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SPATIAL ORGANIZATION CONCEPTS FOR LIVING SPACES WITH TWO CENTRES

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In a functional sense, the centre of the living space is a gathering area for its users and for visitors. In most cases, the living area has at least one space towards which its users gravitate daily or occasionally. In situations where there are two or more centres in the living area, their position, size and connection determine the character of the functional organization, and they result from the social needs of the users. This paper analyzes characteristic examples of how dwellings are organized with several gathering centres, drawing out three basic concepts: a) living space with centres grouped in a social zone, b) living space with a flexible centre on the boundary between zones and c) living space with a secondary centre in a private area. On the other hand, attention is drawn to the existence of different boundaries of territoriality (boundaries of ownership, hospitality and intimacy), which determine the domains of social, private and intimate zones in housing. Depending on whether the gathering centres are located on one side, on the other, or along the border of territoriality, the degree of intimacy of the living space also changes.

***Key words*: achitecture, housing, living space, territoriality, centre.**

INTRODUCTION

When considering the spatial organization of an apartment or house, the term "centre" usually refers to the central position of a room or element which occupies a notable place in the structure of the whole unit. In a functional sense and in the context of this research, the term "centre" stands for the space where its users gather, in order to satisfy different social needs (socializing, talking, etc.). In modern living space, the role of the centre can be taken by the living room, family room, media room, salon (room for receiving guests), dining room, etc. Emphasizing the gathering centre in the living space, can, but does not necessarily have to, be the main constitutive motif of spatial and functional concept of the living space, which primarily depends on the attitude of the architect and the users' needs (Alfirević, Simonović Alfirević, 2018a).

Depending on the spatial structure and geometry, the users' needs, etc., there can be at least one more gathering centre, a secondary one, with the main role of dividing parallel activities for different users within the same space. The need to form a secondary centre in the living space is common in multi-member households, where the users' needs are different, most often due to generational differences (parents/children, older/younger users). The existence of just one centre can lead to conflicts, as is the case when the social activities of younger family members coincide with those of older members, such as when they are entertaining guests (Montgomery, 1972:41).

By referring back to research in the field of housing space, it can be concluded that a certain number of studies relate to the historiographic analysis of the importance and role of the salon, as the secondary centre in the spatial organization in different time and spatial contexts (Kale, 2005; Seda Dazkır, 2013; Nasır, Öğüt, Gürel, 2015; Alfirević, Simonović Alfirević, 2017; etc.). The second group is made of papers dedicated to dimensional, functional or perceptive analysis of the gathering space (Gür, 2013; Cromley, 2004; Čanak, 1976; etc.). Significant research on this topic was carried out by Yugoslav architect Mate Bajlon, who emphasized the importance and the role of forming the secondary centre through the so-called *Extended Circulation Area* (Bajlon, 1972, 1975, 1979).

The aim of this paper is to explore and systematize the characteristic concepts of living spaces with at least two gathering centres and to re-examine the viewpoint which claims that there are three basic concepts in relation to the distribution of centres, in which the level of intimacy when using the living space depends on the territorial border between the social and private zones.

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TERRITORIAL BORDERS IN LIVING SPACES

The concept of organizing living space with two centres has not been scientifically researched too widely. Generally speaking, each living space can be divided into at least two zones - day and night zones, which is a consequence of grouping housing functions according to the biological rhythm of their users (Marušić, 1999:7). They can also be divided into three functional units, with the division made into intimate rooms, common rooms and the household (Bajlon, 1979:40). Rooms can also be differentiated according to the level of intimacy of the space: private (intimate and common) space and the social zone of the apartment2, i.e. space for receiving guests (Knežević, 1989:41). The ways a family uses the space for receiving guests or to gather, among other things, make up the identity of that family and are also part of subtle connections creating the feeling of togetherness and family ties (Fiese, 2006:1).

A specific characteristic of the configuration of every living space is the "territorial boundary".3 It stands for the ephemeral separation of the "private" zone (family and intimate) from the "public" zone of the apartment (social), i.e. the extent to which someone is allowed or expected to enter the living space before users have the feeling that their intimacy has been violated. When the boundary is clearly physically defined, it is, in most cases (in smaller structures), identical to the division into the day and night zone, or (in larger structures) the private and social zone, however, it can be changeable and adaptable to the different needs of users, for example with flexible usage of the living space.

