The concept of “place” has recently been given much attention by those who discuss problems of urban design and architecture. In the past it was meaningful to describe the human environment in terms of stable places, such as house, city and country. Today, however, we tend to free ourselves from these structures in order to live a more mobile life. The technical means of communication liberate us from the direct physical contact with others, and the modern means of transportation allow an ever increasing number of persons to move about. This development is considered favourable by some, because it makes possible more varied social contacts and a wider range of information. As a consequence, utopian projects appear in the architectural journals, which illustrate the “mobile” environment of the future. It is interesting to notice, however, that these projects do not really manage to free themselves from the concept of place, even if they only define place in terms of relatively anonymous “mega-structures,” such as the Walking City of Ron Herron (1964). Peter Cook, the spokesman of the English Archigram group, asserts in his book Architecture, Action and Plan that “architecture will become infinite and transient,” and the Dutch utopian Constant Nieuwenhuis who is known for his fantasy New Babylon (1960-64), says: “In New Babylon everybody will always be travelling and will never feel the need to return to the place of origin, because it will anyhow have undergone a transformation. As a consequence New Babylon does not possess a determined plan. Every element is on the contrary left in a state of indetermination, mobility and flexibility.” But how is it possible to turn something that is changing and indeterminate into a fixed project? This question brings forth the contradiction implicit in Constant’s work, although it does not deprive it of its actuality.

The real purpose of these “projects” is to obtain a deeper human contact and a richer interaction. Thus the American urbanist Milton Webber says: “The essence of the city is not place but interaction.” In contrast to the utopians, however, others fear that mobility may lead to the disintegration of human relationships. These, such as Kevin Lynch, maintain that man loses his sense of orientation if the environment lacks an imageable structure. Thus Lynch asserts that “a good environmental image gives its possessor an important sense of emotional security,” and he furthermore defines the kind of properties an environment has to possess, to permit the formation of such an “image.” The study of Lynch implies a return to the concept of place, and it is interesting to note that his conclusions are of general validity. Thus we know that the lack of direct human contact may produce psychic disturbances, which in fact are becoming ever more frequent among the inhabitants of the great metropolises. The architectural theorist Christopher Alexander has carried through several studies of the problem, and concludes that “... the social pathologies which are characteristic of urban life, delinquency and mental disorder, depend inevitably on the lack of direct contact.” To make such a contact possible “the interested persons have to meet very often, almost every day.” Mental disturbances, on the contrary, occur when meetings are casual and irregular. The environment advocated by the utopians therefore would lead to self-centredness and in the worst case to schizophrenia. To conclude his observations, Alexander designs a habitat, that is, a “place” where man in addition to private dwelling also experiences a sense of communal participation.

Modern architecture does not lack projects which oppose utopian disintegration. We may for example recall the well-known Stedlung Hafen near Bern; a well-defined group of dwellings designed by Atelier 5 (1958-61), or Colin St. John Wilson’s project for the new civic centre of Liverpool (1965), where the architect proposes to give back to the city its lost “heart.” Such projects are often, however, considered “romantic” or “anachronistic,” because they represent a return to a conventional understanding of “architecture.” The criticism is evidently a consequence of the contemporary aversion against the concept of place. When place is abolished, however, we simultaneously abolish architecture.

The current debate among architects and planners on the problems of the human environment is evidently very different from the discussion which took place during the past decades. Before, details were questioned, such as the exterior “look” of the buildings and the type of dwelling to be chosen, whereas we today have arrived at the root of the problems, and ask: What do we have to demand from the environment, in order that man may call himself human? Do we want a mobile world without architecture, or an imageable and architecturally articulate place?

Existential Space
When the environment is discussed, one usually refers to economy, traffic and localization. The human being only enters the debate occasionally. Should he not, however, be the main object of our concern, he and his
orientation in and identification with the world to which he belongs? This problem is basically of psychological nature.

