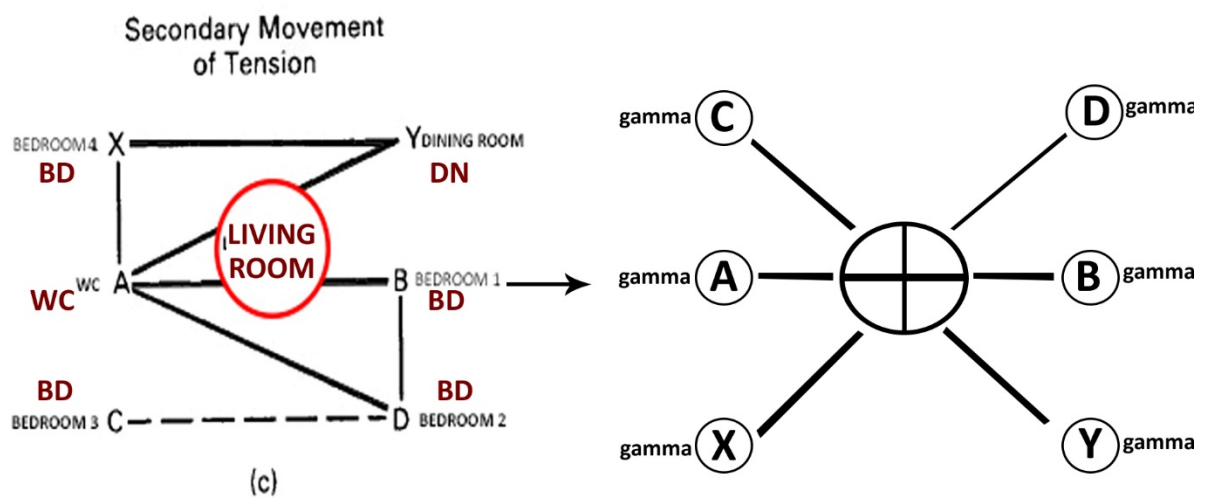
Figure 17: Logic of space unit cell representation

Figure 17 shows the 6 functional cells mentioned in Figure 12, to be transformed each in

a gamma cell unit with one single entrance accessibility. Thus, the opening will be

selected to face the aimed solid space, as the lines in Figure 17 show, leading to the

private living room. Having one accessed entrance facing the central space will enable us

to succeed in the intended high traffic area and control it to be immersed in the central

space needed.

4.3.5. Implementation in Basile's Layout

After achieving the three Parametric guidelines, implementing the pattern is quite

simple as the regional section is mentioned and rooms are patterned and access

structured. Therefore, the suggested structure is as follows:
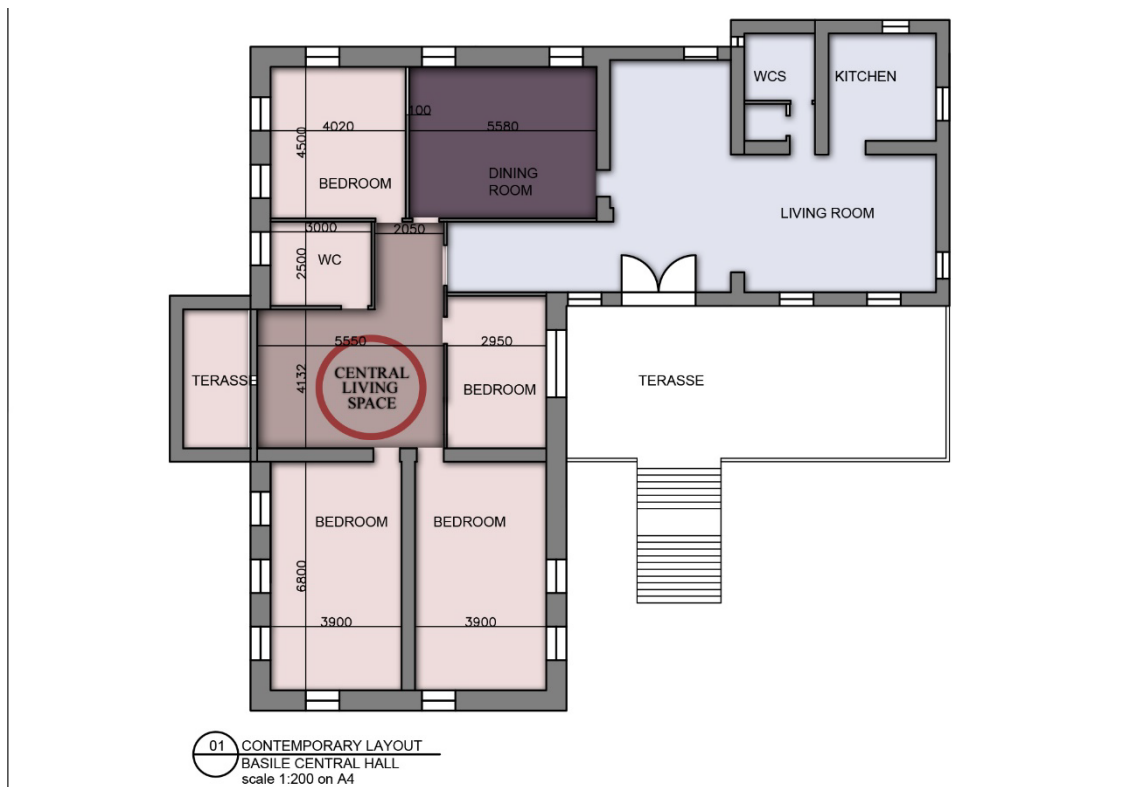
Figure 18: Suggested Layout Front Vs. Back structure