The existence of a territorial boundary in the living space in the form of a "social filter" comes from the fact that any space can provoke the feeling of territoriality, which a person can feel towards others and on different levels, in the form of intimate space, personal space or social space4 (Fig. 1.1). These zones represent different feelings of comfort or anxiety in relation to other people occupying the same space. Their values are relative as they depend on cultural characteristics and personality traits (Sorokowska, Sorokowski, Hilpert, 2017; Strube, Werner, 1982; Gifford, 1983). It is important to point out that along with individual territoriality, there is also group territoriality, which in living spaces refers to a family as the main space user. Bearing in mind the viewpoint of theoretician Douglas Porteous, who claimed that "The house reflects how the individual sees himself, how he wishes to see himself, or how he wishes others to see him" (Porteous, 1976:384), it can be concluded that the configuration of living space, the boundaries of territoriality, the surface area of the social zone, and the number and position of gathering centres, all reflect the level of social needs of a particular user and his or her material status (Ristić, 2009).

For the further purposes of this paper it is important to emphasize that the living space includes different levels of territoriality, on the one hand limited by boundaries, while on the other hand limited by relations between the users and the space. The first level is determined by the physical boundary of the living space toward the surrounding public space and shows "the boundary of ownership". The second level is present when there is a clear distinction between social and private spaces, and it presents a supposed "boundary of hospitality" for visitors. The third level is determined by the physical boundaries between the intimate and family spaces and determines the "boundary of privacy" between family members or the household (Fig. 1.2).

GATHERING CENTRES IN LIVING SPACE

In order to analyze the potential influence of gathering spaces on the configuration and character of the living space, it is necessary to perceive their positions on the whole and the relations resulting from them. The most frequently used centres in living spaces are: the living room, family room, media room, salon, dining room, etc.

In living spaces of medium or lower standard, in most cases it is usual that the users' gathering centre is the living room, or if necessary a dining room closely connected to the living room could also serve this purpose (Čanak, 1976:305). By raising the standard, enlarging the structure and the surface area of the living space, the living room is most often representatively furnished, reserved primarily for receiving visitors and for special occasions. According to the latest research, the living room is very often used as a safe haven from family hassle going on in the family room (Rechavi, 2009:133). The term "living room" was not adopted until the end of the 19th and the start of the 20th century, and a previously used term for the space where guests were received was the salon.5 The primary role of the living room is to offer comfort to visitors and to reflect the form in which individuals or a families "want to be seen" (Goffman, 1956:14). It is understood that it should be bright enough, spacious enough and closely connected to the main entrance, as the visitors will enter the space reserved for them through the shortest possible route, avoiding viewing or passing through family or intimate space (Cromley, 2004:167). In many cultures, the living room is the one most frequently used, which is why it is considered "the façade" of the living space (Nasır, Öğüt, Gürel, 2015:16).

As opposed to the living room, in larger living spaces, the family room is the secondary centre, which is less formal

2 In the bibliography, the term "social zone of the apartment" has not been clearly defined despite its use. In the context of this paper, the term will describe the zone of the living space which is available to the guest so that the user (host) does not feel any form of reduced or violated privacy.

3 The main meaning of the term "territoriality" is the pattern of behavior of a person or group, based on the need to control their physical space (sometimes an object or an idea) (Edney, 1974:959).

4 *Intimate distance* defines the distance of 45cm, reserved for extremely close people, family members, partners, i.e. those we trust. Approaching a person we are not close with at this distance can be quite disturbing. *Personal distance* defines the distance from 45-120cm, which is usually the distance we keep when speaking with friends, shake hands or have an opportunity to follow their body language or eye movement. *Social distance* defines the distance from 120-360cm which is present in communication with people we are less close to or with complete strangers. On such occasions we usually speak louder and eye contact is necessary (Hall, 1966:13; Efran, Cheyne, 1973:203).

5 In western culture, mostly in Anglo-Saxon areas, the living room is also described by terms such as: *parlor, drawing room, sitting room, lounge room, lounge, front room, reception room*, etc.