Even if psychology is a young science, it offers useful insights. I may in particular refer to the research carried out by the Swiss psychologist Jean Piaget on the development of the child. His statistically supported observations concern the formation of concrete concepts such as sun, moon, water, earth, and rock, as well as more abstract notions such as causality, time, and space. Piaget demonstrates that it is not possible to arrive at any cognition without having an emotional relationship to the object, and without understanding it in a spatial and temporal context. "An object," he says, "is a system of perceptual images endowed with a constant spatial form throughout its sequential displacements and constituting an item which can be isolated in the causal series unfolding in time." In other words, man gradually constructs the image of a structured world, in which the notion of space, that is, existential space, forms an integral part. For Piaget the process of cognition is therefore first of all a process of "conservation." A fundamental experience is the discovery that objects have permanence; also if they disappear and reappear, the result is always "the construction of permanent objects under the moving images of immediate perception." This implies that the child learns to recognize, that is, creates a world based on a system of similarities, and also that certain things are associated with certain places. In fact, the child spontaneously looks for a lost thing where it was seen the last time, and gradually learns to distinguish mobile objects from stable ones and to use the latter as points of reference for the former. Thus Piaget writes: "So long as the child does not undertake spatial searches to find objects which disappear, that is, so long as he does not succeed in deducing their displacement in space when he no longer sees them, one should not yet speak of object conservation."

The development of the concept of place, and of space as a system of places, is therefore a necessary condition for adaptation to a given environment. Piaget concludes: "...the universe is built up into an aggregate of permanent objects connected by causal relations that are independent of the subject and are placed in objective space and time. Such a universe, instead of depending on personal activity, is on the contrary imposed upon the self to the extent that it comprises the organism as a part in a whole." The world of the child is evidently "egocentric." Neither in a motoric nor a perceptual sense does it possess the possibility of "mastering" the environment. Even if the limits are gradually extended, the structure remains centralized. When I asked my twelve-year-old son to describe his environment, he answered that he would start with talking about his home, "because it is from there one departs to go to all the other places." The observations of Kevin Lynch demonstrate how the world of adults also consists of centers and of possibilities of centrifugal movement, which generate zones we may say that we "know." Between these, large unknown areas extend like white spots on our personal maps. And this is how it has to be also for quantitative reasons.

Gradually we also build up a more abstract concept of space. It consists of universal relations such as "inside" ("within"), "outside," "under," "over," "before" and "behind," and of more specific geometrical structures. Even if these relations influence our orientation and thinking in a decisive way, they remain a supplement to, rather than a substitute for, the fundamental structure of existential space.

When we say that existential space is "egocentric," we recognize that it varies from individual to individual. I have, however, pointed out that general structures do exist, and that they are common to all personal "spaces." The best-known studies of these structures are due to Gestalt psychology, and show that man orders his environment spontaneously according to certain "perceptual laws," which are given a priori independently of the situation. Piaget has offered a further elaboration of the principles of perception, in terms of geometrical relations. The Gestalt laws demonstrate that the objects are recognized as wholes on the basis of "similarity," "proximity," "continuity," and "closure." In general, this implies a figure-ground relationship, which means that a perceptible "figure" always has to appear on a less structured "ground."

Gestalt psychology describes abstract "principles of organization" rather than the structures of concrete existential space, and has to be elaborated in several fundamental ways. This has been done by the German philosophers Otto Friedrich Bollnow, who in his book Mensch und Raum demonstrates that the concept of space is connected with human actions. "Space," he writes, "is conquered through man's actions." Thus the German word Raum (space) meant the action of freeing a place for settlement (enr accomplishments), before it came to denote the place as such. This state of
affairs is well expressed by the term "take place." The concept of place, thus, has two meanings: place of action and point of departure. Hence it represents what is known and what permits man to depart towards a more distant goal. Only when the individual possesses such a point (or system of points) of reference, he may act in a meaningful way. Let me recall the words of Archimedes: "Give me a fixed point, and I shall move the world!" The concept of place hence implies that man does not move about in space in a casual way. All movements are in a certain sense centrifugal or centripetal. Our ways always presuppose a point of departure and a point of arrival. These references give meaning to the path, and therefore we may use terms such as "before" and "behind," which indicate that any activity primarily means to be "on the way." This fundamental property of existential space is expressed by numerous sayings, such as "to be at a crossroad" or "to be on the false track."

In general, our movements generate a horizontal plane which defines our possibilities of action. This plane has a twofold delimitation: firstly the horizon and secondly the immediate surroundings. In both cases the individual is at the centre. "Existential space," however, is an image which exists independently of the immediate situation, possessing its own order and stability. It may be closely delimited or even reach beyond the visual horizon. Man's "condition" consists in the tension between existential space and immediate egocentric space. The same evidently holds true for his social and cultural "spaces." The tension is expressed by terms such as "at home" and "elsewhere." When the centre of our immediate space coinci-
cedes with the centre (or one of the centres) of existential space, we feel at home. If not, we are "away," in the sense of being "on our way," elsewhere or even "lost." Thus Bollnow says: "The double movement of departure and return reflects a differentiation of space in two zones, a smaller internal one and a surrounding external one. The first is the intimate world of the house and home, the second the outside world into which man departs and from which he returns. The distinction of these zones is of fundamental importance for the structure of lived space." [16]