Figure 19: Spatial systematic Prototype – 3D structural representation

Figure 18 shows the possible structure for Basile's top view Layout with minimum wall modifications needed; however, Figure 19 shows a 3D structural representation of the spatial systematic methodology, where the designs included are only to show the identity of the room. In this structure, modified walls are restricted to typical 10 cm in thickness instead of the old 40 cm in order to lower cost and gain space. Consequently, in Figure 20, triangulation is checked through the dispositions of rooms as mentioned in Figure 16. In addition, the dining room colored in purple in Figures 18 to 20 is selected to have a middle position between the two Front and Back regions, which are colored in light red and blue.
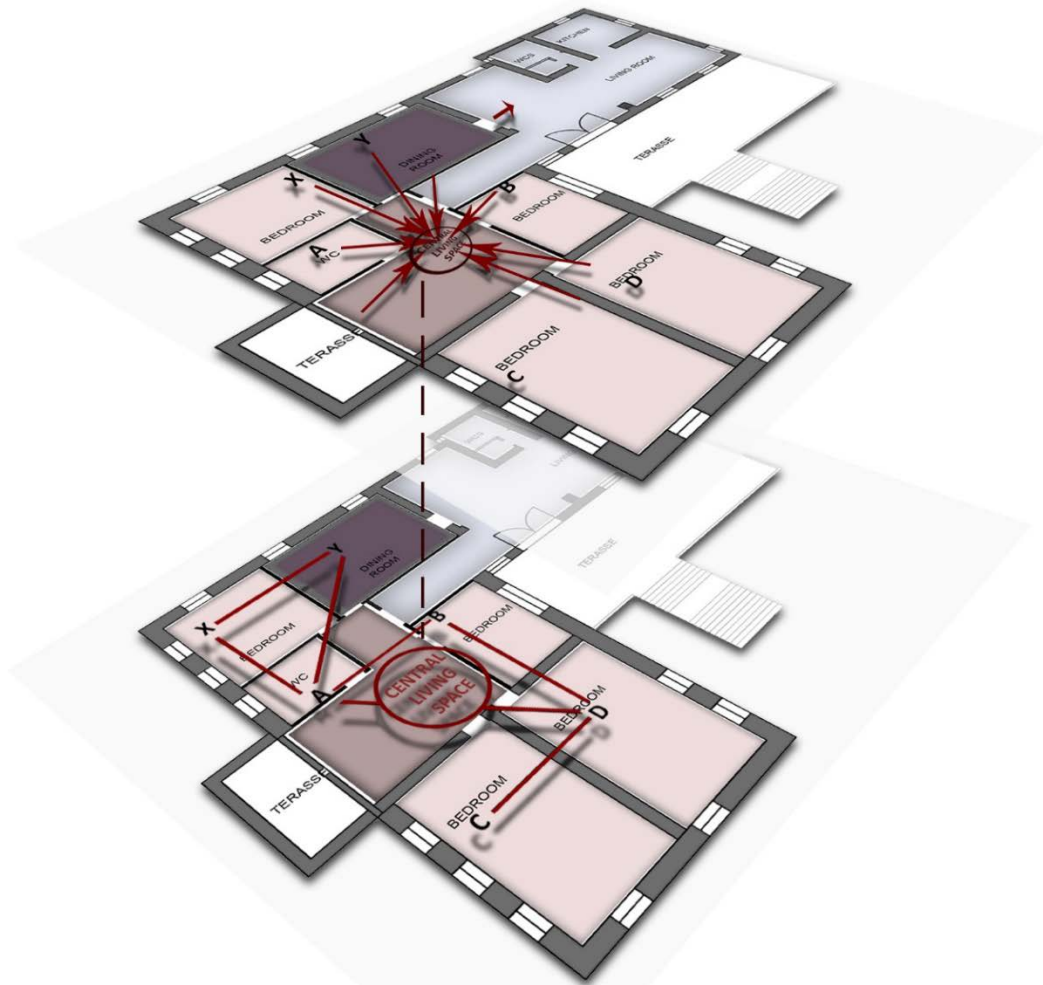
Figure 20: Triangulation Vs. Logic of Space verified structural Layout

Thus, an alternative second opening has to exist in order to join both private and public sections of the house. However, all the entrances of the rooms are located to the face central space, which develops a traffic circulative area in order to reach all wanted functional rooms.

As a conclusion, the three guidelines are achieved along with Basile's family recommendations. Articulation and Organization are checked with retrieving the highest ranking rooms throughout the interview: bedrooms, the dining room and the living room. Since our living room is our central triangular aimed position, the number of rooms are

then calculated along with the dining room in order to pick the suitable triangulation pattern type. Secondary Triangulation, described by William Whyte, was the reasonable choice type combining all Articulation identities and sets following their order. Each room had its position in the secondary triangulation creating our selective pattern to be implemented referring to Basile's house structure as shown in Figure 13. In addition, following modern concept as well as Basile's case shaping its members' intention, private vs. public sectioning was considered as a requisite in Layout design. The house was then sub-divided into the "Front" and "Back" sectors, separating the "wet" from the "dry" areas. Thus, zoning rooms was achieved and described accordingly in Figure 15. Nevertheless, the dining room, which is considered as an essential "Front" area function, is nominated by Basile's family members to be merged with their "Front" region sector. Therefore, in order to combine both divisions, the dining room had to be reshuffled and placed in as a "middle zone," joined with the previous secondary triangulation proposal; yet, it is considered to be part of the Front region. Basile's full house pattern was then evolved to be illustrated in Figure 16. The third phase, Signification, had to be achieved following a studied space circulation. Following the Logic of space, "gamma" cells with one entrance served us as a suitable solution in order to reach our high circulatory intention. Thus, our aimed central private living room had to combine all possible "gamma" cells entrances in order to reach its highest traffic circulation, which is shown in Figure 17. Consequently, the proposed structural Layout for Basile's family attained its structural shape in Figure 18, achieving the "Front" vs. "Back" zoning with a middle regional dining room, and shaped the aimed living room as a private central space combining all "Back" functional "gamma" cells entrances checked in Figure 20.

Since each Lebanese family has a unique character, the three guidelines can be modified altering the process and the outcome. The Organization phase and selecting the Triangulation pattern type can be modified with the members' chosen Articulation of their identities and their number. Consequently, the Organization phase can be altered following the initial house structure. Thus, generative patterns can be created throughout the Parametric process. Therefore, the designer's role is to be accurate to customize the family's character throughout this systematic approach in order to reach a proposed layout outcome that combines an interactive central "living" space structured in a customized plan that reflects the family's unique character and its solid identity. In addition, after completing the final layout outcome, structure is to be tested to ensure its circulatory success. Not to mention that other proposals can be studied and suggested for Basile's house; however, the mentioned Layout is selected to be software tested in the following stage.

4.3.6. Summary of outcome and Case studies relevance

Systematic approach: The Literature Review on social and structural theories contributed to the systematic approach frame result. This research aims to enhance family reunion in contemporary residential interior contexts through a spatial systematic methodology based on the crossing of communicational social and structural methods. Thus, a communicative plan is the reflection of functional aspects combined into an interactive joining display (Lahoud, 2008). The spatial systematic methodology represented in a structural outcome must enable us to create a combination of embodied experiences expressing our "identity" and enhancing its "solidarity." Thus, solidarity

within a space is built on the union principle and "intercommunication" (Hillier & Hanson, 2005). Therefore, parametric semiology explained in the social literature review claiming that designs made are all a communication design, is considered to be used as the structural aspect of the spatial systematic methodology. With its three guidelines, Organization, Articulation and Signification, Parametric communication is emerged empowering integrity in the designed central space area.

Outcome: Case studies were considered as added guidelines in outcome process.

Jala Makhzoumi and Reem Zako (2007) : Their investigation on the role of urban domestic gardens in the Central Hall revealed results using Depth Map software depicting circulation, which were perceived as the highest in Central Halls. Therefore, the Central Hall structure and its central location offered the researcher the central position to follow aiming for a high traffic circulation in its area.

Rihani (2009) Central Hall residence choice: Rihani insisted on leaving a symmetrical Central Hall as it reflects the central family core; however, an "old vs. new" spirit was added for decoration. On the one hand, symmetry in the outcome was partially executed, as the central space is positioned in the middle between the four most preferable rooms. On the other hand, interior decoration is chosen to have a modern spirit in its furniture in order to have a combination between the "old and new," a structural interior reflecting Basile's spirit.

Bioclimatic Architecture in Central Hall: Sany Jamal and Aram Yeretzian (2006) declared the importance of the Central Hall as a dynamic factor reducing additive energy use for its sea position, light and ventilation aspects. Thus, the Central living area is

selected to preserve the orientation of the Central Hall toward the sea, allowing its openings to maintain natural ventilation and light.