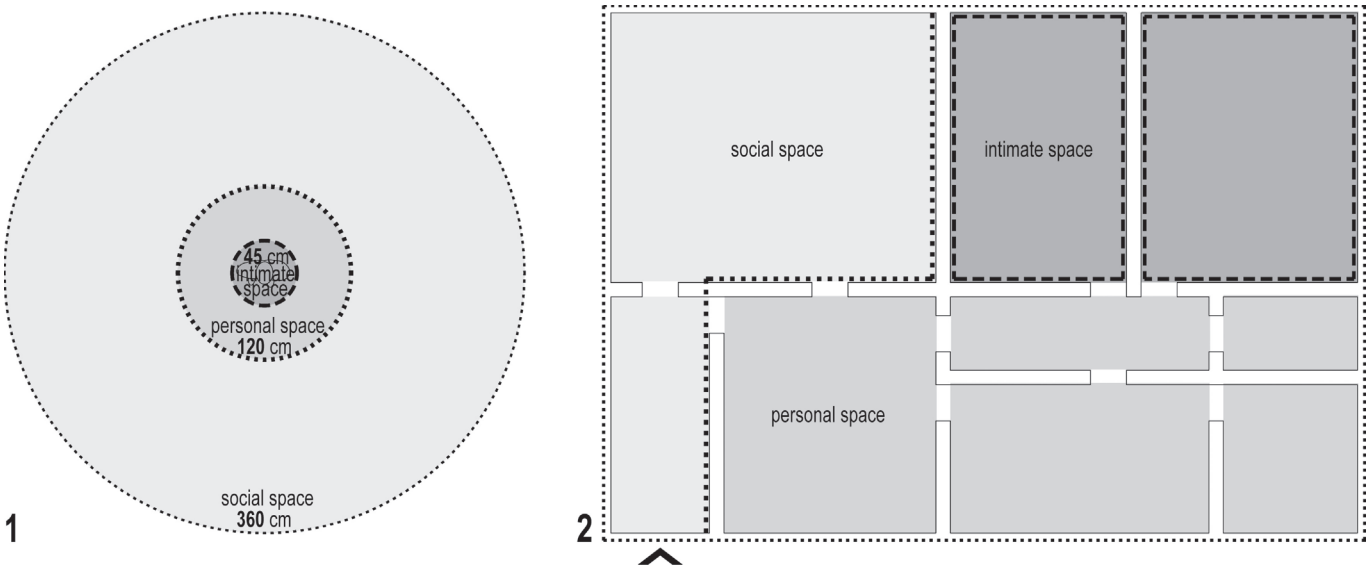

Figure 1. Territorial experience: 1) in personalities 2) in living spaces (Source: author's archive)

than the living room, both in the way it is organized and in the way it is furnished. Most often it is located at a distance from the main entrance, next to the kitchen (sometimes the dining room). It is used for daily gatherings of the family, recreation, relaxation and as a place for children to play, the emphasis being on its comfort and cosiness (Cromley, 2004:168). In smaller living spaces, a family room takes the role of the living room, which means putting together daily activities within the same polyvalent space and in some cases this can create functional problems. As the family room is one of the most intensively used spaces, it is very important that it has adequate dimensions to accommodate all family members. In very large spaces (500-1000m2), activities from the family room are most often divided into several smaller centres (media room, children's playroom, etc.), so that adequate comfort can be provided for all users.

Depending on the size of the living space, the dining room can have a double role – the role of "the family table" and the space for reception of guests and occasional family celebrations. In larger spaces, a festively decorated dining room is most often positioned next to the living room, while the family room includes a smaller dining room for everyday use. Although the role of the dining room is secondary in relation to other centres of gathering, in some concepts, as in the case of the so called "salon" apartments built in Serbia between the two world wars, it can by virtue of its size and position have a primary role in the spatial organization (Alfirević, Simonović Alfirević, 2017).

CHARACTERISTIC EXAMPLES OF LIVING SPACES WITH MULTIPLE CENTRES

Living space with centres grouped in the social zone

Grouping the gathering centres is characteristic primarily for polyvalent living spaces, where the concept of open plan has been applied. The internal openness of the plan depends on: a) the lifestyle and the habits of the tenants, b) their health status and age, c) the concept and distribution of primary supporting structures, d) the structure of the family and organization of life within the living space, etc. (Čanak, 2013:67). It can be said that grouping the centres in a social zone is directly conditioned by the parameters mentioned above, primarily by the lifestyle parameters and the users' habits. The primary motives for use of this concept are the need for space for frequent social contact with friends or members of extended family and the need for presentation and emphasis of status (Fig. 2.1). By grouping the centres in the same space, some of the housing functions related to family activities (such as the family room and dining room) can be transformed into the domain of the social zone, which changes "the boundary of hospitality" in order to achieve larger spatiality and representativeness. In certain extreme cases the scope of the social zone can have a decisive role in generating the spatial concept, whereby the space for receiving guests can occupy almost half of the living space (Fig. 2.2).