Thus the places, the ways and the zones which constitute the existential space of the individual, stem from his interaction with the given environment. This space is in general common to those who belong to the same place, even if it is subjectively "coloured." From childhood on we find ourselves placed within a space given a priori, which we have to understand and to which we have to adapt. Thus Piaget says: "The physical environment is not imposed on developing intelligence at all once or as a single entity, but in such a way that acquisitions can be followed step by step as a function of experience." [17]

From what I have said about existential space as a system of places, ways and zones, one might get the impression that the human environment is two-dimensional. In a certain sense this is true; the third dimension is basically different from horizontal extension, as is indicated by the terms "up" and "down." What is above and below has always been considered different, and in another sense than what is hidden behind the visual or intellectual horizon of the individual. The vertical axis is in fact traditionally considered the sacred dimension of space. [18] It indicates a "way" which leads to a reality "higher" or "lower" than our everyday world, a reality which wins over or succumbs to the force of gravity. Erich Kästner says that the idea of salvation is generally associated with the mountain: "In every ascension redemption is reflected. This is expressed by the force contained in the word 'over' and by the power of the word 'ascend.'" [19] Existential space is therefore non-homogeneous and different from mathematical space.

I have been able to talk about the structure of existential space because life itself is structured. We may say that it consists in a movement from one condition to another, a continuous and incessant movement, possessing rhythm and form. Even our most basic needs follow rhythmic patterns. Moreover we are part of the hierarchical cyclic system of "days," "seasons" and "ages." Thus Piaget says: "Life itself is a creator of patterns." [20] All our conditions are in some way related to space, and from what I have said above, we understand that the relationship between existential patterns and existential space is isomorphic.

We might also say that life interprets itself as space, in taking possession of the environment. This happens simultaneously through physical orientation and through a more profound identification. When an action takes place, the place where the action occurs becomes meaningful, in the sense of expressing the possibility of the very occurrence. What happens does not only partake in a spatial structure, but is also linked with a system of values and meanings, and thus acquires character and symbolic importance. [21]

Particular actions are hence connected with particular places. This holds true both when we take possession of the given surroundings and when we create new spaces. To create a new space means to implement existential patterns in a given environment. Rudolf Schwarz says: "The people inserts the world it carries within, into the surrounding earth, that is, inserts the interior landscape in the exterior one, and both become one." [22] What is here implied, is an interaction between certain intentions and a given situation. This interaction, however, comprises a certain freedom; we are not entirely conditioned by the environment, but may shape it according to our needs, both in perception and use. This does not mean that the resulting existential spaces are basically different. Existential space always consists of places (of various character) and of ways which represent "tensions." It is also differentiated in known and unknown zones, as is indicated by the terms "inside" and "outside," and is necessarily organized hierarchically, because life occurs on many levels, from the sensorimotoric to the symbolic.

Architectural Space
I have used the term "existential space" to denote our concept or image of the environment. But I have also suggested that the formation of an image presupposes that the environment possesses a certain physical structure. If the structure does not permit the development of a satisfactory existential space, man himself has to modify the environment. This happens all the time: we open and close windows and doors, move pieces of furniture, switch on the light. But the individual only has a minimal influence on the more general system of places which comprises his personal space. Since this system possesses a
public character, society itself commissions certain specialists, that is, architects and planners, to take care of it. The task of the architect is therefore to "concretize" or set into work a more or less common existential space.22

The first point to be clarified in this context, is how natural elements may satisfy our needs, and how we may "develop" them further. The choice of a place for dwelling is never accidental. The study of localization has in fact become a science, to which geographers have contributed significantly.23 I shall not here discuss the economical and practical factors involved, but only suggest how natural space may serve as existential space, in the psychological sense indicated above. The term "natural space" already shows how this happens: the landscape really contains "spaces" which may be understood as places. Let me again quote Rudolf Schwarz: "We talk about landscape spaces and think of the landscape as a house: the mountains are the walls, the bottom of the valley is the floor, the rivers the ways, the coasts the thresholds, and where the mountain becomes low is the gate."24 The humans choose these spaces for their dwelling, and their history becomes an interaction with the landscape, that is, with the genius loci which from times immemorial was considered a reality of primary importance.