Schumacher Vienna University: According to Schumacher (2016), the university functional disposition was based on the parametric three guidelines. The Organization pattern was a joining pattern of "face-to-face" contact were all departments were facing each other. Accordingly, articulation consisting of the function of identity and number are then elaborated. Moreover, the Articulation identity was classified into "passive" and "active" bodies in the Signification guideline. "Active" departments were set as a fusion in "passive" bodies in order to have a full activation. According to Schumacher (2016), each designed space has to be a communicative space. Thus, application in research was very similar, as guidelines were reflected in a residential space. When it comes to residential areas with both public and private interventions, the restriction to "face-to-face" pattern was not insufficient. As such, a triangulation pattern had to be added developing the same concept. In addition, the articulation of "active bodies" was collected during the interview, where identities are selected to frame central space in order to increase circulatory traffic. In addition, "active bodies" which are the selected rooms, are to be restricted into one entrance in order to control the participants' orientation toward the central space. Thus, the entrances of the rooms were singular confronting the central living space triggering familial interaction.

4.4 Space Syntax Proposed Layout Testing

In this phase, the structural outcome drawn in Figure 12 is tested. Various program options are available for circulatory testing as Depth Map 7, Axman, Webmap

and many others; however, the selected software program, Depth Map X, is considered to be accurate, easily purchased suitable for Windows 7 capacity, and specific for spacing and layout analysis. Depth Map X, also known as Space Syntax, is a Spatial Analysis software and a reachable program to professional practitioners, especially Architects and Interiors in addition to academic researchers. The software is accessible for commercial and non-commercial practices in structural fields, where it can be functional as an open source. Multi-platform softwares stand to complete sets of spatial network analyses, which are designed to comprehend social procedures within a built environment (Bafna, 2003). They work at a variety of scales from small domestic residences and buildings to immersed urban cities, streets or states. At each scale, the purpose of Depth Map X software is to establish a map of open space elements. In the mid-1970s, Hillier and Hanson (1984) searched into spatial outlines and their relation to their environmental aspects. This concept has been developed and sightseen where the methodological frameworks are distinguished by the members of the Space Syntax community (Hillier & Hanson, 1984). The fundamental type of syntactical analysis tackles a certain process. The representation of executive spaces is analyzed, in which a structural plan is drawn and sectioned into a unique polyline shape and separate elements. The relation between these shapes are then interpreted into justified graphs. Significant elements found in tested spatial outlines are divided into two different categories. The first category implies tree-like layouts, while the second type falls under the name of ringy layouts. Hanson (1984) states that the tree-like layout indicates spatial configuration, which demands a solid program. The physical movement, shifting from one area to another, is very firm which allows fewer possibilities in route choices when it comes to a domestic display.

However, ringy configurations can be more practical as they suggest additional choices in the circulation between these spaces. Movement is then influenced by the size of these proposed rings as well as the quantity of spaces a physical activity can pass through. The existing rings within the tested space and its formation can regulate the concept of control. Control can reach its highest level when it comes to the joining point of intersection of two element rings or more. This interaction can be amplified as it occurs when the intended domestic area has more than one entrance (Hillier & Hanson, 1984). Thus, these entities or room identities are associated together via inter-connected links or shapes that reflect corridors in residential plans. These layouts are then performed through graph analysis of the resulting network. Graphs can be seen as axial linear presenting inter-connection as colored lines, or through VGA graphs presenting them through color motion. Colors are varied from blue as a negative traffic to red presenting the highest activity area.

Depth Map is widely used for urban planning as well as domestic investigation. Residential layout tests were part of an American University of Beirut (AUB) study published by Jala Makhzoumi and Reem Zako, where Central Halls are verified in the published article "The Beirut Dozen: Traditional Domestic Garden as Spatial and Cultural Mediator." The article clarifies the link between the spatial and cultural dimensions of the traditional domestic garden of Beirut Central Halls in their authentic central areas. Moreover, VGA offers the spatial analysis needed in order test the highest circulation location in twelve Central Hall houses (Makhzoumi & Zako, 2007). All tests showed that the old central spaces earned the highest circulation, which provided an additional central inspiration to follow.

Consequently, the main objective of using this program for this case study phase

is to test the final outcome in Figure 17 in order to analyze its inner connection and to

assure a high traffic accessibility reached in the central living room. The structure in

Figure 17 is drawn in one polyline command using AutoCAD software. The file is saved

in dxf format is then opened in Depth Map X software, where the grid is fixed to reach an

aimed structure to be tested. Selecting the VGA traffic motion, a visibility graph is

selected, the layout is then calculated and colors are varied to indicate the highest traffic

area in the proposed residential structure. The result is shown in the following picture:
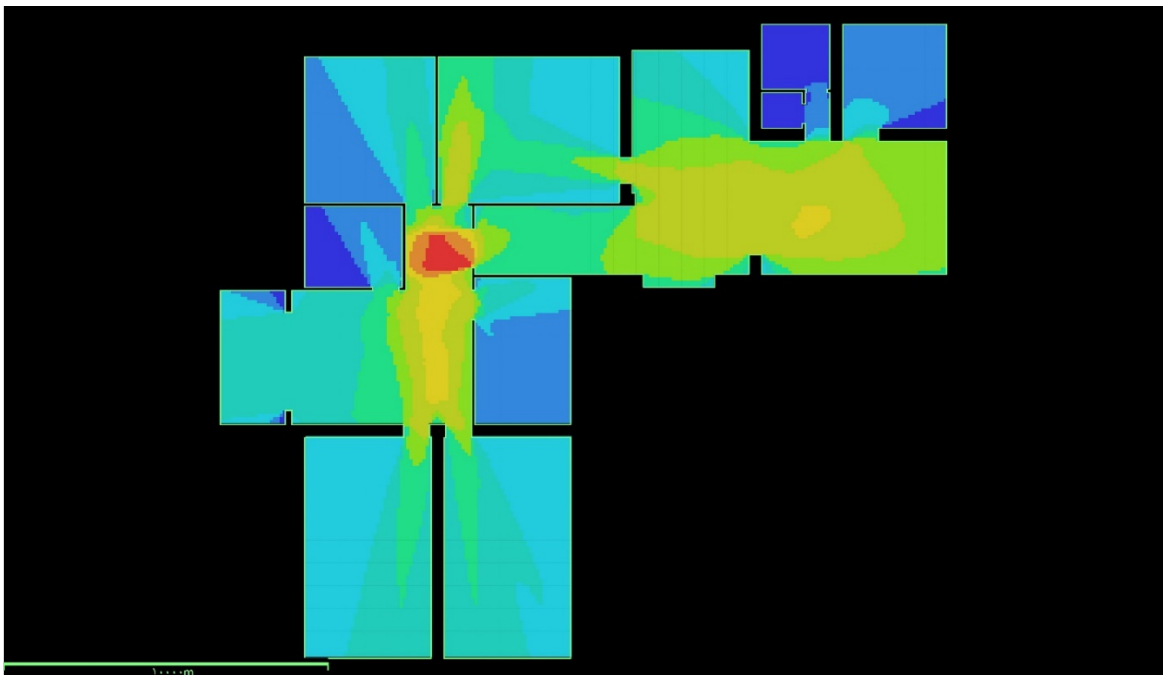
Figure 21: Depth Map VGA Basile's structure result 1.

As shown in Figure 19, colors are switched from dark blue, indicating the least

accessible space in the kitchen, the public and private bathrooms and the bedrooms.

Furthermore, colors differ from yellow, with higher traffic circulation in the entrance and

public living room, to red, the highest motion wave in the private living room entrance.

Although results indicate the achievement of the research aim as the red color is

perceived in the entrance of the private living room, the results are to be tested again,

with a minor change in order to reshuffle the red wave from the central living entrance in

order to cover its second side. The needed variables, which indicate a high traffic area,

are the entrances. Therefore, pushing the central bedroom entrance from its suggested

location toward bedrooms (C) an (D) is to be tested, noting that the Triangulation pattern,

as well as the Logic Gamma cells, remains intact as the same approach is reached.