These tendencies indicate the users' extrovert nature, as their need for socializing or presenting their living space to others constitutes a significant aspect of their everyday activities.

In living spaces with smaller surface areas, the grouping of different centres has a very significant role, since due to the lack of space, the closeness of the dining room and its positioning in the zone of the so-called "extended communication area" contributes to the feeling of larger spatiality and the formation of two centres: a) primary – living room and b) secondary – the space where the family gathers around the dining room table, which is outside the kitchen space. According to Bajlon, the extended communication area emerged from the need to "find the form of family gathering at the table, in cases when the apartment was so crammed that it did not allow family gatherings, so it was more and more becoming an addition to the living room" (Bajlon, 1972). The use of the extended communication area in scarce socio-economic conditions offered different options, such as: a) turning the entry space into the space for receiving guests, b) making the space

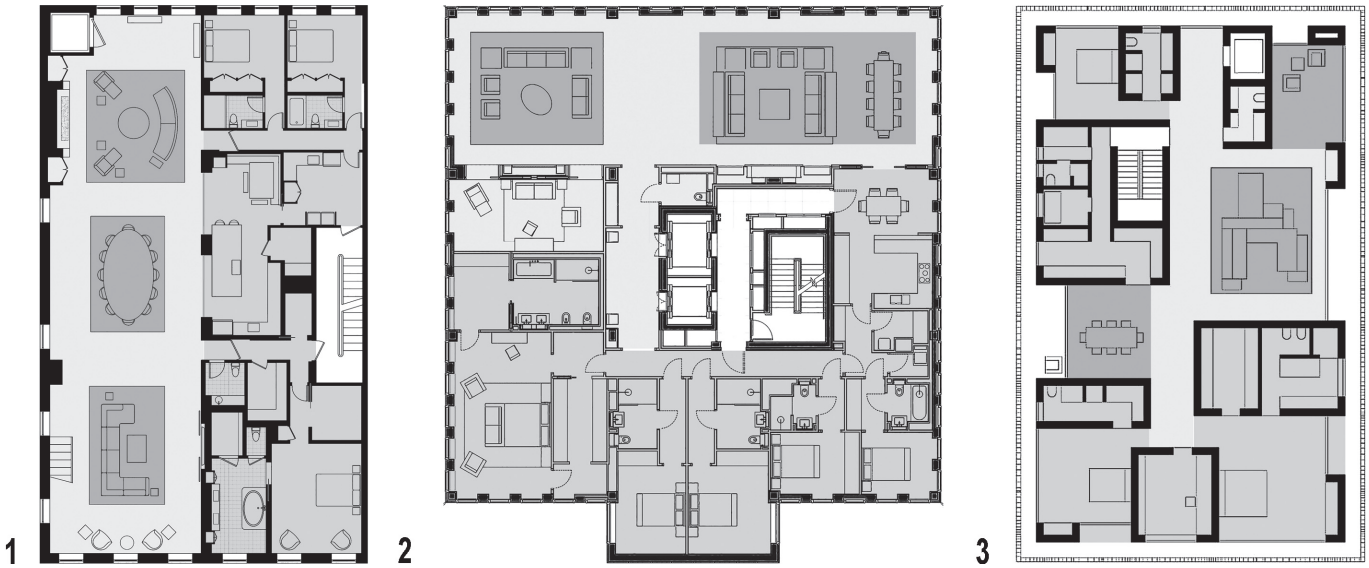

Figure 2. Characteristic examples of living spaces with centres grouped in the social zone: 1) 87 Mercer Street penthouse, New York (Tony Ingrao); 2) Holland Green, London (OMA & Allies & Morrison, 2016); 3) Ninetree Village, Hangzhou (David Chipperfield Architects, 2008) (Source: author's archive)

Figure 3. Characteristic examples of living spaces with flexible centres bordering with different zones: 1) City life Residential Complex, Milano (Zaha Hadid Architects, 2016); 2) Karlatornet, Gothenburg (Skidmore, Owings & Merrill, 2019); 3) 900 North Avenue, Chicago (Kohn Pedersen Fox Associates, 1989) (Source: author's archive)