Following the same process, the entrances were pushed in AutoCAD program and

reentered in Depth Map X as a dxf file. The second result came out as the follows:
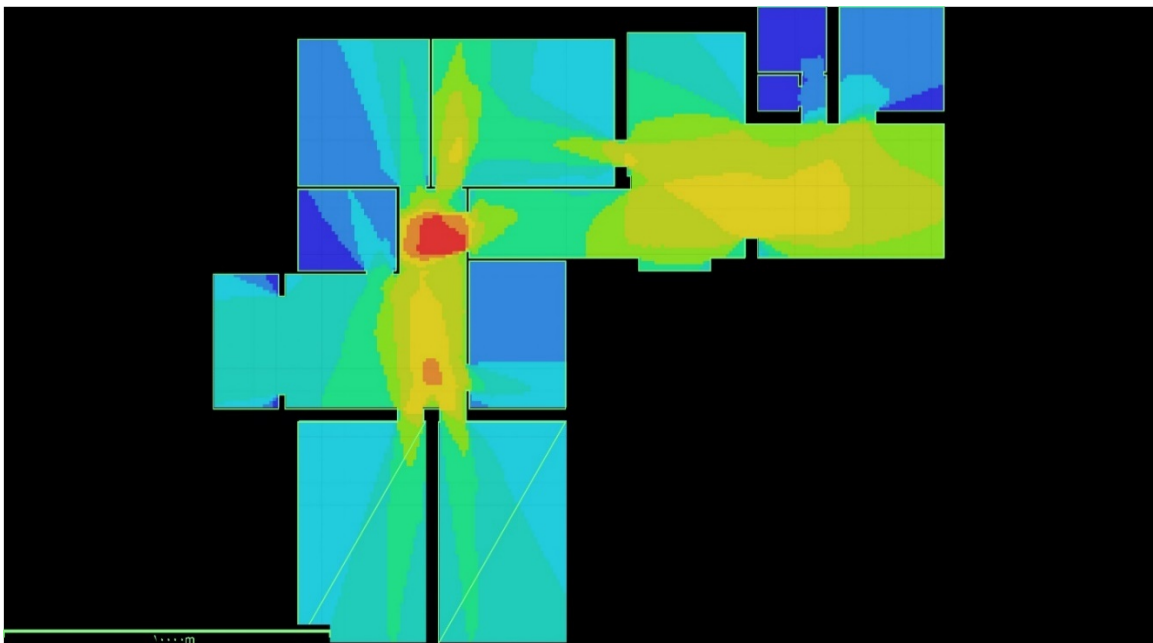
Figure 22: Depth Map VGA Basile's structure result 2.

As shown in Figure 20, the VGA color motion marks the same results as in Figure 19.

The least traffic activity is depicted in the kitchen, public bathrooms and bedrooms,

While higher circulation exists around the entrance and public living room. However,

what is marked in this trial is the red zoning, which is shown and reached in the both sides of the private living room, where our aim can be attained. Regulating the of number entrances to an equal position covering both sides of the "living" space permits to create a high traffic motion covering all the central area. Thus, the spatial order of the human residential habitat is linked with their instant physical organizing tool that has power to connect social members and force their movement activities. Therefore, high passaging in this area is accomplished. Circulation in this area is the highest compared to other zones in the house. Thus, higher circulation results in higher interactive meetings and communication, which can reestablished the family members' joining unit and reinforce its solidarity.

In this chapter, the guidelines were checked and unified in a final outcome. Parametric guidelines emerged in the process, where each segment was purely customized according to Basile's answers. In addition, the final layout was one of many other proposals that can be provided and approved by the family. However, due to the lack of time, only one sample was designed and presented. Moreover, in order to be accurate, each designer could select a circulative analysis software in order to test the plan validity and fix it accordingly. In this case study, Depth map X, designed by space syntax, showed a minor lack in the first trial, which allowed the second one to be more successful. The final outcome is directly related to the case study; thus, each designer willing to implement a central union in a residential space should follow the same process. A detailed data interview should be fixed in order to examine each family's character, residential desires and lacks. In addition, throughout the meeting, retrieving articulation identities is essential, as grabbing the number of rooms preferred to be joined

allow to apply the organization stage by choosing a practical triangulation pattern in order to complete the final signification stage. The logic of space states that "gamma" cells are a sensitive application. Each designer should study the possibility for room singular entrances to be concentrated toward the needed central space in order to shift members' orientation in movement toward the intended living area. Not to mention that the central area could be modified according to the primary structure and cost of the house. Each family member's identity could alter the divisions providing generative layout proposals based on the same approach. Consequently, it's the "identity" and the family union that should be reflected in the social and structural division of houses.

5.   Conclusion, contribution and limitations

Central Hall houses known under the name of Lebanese houses were once stated as the core of our country's architectural heritage and a social family foundation. However, past and present influences played a crucial role influencing origin structural and modifying Lebanese morals (Makhzoumi, 2009). Therefore, a detailed background in chapter two explained the socio-economic causes that led to the Central Hall failure starting from native Architects, with a modern western perspectives, until implementing urbanization as post war innovation (Ragette, 1980) till implementing modern "living rooms," which were hardly designed to gain family's union. "Living" spaces rather became lifeless inside the house with no prior consideration to their authentic social role (Davie, 2003). Davie (2003) asserts the powerful sense of privacy that was added decreasing familial socio-aspects. Thus, the assertion of modernisms was directly related to the question of identity that lost its preservation (Hays, 1998). Eventually, the modern concept did not alter the structure but the social affection inside families' interactions. The modern interior and the western imitation eliminated the reflection of Lebanese families' character. The modern social lifestyle, the introduction of a dying living room and technology intervention left no room for personal residential interactions, influencing socio-family connections and communication. Many social factors concerning our contemporary lifestyle cannot be restrained; however, the interior residential structure can, in another approach, trigger personal meetings boosting familial interaction and communication. Therefore, the aim of this research is providing a systematic approach to targeting two main roles: social and structural approaches that can fit any contemporary

residential interior context in order to enhance fading inner familial socio-connections. Thus, Chapter Three clarified the methodologies needed to be applied in a residential typical case study. A combination of selected social and structural theories tackling the identity and communication were explained. Starting from the ideal "reality" of Jean Baudrillard's *Simulacra* in which he described Urbanization as a pattern imitation and a duplication of reality. Contemporary designers were deeply critized as Baudrillard (1994) replaced them in a "one *sign* amongst many" term, where the reality by itself no longer seems to have any meaning. In addition to reality, the Pallasma (2012) theory of identity was also explained as the authentic timeless task of design in which true uniqueness of its inhabitant had to be persistent. Thus, taking "reality" preservation as a main objective, the revival prototype had to be unique to each family's character and beliefs. Thus, in the second part of Chapter Three, each member's interview was essential to reflect Basil's family "identity" as the final outcome had to enable its participants to create a combination of embodied and lived experienced symbols that express and organize their identity in the residential space. The aim of this research is associated with the value of integrity and solidarity within its members. Accordingly, solidarity, defining the reproduction of the Lebanese identity lies in the local reproduction of an identical reflection of the members' characters. Hence, as Hillier (2005) states about solidarity within a space as a concept which is built on the union principle and intercommunication, the gradual evolution of a social system must go hand in hand with the build-up of a designed spatial layout order. A social interface fortifying Lebanese solidarity requires a structurally built environment as a field of communication, which triggers members' interaction, allowing further social contact. Therefore, the Parametric semiology method,

claiming that designs made are all a communication design, served as the main key for a structural procedure. Thus, three parametric guidelines were re-inspected and applied in Basile's case study in Chapter Four: Organization, Articulation and Signification. After the members' interview's analysis, the three principles of Parametricism were taken as a conceptual approach, which were checked and implemented through a designed case study on Basile's layout and character. According to Chris Abel (1997), the idea of human identification with a certain habitat sense is presupposed by its own "character." Therefore, the members' interviews were analyzed in order to reflect Basile's family "real" spirit and uniqueness. Thus, structural and social theories went hand by hand in order to create the functional room character needed. Moreover, by using specific data collected from the analyzed interviews, the center character of the place shaped the Basile's personality. In this stage, according to Schumacher (2016), the three main first parametric guidelines were checked. "Organization" and "Articulation" were formed in "secondary" triangulation type. Secondary patterns served as a solution for a connective solid outline joining all nominated identities together, where the aimed central space with an increased traffic is placed. In addition, the third guideline "Signification" focusing on the circulation channel phase was applied. According to the Logic of Space method, "Gamma" cells with one entrance were selected, where cell-units are concentrated toward the central space in order to shift members' orientation in movement toward the intended living area. In addition, the structural method approach followed several additional requirements, which are mentioned in the members' interview. The house layout was sectioned between "Front" and "Back" divisions. The dining room, nominated as the third rank in the Articulation process, was chosen to be a middle zone connecting both

partitions. The proposed structural layout was then drawn. The "private" "living" room was structured, following a distinctive secondary triangulation gathering the highest ranking "gamma" rooms. As circulation areas in dwellings is the product of their location within the system, the larger the level of circulation is, the larger the inter connections between members in the aimed functional sector are (Can I, 2016). Therefore, the proposed layout had to be software tested in order to assure its traffic circulation. Depth Map X test program showed positive results with two red waves around the aimed living space confirming the highest traffic area in the aimed process space.

Contribution and limitations

One case study: Due to the lack of time, this research tackles one case study related to the Basile family, which suggests that the spatial systematic methodology proposal was presented and well accepted, as execution cost was requested by the father, Mr. Jose Basile, for a possible future project implementation. However, one example was elaborated, which can be considered as insufficient for designers aiming to follow the suggested systematic prototype. As every family has its own different background, character and layout frame, the conduction and application of the same suggested prototype will result in generative structural outcomes reflecting each family. Thus, more case studies are to be showed and elaborated aiming to have more than one example in order to enhance designers' understanding of how to apply the approach.

Technology: The implementation approach tackles the structural layout of the house in which the family members are still living. However, the members' situation could vary where conditions can control the availability of the person in the house.

Therefore, a virtual Central Hall can be designed in a following research. A Virtual Central Hall can be the continuity of the same systematic approach and structural outcome, which can be turned into a virtual one, able to cope with technology's variations and join family members without the necessity for personal availability in the house.

Data: This case study tackled only one family. Thus, further research on other case studies and more interviews should be conducted and analyzsed in order to show academic researchers and designers the social and structural perspective regarding the designed approach.

Social changing values and the Lebanese lifestyle are in a continuous changing situation, which cannot be controlled. However, it is in the designers' will and power to enhance and preserve fading familial values and morals through structural approaches, which can be considered as the primary guidelines for recreating a central "living" union. However, every designer has to take into consideration each family's character and uniqueness as generative patterns can be created throughout the parametric procedure. Therefore, the designer's role is to be accurate to customize family's character throughout the process. The designer's accuracy is significant in order to achieve a solid central living that combines both the structural method parameters with its family's social requirements. Each central "living" space structure is a customized process that reflects the family's "uniqueness" and its "solid" identity.

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Appendix

Mme Jacqueline Basile Transcribing

Me: *Bonjour Mme Jaqueline ente l em la 3 chabeb w set el bet ana 3am ba3mol ma3ke hayda el interview ta 7ata ekhod mennik el data el lezme michen l thesis taba3e. akid ente 2rite w mdite l consent form w nehna hala2 ready ta nballeh bel interview*
Translation: Godd Morning Mmr Jaqueline, you are the mother of the three brothers and the housewife, I am conducting this interview in order to collect data needed for my thesis. Of course you have read and signed the consent form and we are ready to start with the interview.
Jacqueline: Okay
Me: *awal sou2al bi 2oul enno chou henne l activite yalle bta3emliyon ente khilel nharik*
Translation: first question is, what are your daily activities?
Jaqueline: *ana 3ende mat3am brou7 bakkir 3al mat3am befta7o w bzabet wad3e bel mat3am berja3 beje 3al bet khilel se3ten beje botbokh bkhallis berja3 brou7 berja3 berja3 beje bchouf chou fi tondifet choufi cheghel lal bet berja3 brou7 3al mat3am 3achiyye*
Translation: I have my own restaurant I open it and I fulfill my duties in the restaurant, then I come to my house , in two hours I come to cook, I finish then I come back to check if there are some cleanings and work for the house then I return to restaurant at night.
Me: *ok ye3ne ta2riban kam se3a 3am t2adiyon be hayda el bet?*
Translation: ok so approximately how many hours are spent in the house?Jaqueline: *bel bet chi 4 se3at, wel be2e bel mat3am*
Translation: at the house around 4 hours, and the rest at the restaurant
Me: *betfadle t2adiyon la wa7dik wala betfadle t2adiyon ma3 3ayltik eza keno mawjoudin*
Translation: do you prefer to spend them alone or you prefer to spend them with your family if they were available?
Jaqueline: *akid ma3 3aylte bfadel ma3 3aylte w halla2 l wade3 enno euh.. fi cheghel w heik medtara enne rou7 w eje*
Translation: of course with my family I prefer with my family and now the status is euh.. there is work and I am obliged to come and go.
Me: ok
Jaqueline: *w da7e be hal wa2et*
Translation: and sacrifice the time
Me: *halla2 hasab ma la7azet enno euh.. baytik ma2soum la kaza 2a2sam henne ouwad l nom fi 3enna oudet el 2a3de fi 3enna el corridor 2oudet l sofra fi 3enna l matbakh wel hemmemet fine euh.. please bet3adidile yehon bel ameken l aktar chi ente bet2ade wa2et fiyon lal 2a2alla chi?*

Translation: I recognized that euh.. your house is divided into several partition which are bedrooms there is living room, corridor, dining room, we have the kitchen and bathroom, euh.. please can you rename them from the most visited until the least?

Jaqueline: *aktar chi akid set l bet bet2ade wa2ta bel matbakh w be ouwad el nom w bi ehh..w bi kell bet ye3ne w hayda el bet ana mas2oule 3anno bade oudet el 2a3de wel kell*

Translation: the most, of course, housewife spend her time in the kitchen and the bedroom and in euh.. everywhere in the house and I am responsible of this house and living room and everyroom.

Me: *ok ye3ne aktar chi 3enna el matbakh w 2ouwad el nom w 2ooudet el 2a3de wel be2e*

Translation: ok so the most we have the kitchen and bedroom and living room, and the rest

Jaqueline: *wel be2e be sir chwe w chwe*

Translation: and the rest became less

Me: *ok fike please euh.. techra7ile baytik be kam kelme men ne7yet euhh.. el ta3allo2 social w structural ye3ne kif to2sim l bet betle2i?*

Translation: ok can you please euh.. describe your house in few words in term of euh.. the social attachment and structural one like how to you define house composition?