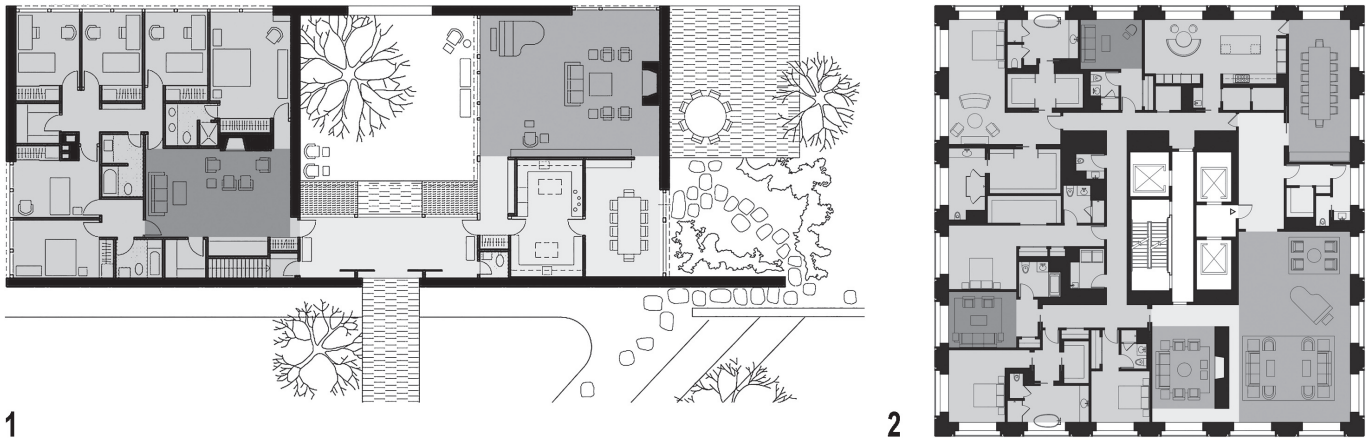

Figure 4. Characteristic examples of living spaces with the secondary centre in the private zone: 1) Hooper House I, Baltimore (Marcel Breuer, 1960); 2) 432 Park Avenue, New York (Rafael Viñoly, 2015) (Source: author's archive)

for everyday use an area for children to play or study, c) separating the activities of children and their friends from parents' activities with their friends, d) giving users the experience of larger apartment spatiality, etc. (Alfirević, Simonović Alfirević, 2018b:10) (Fig. 2.3).

Living space with a flexible centre bordering with different zones

Positioning the centre on the border between the social and private zone of the living space enables flexible use, achieved by separating or connecting the centres. By removing the flexible partition, the social zone is extended to include the space for gathering in the private zone, which temporarily disturbs functional relations and prevents the option of part of the family gathering in a more intimate space (Fig. 3.1). On the other hand, by building a partition and separating the centres one can achieve the necessary conditions for usage of different intensity or regimes. Positioning the centre in this way makes it possible to satisfy the diverse social needs of the users, particularly if it is combined with the concept of organizing the living space to have two entrances, which can contribute to achieving the autonomy of social and private zones for longer periods of time. Depending on whether the family rooms are grouped into one unit or separated into blocks (parents and children), as well as whether the social zone has a corner entrance or a middle entrance, the number of centres in the living space can differ (Fig. 3.2). The users get the largest spatial comfort when the living room and dining room are part of the social zone, while the kitchen and the family room make up an autonomous unit with the intimate zone (Fig. 3.3). Including the kitchen in the social zone is a characteristic of the extroverted concept of functional organization, where part of the private zone space is exposed to being seen by visitors.

Living space with the secondary centre in the private zone

Clear functional separation of the centres into different zones is characteristic primarily for living spaces with large surface areas and a larger number of rooms, but it is also present in the specific (introverted) needs of users who expect the social and private zone to be strictly separated (Fig. 4.1) This concept of spatial organization is most convenient for multi-member, two-generation or three-generation households, as they have a more visible need for separation due to different lifestyle rhythms. The advantages of this concept become more pronounced when the living space can be accessed through two or more entrances, allowing each zone to achieve autonomy, and at the same time to be part of a larger unit (Fig. 4.2). When the secondary centres are situated far into the private zone, bordered by intimate rooms, they are meant to be used for the intimate conversation of users. The main problem that can arise with this concept is the potential segregation of users. In conditions when every member can have a private space and with gathering centres physically separated, there is a higher likelihood of weaker intimate relations among the users, which can lead to alienation.

CONCLUSION

From the examples shown it can be noticed that the boundary of territoriality does not necessarily coincide with the boundary of the daily or nightly zone in the housing space, that it is not always clearly defined and that to a great extent it depends on the users' cultural patterns of living, their habits and needs. The paper analyzed three main concepts of centre distribution in the configuration of the living space and their influence on the level of intimacy resulting from that (Fig. 5). The results of the analysis indicate that the widest scope of needs can be satisfied through a flexible concept with a secondary centre on the border between the zones, as it combines the advantages of the remaining two concepts which are "more extreme" (Tab. 1).

Along with the above mentioned concept there are also others, such as those that do not include receiving guests in the living space, which leads to the disappearance of the social zone, or guests being received in the family zone, since there is no social zone. In most living spaces which have a clearly defined social or private zone (family and intimate zone), there are three different boundaries of territoriality ("boundaries of ownership", "boundaries of hospitality" and "boundaries of intimacy"). In smaller apartments, where the social zone is not clearly defined, the boundary of hospitality comes closer and sometimes even coincides with the intimacy boundary. An extreme situation emerges when visitors are not received inside the living space, which makes the boundary of hospitality coincide with the boundary of ownership. The need of users to have separate centres, as well as their design, can often lead to excessive dimensions of the gathering space, or reduction of dimensions of other private spaces within the apartment,

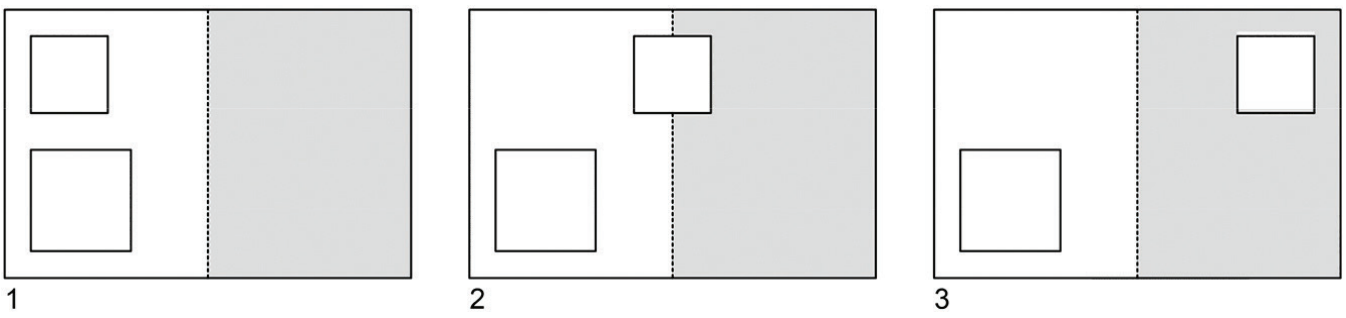

Figure 5. Characteristic positions of gathering centres in a living space with relation to the boundaries of social and private zone (Source: author's archive)

Table 1. Presentation of the concepts analyzed

	Centres grouped in the social zone	**Flexible centre on the zone borders**	**Secondary centre in the private zone**
Functional concept	"extroverted"	combined	"introverted"
Users' motives	Space for frequent social contacts	Space for occasional social contacts	Space for frequent or occasional social contacts
	Representative space that shows status	Space for informal family gatherings	Space for informal family gatherings
Character of space	Polyvalent (open plan)	flexible	segmented
User profile	One-generation households, two-generation households	Two-generation households, three-generation households	Two-generation households, three-generation households
Advantages	Existence of a permanent and clearly defined zone for guests and socializing	An option for forming a larger zone for guests and socializing	Existence of permanent and clearly defined zone for guests and socializing
	--	Possibility of segregating simultaneous activities in social and family zone	Segregation of simultaneous activities in social and private zone
Shortcomings	Activities in social zone disturb simultaneous activities in the private zone	Activities in social zone can disturb simultaneous activities in the private zone	Users' segregation and possible alienation

which can result in disproportionate private and social zones. Having in mind all we have said, it can be concluded that the level of extroversion of the living space is directly related to the character and the needs of its users, i.e. their presentation of the living space to their visitors, but also to the culturological context.

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