Jaqueline: *euh.. ne7na baytna 7ara armid kbire w to2sim men jouwa mech kell halla2ade 7elo ma keno yedersou ma ken madrous ouwad el nom ye3ne 2ouwad el nom ye3ne betoll ye3ne 3al.. hayda li ze3ejne aktar chibass meche l 7al*

Translation: euh.. our house is a big courtyard and it's not well divided from the interior, they did not study it, bedrooms were not well studied, as they face the.. that's what bothers me the most but it's ok..

Me: *ok ye3ne ente kif betfadle l to2sim?*

Translation: ok so howe do you prefer to structure it?

Jaqueline: *ye3ne y koun fi euh.. 2oouwad l nom 3a janab la ma y koun ktir w ehh.. eno bi nemo el wled el chabeb ta yenemo merte7in w eno ma y koun fi dajje 3al beb w heke*

Translation: it means to have euh.. bedrooms on the other side so it doesn't and eh.. the children the boys comfortably sleep and not to have noise coming from the door ect..

Me: *ye3ne bet7essiyon enno majmou3in ma3 ba3don?*

Translation: it means you find them combined all together?

Jaqueline: eh

Translation: yes

Me: *ok. Euh .. ente bet2ayde el teghyirat li sarit be baytik nazarna la2ano ken fi part adime adim be baytkoun w nkhalat ma3 part jdid bet2ayde hayda el chi ? wala kente betfadle enno bass yeb2a el bet adim?*

Translation: ok.. euh.. do you encourage the modifications happened to your house seeing that there was an old prt in the house that was combined with the new part, do you encourage this? Or you preferred to stay on the old part?

Jaqueline: *la la ahsan byet2assam al ahsan*

Translation: no no better, it's better divided

Me : *okey eza 3endik l chance ennik tzide ossem la baytik aw ennik tghayre fi euh.. chou betfadle enno y koun hal teghyir*

Translation: Okay if you had the chance to add a space to your house aw to change in it euh.. what would the modification be?

Jaqueline: *akid bfadil enno y zid 2ouwad dyouf w enno y kouno el ness teje terte7 3ende y koun 3ende ma7al la dyouf koun ana merte7a w henne merte7in*

Translation: of course I prefer to have guest rooms and to have people coming and be comfortable, and to have a space for the guest so I can be comfortable as well as them

Me: *ye3ne betfadle ka2anno 3am to2osme ben l dyouf..*

Translation: it means you are dividing the guests..

Jaqueline : *bi 3ajanab*

Translation: on another side

Me: en ok

Jaqueline: w *privee 3a janab*

Translation: and the private on another side

Me: *ye3ne ente 7asse eno fi khalet bel privee wel..*

Translation: you mean that you feel like there is a combination between the private and..

Jaqueline: *eh w kello maftou7 3al ba3do*

Translation: yes and all is a open space

Me*: laken ana bade etchakarik 3ala el interview w merci ktir la elik*

Translation: So I would like to thank you for the interview and thank you

Jaqueline: *ahla w sahla fike*

Translation: you are welcome

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[ ] my name   [ ] my title   [ ] direct quotes from this interview

Name: Jacqueline Bassil

Signature of Subject __Jacquelim_____ Date Jan 19, 2019

Signature of Investigator _____ Date _____

Jose Basile Interview

Me: Hello I'm Julia Mikhael, I'm conducting this interview in order to have the data for my thesis, euh.. I am interviewing you Jose Bassil who is the father and the owner of of Bassil's house. So, euh.. You've seen the consent form and you've signed it and we are ready to go. So my first question is: what are your daily activities and your usual routine?

Jose: At work you mean?

Me: Yes, between your house, at work what do you in life?

Jose: Usually euh.. I am a production manager in a dairy plant, I usually leave home at 7:30 and arrive at 8 o'clock start my daily work with my thirty people crew that work with me in the dairy plant we manufacture dairy products, cheese, fragmented meals etc.. and euh.. Usually I leave work at 4:30 pm and I come back to my home and euh.. Usually I rest in my residence

Me: okay so you stay at home at night after your work

Jose: yes,I stay.. usually I stay at home after my work

Me: okay so approximately how many hours do you spend at your house?

Jose: usualy euh.. its from, around 14 hours if you want to say from 5 pm till 7 am the next day, it's usually around 14 hours

Me: yes, and in these hours do you spend them with your family or do you prefer to stay alone?

Jose: no usually we.. we are all one family so we stay all together, euh.. we euh.. we stay all together at home , yes I prefer to stay with my family.

Me: Okay, euh.. so as I've seen the functional areas in yur house are bedroom, living room, the corridor your dining room, kitchen bathroom and your storage room, so can you please rename the rooms from the most visited to the least visited in your daily activity?

Jose: yes, usually euh.. the rooms that are the most visited are the living room, euh.. are the living room, no, sorry euh.. the rooms that are mostly visited are the bedrooms first, and then the living room and then the kitchen and finally the bathroom

Me: Okay, okay and why do you spend them in your bedroom, euh.. is it, is there any cause for it?

Jose: we usually prefer to rest and take a nap in the afternoon and euh.. that's why we spend most of the time either resting in our bedroom and taking a nap and maybe we go and stay a little bit in the living room and little bit in the kitchen but mostly it's in the bedroom.

Me: okay, so can you describe your house in terms of social aspect

Jose: usually, euh.. it is an old house maybe around one, more than one hundred years old, which I inherited it from my grand father and euh.. usually like you know its an old house which is not very well divided, eh.. I mean as far as euh.. rooms concerned, so that's why it is a lot of reshuffling and re- euhh.. re-structuring the rooms, so it would fit the new system or the new architectural designs

Me: Okay, okay, how do you evaluate the modifications done, do you encourage adding the new part to the old part of your house?

Jose: euh.. usually, I prefer to leave it like it is but restructuring it from inside according to a modern euh.. architecture

Me: okay, so you are okay to add these, this modern part to your house

Jose: Yes.. yes

Me: Oky, and if you had the chance to add a certain space to your contemporary house, what function would it be?

Jose: well usually.. what function you mean, what euh? (coughing) how, how should I add it euh..

Me: If you want to add a space, euh.. what would it be? A new living room? A new bedroom? Euh.. maybe restructuring the area to have a more space for some..

Jose: yes I prefer to restructure it ..

Me: So it's a restructure

Jose: .. without adding anything just restructuring the areas according to euh.. the most important rooms, less important rooms.. and according to a modern way

Me: what do you mean by a modern way? What do, do you think that euh.. there is a deficiency in the structure?

Jose: usually u know that the old houses euh.. usually when you enter the main entrance you can see the bedrooms in front of you which is not, a.. which is not, which is not a good thing to see, so when you enter the main entrance you should maybe go inside a living room maybe first and then put the bedrooms euh.. in the .. aside, so that why it should be structured in this way

Me: mm.. so do you think that there is a shifting between the public and the euh.. private area that's what you mean

Jose: yes, ther should be shifting between public and private area

Me: Okay, okay do you want to add anything ?

Jose: euh.. no (laughing both)

Me: So I would like to thank you for participating in this interview

Jose: Thank you very much

Me: .. and all the data will be used in my thesis

Jose: Thank you

Me: Thank you!

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[ ] my name   [ ] my title   [ ] direct quotes from this interview

Name: José Bassil

Signature of Subject ___JoseB___ Date Jan 19, 2019

Signature of Investigator _____ Date _____

Clement Basile Interview

Me: Hello

Clement: Hi

Me: I'm conducting this interview in order to fulfill my data needed for my thesis. So I'm interviewing you Clement Bassil the middle son of Bassil's family, euh.. I've already, you've already signed and agreed on the consent form

Clement: yes I did

Me: So I'll start with my interview, first question: what are you daily activities/routine what do you do in life?

Clement: Euh… usually I go, I go work every day, I work in Ashrafieh at a catering company, euh.. Then after work I go to my gym in Jeita, after that I go home.

Me: okay, so approximately how many hours per day are spent in the house?

Clement: Mainly I spend only the night at my, my house.. yes

Me: Okay, so after u go to the gym

Clement: yes, after the gym I go to my house and rest

Me: Okay, and do you usually spend them with your family or do you prefer to stay alone?

Clement: *hala2* (Now) if my family or my parents were available at home I sit with them and we have some conversations between, between us.

Me: Otherwise?

Clement: Otherwise, euh.. I go to my bedroom and I, I work on my thesis

Me: okay, so mainly you are at home

Clement: yes at home, only if I have, if my friends, we have plans we go out we have some, some dinners some coffee

Me: Okay, deal, so for the functional areas in your house

Clement: yes

Me: there are bedroom, living room, corridor, dining room, kitchen, bathrooms and storage room

Clement: yes

Me: can you please rename the rooms from the most visited to the least visited in your daily activity

Clement: euh.. I spend all my, most of my time in my bedroom first, second if my parents were available or they are sitting in the living room I sit with them and I we have some discussion

Me: and for the other functional rooms like we have here euh.. Kitchen we have dining room

Clement: *hala2* (now) kitchen and bathrooms I usually, I usually use them to fulfill my needs, okay, the storage room I don't use it, only it's my, my mom

Me: okay, deal, can you describe your house in few words, in term of social and structural aspects

Clement: euh… what do you mean by social?

Me: Okay, I mean like euh.. do you feel like comfortable in your house? Are you attached to it?

Clement: yes I am comfortable in my house, it's a beautiful house it's a big house, and I'm attached to it as it is my heritage, that's why I'm, I love it

Me: Euh.. okay that's for the social part,

Clement: Yes

Me: Euh.. for the structural part are you really comfortable with it, do you find it like suitable for your living style?

Clement: Euh.. *hala2* (now) for the structural part, I'm, I'm not really, com.. comfortable with it because euh.. I have my, I have my bedroom and, euh.. the door of my bedroom and euh.. and the entrance are opposite to the same side

Me: Okay, so u mean like in front of each other's

Clement: In front of each other's so every visitor that comes to us I should, I should close the door to avoid any interaction between them if I am in my, in my bedroom

Me: so do you find it like annoying to

Clement: Yes it's annoying to be in your bedroom and receive some visitors passing through, through the door *yaane* (I mean), okay

Me: So you feel like there is no division between, the, the private area and the public one

Clement: Yes, there is no division between them

Me: Okay, euh so mmm.. Can you evaluate the modifications like are you encouraging euh.. The new part added to the old part or you prefer to have the old part only?

Clement: euh *hala2* (now) mainly I love the extra space in the new house but I prefer to divide the house correctly before adding any extra space

Me: you mean as we said before

Clement: Yes, divide between private and public, yes

Me: okay, so if you had the chance to modify or to add an certain space to the house, what function would it be?

Clement: first I prefer to divide the house correctly then if I had the chance to add some space I will do it

Me: Okay but like what?

Clement: I will do, euh.. Many spaces to have a bigger house but only to divide it it's the only first step

Me: and why do you prefer to have that division between public and private space? As you said before you didn't like the structural part of an entrance in front of your bedroom

Clement: yes I have, I want a correct division to sit with my parents privately without other people, I mean if I am sitting in my, in the living room without having interaction with people in the living room

Me: So you mean like the living room is mostly in the public area not in the private one

Clement: yes, yes the private area, is for me and my parents and for the living room

Me: Okay, deal, so I would like to thank you for this interview and as I said in the consent form I'll use these information only for my researth thesis, Thank you Clement and have a nice day

Clement: Thank you, good luck

Me: Thank you!

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Name: Clement Bass.L

Signature of Subject _____ Date Feb20, 2019

Signature of Investigator _____ Date _____

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Christian Basile Interview

Me: Hello, I'm conducting this interview in order to fulfill my data needed for my thesis two, so I'm conducting you Christian Bassil who's the youngest children of Bassil's family, as I've said you've read and signed the consent form, so I'll start with question one, what are your daily activity, what are your routines? What do you do for life?

Christian: I usually wake up and pack my bag and go to the gym, I work as a personal trainer then I go to university and I study physical therapy, this is my forth year and euh.. I usually go back home like 9 or 10. That's it

Me: Okay so, approximately how many hours are spent per day in your house?

Christian: Like around euh.. three or four hours before I go to sleep, usually

Me: And euh.. do you prefer to spend it alone or with your family? And why?

Christian: euh.. if there is someone in the house I usually prefer to stay in my bedroom, prefer to stay in my bedroom and if there is no one, and my family is here I, I spend the time with them of course

Me: Okay so if there is someone of your family awake yu'll spend yur time with them

Christian: yeah

Me: Okay, so for the functional areas in your house as I've seen there are the bedrooms, living room, corridor, kit hen and bathroom and the storage room

Christian: yeah

Me: so can you rename the rooms from the most till the least visited in a normal daily activity?

Christian: euh.. yeah usually my my most more preferred room is my bedroom, this is the first rank

Me: so you spend most of your time in your bedroom

Christian: yeah.. then euh.. I think second rank would be the euh..dining room

Me: Why?

Christian: because I I study in it, euh, I feel, I feel like euh.. comfortable in it, then the third space would be the living room, euh.. then the kitchen

Me: Okay, there is also the corridor, bathroom and storage room

Christian: yea.. euh probably the bathroom and corridor and I, I don't use the storage room

Me: Okay, okay, euh.. so euh.. I want you to describe me yur house in few words, in term of social and structural aspect

Christian: Euh.. social like what?

Me: I mean like social euh.. your house does it mean to you? Are you attached to it?

Christian: euh.. yeah of course it means to me, my past family used to live in it

Me: okay so you are attached to your house, euh.. and for the structural aspect?

Christian: euh.. what do you mean by structural aspect?

Me: structural aspect like the structure of the house, in term of the system, the functional areas, the rooms euh.. are structured in a system like we have the dining room near your bedrooms and we have your living room near your kitchen, so do you prefer, do you encourage this system or do you prefer to have another one?

Christian: I definitely prefer to change it

Me: Okay, why?

Christain: because my bedroom is directly in front of the door so everyone can see me when I'm in my bedroom that's why I prefer to study in my ining room so I can have some privacy, and yea..

Me: So you do not encourage your structural aspect

Christian: no no I would like to change it

Me: okay, and for the evaluation of the modifications done, do you encourage adding the newest part to the old part of the house? Or do you prefer to have only the old part?

Christian: euh.. I prefer to .. to have the new to the old part euh.. combined, euh.. so we can add some space so it will be, it will be good even if it's new space

Me: so you have no problem with the newest part

Christian: no

Me: okay and if you had the chance to add a certain space to your house what function would it be?

Christian: euh.. euh.. I would, maybe I would like to add a bathroom closer to my, private bathroom closet to the, to the euh.. bedrooms

Me: so the actual bathroom where is it located?

Christian: it's a, it's far, far, next to the kitchen it's far from the bedrooms, yeah

Me: so you prefer to have a private one near you or bedrooms

Christian: yeah

Me: and do you prefer to have another extra space or that's it?

Christian: yeah of course I would like you have an extra space

Me: okay what function would it be?

Christian: silence

Me: so it's only the bathroom, okay, euh I would like to thank you for participating in my interview and as I've said your words are confidential and used only for my thesis

Christian: anytime

Me: thank you and have a nice day

Christian: you too

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Name: Christian Bassil

Signature of Subject _____ Date Feb 20, 2019

Signature of Investigator _____ Date _____

Vincent Basile Interview

Me: Hello

Vincent: Hi

Me: I'm conducting this research in order to fulfill my data needed for my thesis research, so I'm interviewing you Vincent Bassil…

Vincent: Yes…

Me: Who is the older, oldest son of Bassil's family. So Vincent Bassil we start with question one

Vincent: Okay

Me: Euh... What are your daily activities or routine throughout your day?

Vincent: Actually euh… in my room I have my, my, my office so I work from home, okay euh… I am an architect and an artist, okay so, basically I work fro.. from home.

Me: Okay, so usually you have your clients coming to your home in order to have these meetings?

Vincent: Yes, at home or in a coffee shop or… it depends on the project

Me: Okay so approximately how many hours per day are spent in the house?

Vincent: Mmm… Okay, maybe euh…

Me: As an average

Vincent: Eight hours or more, it depends actually

Me: It depends on your major, your meetings

Vincent: Exactly

Me: Okay, so do you usually spend them with your family or do you prefer to stay alone in a space, in a certain space in the house?

Vincent: Both, but I, I, I stay alone in… euh… more often because I prefer my privacy.

Me: So you prefer to stay in a certain location in the house?

Vincent: Exactly, in my bedroom

Me: In order to fulfill your requirements for the major

Vincent: Exactly

Me: Okay, so the functional areas in your house as I've seen are: bedroom, living room, corridor, dining room, dining room, kitchen, bathrooms and storage.

Vincent: Yes…

Me: Can you please rename me the rooms from the most till the least visited in a normal daily activity?

Vincent: Okay, euh… I'll start with my bedroom first, then I can say dining room…

Me: Okay

Vincent: because of the table cause I can work from my dining room

Me: So its like a functional room.. in order to

Vincent: Exactly, its like a second office, with a huge table and everything and then I can say kitchen, then living room, then euh.. euh.. what's whats???

Me: There is also the bathroom and storage room

Vincent: Okay, *donc* euh… bathroom and storage room and corridor

Me: So mainly it's your bedroom

Vincent: And dining room, both

Me: Okay, can you describe your house in few words like in terms of social and structure aspects? You are an architect so…

Vincent: Yeah…

Me: … you have known that it's an old and a new modern house conflict

Vincent: Yeah, okay euh… my house euh… it's basically an open space, euh… with euh… lots of people all day and euh… and euh… *hek* basically, with a euh.. actually euh..

Me: so do you prefer these modifications do you encourage it or do you prefer to have the old part that's different from the newest one?

Vincent: actually what bothers me in my house basically is the... *mafi deux circuits yaane ana bfadel bel bet ykoun enna deux circuits, wahad privee wahad public am behke as an architect, okay yalle howe naes enna bel bet, enna bel bet, ktir c'est un espace public kl l nes betchouf kel chi am naamelo laano les chambres maftouhin ala el espace li men3ich fi, law bye2dar ysir fi metel un circuit tene privee, okay hek mneedar n3ich hayetna wel nes teje 3ade yaane l tnen ykouno sawa basically ma3 ba3don.*
Translating to English: actually what bothers me in my house basically is that there is no two circuits, it means I prefer in the house to have two circuits, on ethatis private and the other to be public, I am speaking as an architect, okay, which is what is missing in our house, in our house, is too much of a public space, all people see everything we are doing because our rooms are opened toward the space we live in, if it is possible to have

another private circuit, okay, that's way wecan live our normal lives and the people can come normally, it means both of us being together basically.

Me: okay

Vincent: *bi koun akid el lifestyle ahsan*
Translating to English: we would have a better lifestyle

Me: So do you encourage your euh.. the added part of the house?to the old one? Or do you prefer to stay in that old structure?

Vincent: *Akid I, I prefer*, eno ykoun fi euh.. added hek structure laano btozbat ma3 hayetna l modern aktar
Translating to English: Sure, I, I prefer to have, euh.. added structure because it fits more with our modern live

Me: extra space

Vincent: Exactly

Me: Okay, so if have a chance to add or to change a certain space in your house what function and euh.. what is the space euh.. do you prefer to have it? As an extra

Vincent: Extra space… euh .. maybe a second living room

Me: what for?

Vincent: euh… a second living room a more private living room, to , to maybe spend more time with my family without other people, or , or we can, I can work from this living room

Me: So you prefer to have like a living private room or do you prefer to have a space, a private space where you can work from?

Vincent: both, and it.. it can be both actually, it can be a living room and a private space actually.

Me: So your actual living room is a more public one

Vincent: Yes.. yes

Me: That's what bothers you

Vincent: Exactly and its, it's a , a with a direct connection with the kitchen and the bathroom and everything so its, it's a bit exposed

Me: Okay deal

Vincent: …and its far also from my bedroom, so I prefer to have near my bedroom another living room

Me: like an intimate space

Vincent: Exactly

Me: so if this space was added, you prefer to spend more of the time inside that space or inside your bedroom?

Vincent: Maybe both, and, and, both! Why not? And another space to work from

Me: Okay, deal, so I would like to thank you for participating for my research

Vincent: *de rien,* with pleasure

Me: And I, as I mentioned that the consent form is signed and we can use all the information you've said in my research

Vincent: With pleasure

Me: Thank you a lot

Vincent: Bye.

NOTRE DAME UNIVERSITY
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CONSENT TO PARTICIPATE IN INTERVIEW
THESIS: REVIVING FAMILY SOLIDARY: RE-STRUCTURING LEBANESE CENTRAL HALL

You have been asked to participate in a research study conducted by Julia Mikhael from *Faculty of Art, Architecture and design* at Notre Dame University-Main Campus. The purpose of the study is to collect, from this semi-structured interview, information that will help answering my research question regarding my thesis. You were selected as a participant in this study because you are the main source for needed data regarding my research. You should read the information below, and ask questions about anything you do not understand, before deciding whether or not to participate.

• This interview is voluntary. You have the right not to answer any question, and to stop the interview at any time or for any reason. I expect that the interview will take about four to five minutes..

• You will not be compensated for this interview.

• Unless you give us permission to use your name, title, and / or quote you in any publications that may result from this research, the information you tell us will be confidential.

•I would like to record this interview so that I can use it for reference while proceeding with this study. I will not record this interview without your permission. If you do grant permission for this conversation to be recorded, you have the right to revoke recording permission and/or end the interview at any time.

This project will be completed by July 2019. All interview recordings will be stored in a secure work space until that date.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

[ ] I give permission for this interview to be recorded.

[ ] I give permission for the following information to be included in publications resulting from this study:

[ ] my name [ ] my title [ ] direct quotes from this interview

Name: Vincent Bassil

Signature of Subject ___Bassil___ Date Feb.20, 2019

Signature of Investigator _____ Date _____