The built form is also determined by the character of the landscape. On the great plains where nature does not offer many points of reference, enclosed spaces have to be created, whereas a directed valley asks for linear patterns. These examples suggest that natural space usually does not suffice to concretize man's existential space. Even the nomads group
their tents, and they are moreover related to places, since they always move within geographically defined zones. Only when man has taken possession of space, defining what is inside and what remains outside, we may say that he dwells. In his book *Citadelle*, Saint-Exupéry characterizes man as "he who dwells." The distinction between inside and outside is of fundamental importance in architecture, and modern architecture is in fact often defined in terms of a "new relationship between interior and exterior space." The enclosure and the gate are the original means to distinguish inside and outside, and to create a meaningful relationship between them. A single opening in the enclosure, however, does not take the more general structure of the environment into consideration, which is determined by the course of the sun and is known as the "cardinal points." These are well represented by means of the crossing, which is one of the oldest spatial structures known to us. Schwarz writes: "He founds his city placing on the ground the crossing of two ways which divide the world into four domains, whereupon he encloses the centre." The crossing within the enclosure implies that the place is part of a larger whole. A work of architecture is hence characterized by "what it is" in relation to its surroundings. The interaction between inside and outside is also based on the establishment of directions within the place. This can happen in different ways. We've seen as that easier is the opening. The so-called "guiding" elements are of particular interest in this connection, that is, lines and surfaces which from the interior continue towards the outside and vice versa. Such elements were introduced at the
outset of the modern development to create "fluid" transitions. Even if the distinction between the exterior and the interior could not entirely be abolished, a certain spatial indeterminacy resulted. The aim was undoubtedly to express the new "open" and dynamic world, but during the last years we have experienced an increasing opposition against this tendency since man cannot feel "at home" in a space without limits. Rudolf Schwarz says: "To become a home, a domain has to be small. The settlement must possess a livable scale." A new interest in varied spatial definitions has thus come to the fore. The American Robert Venturi, for instance, tries intentionally to create contrast and contradiction between interior and exterior. "Since the inside is different from the outside, the wall—the point of change—becomes an architectural event. Architecture occurs at the meeting of interior and exterior forces of use and space. These interior and environmental forces are both general and particular, generic and circumstantial." The importance Venturi gives to the wall is enhanced when it is curved. A concave surface gathers space like a parabolic mirror and creates condensation, whereas a convex surface lets space run away, projecting it outwards. The relationship between concavity and convexity is therefore of fundamental importance in architecture. Borromini was the first to exploit this possibility, using the curve to define zones of varying direction and density, and thus to create a "field" containing rich tensions. It is not a mere coincidence that the known Borromini scholar Paolo Portoghesi has used this method in a new and fascinating way, adopting the curve to articulate and stabilize the fluid space.
25. Curved wall (Porolgesi, Casa Baldi).
of neo-plasticism. This is particularly evident in Casa Andreis, where five centres receive exterior space, at the same time as they generate a dynamic and continuous interior. The solution illustrates how centres, ways and zones may unify to form a complex, integrated totality. Thus we arrive at the fundamental question: How can architectural space be described as a field of complex occurrences?

I have already maintained that existential space is hierarchical, and that architectural space has to possess a corresponding structure. Existential space comprises different zones connected with different activities, which are interrelated in various ways. Only exceptionally they coincide with the Cartesian coordinate system of early functionalism. Architectural space, on the contrary, contains directions and centres, condensations and dilations. It concretizes existential space, which, on the other hand, represents the "spatial consequences of the functions." This was already understood by Le Corbusier and Mies van der Rohe, who developed the "free plan" where the space-defining elements are separated from the load-bearing structure.

Certain functions are however characterized by a more or less regular repetition, and therefore determine a regular, cellular space. We hence understand that architectural space may comprise a great number of different spatial organizations, which may be juxtaposed or even interpenetrating. Sometimes they are distinguished from each other, but mostly they form part of a gradual transition or metamorphosis.

In the new architecture such solutions are frequent. The project of Paolo Portoghesi for the Parliament in Rome thus offers the example of a
combination of cellular and spiral organizations. In the examples mentioned above, we always have to do with more or less complex "fields" which correspond to a collective or individual existential space. To describe these fields I have used geometrical terms. This may seem a contradiction, since I have asserted that geometrical organizations are only one of the components of existential space. I should therefore emphasize that existential space primarily has a topological structure. Many functional patterns, however, possess an approximate geometrical organization, which ought to be systematized for practical and technical reasons. Several times I have suggested that "fundamental structures" result from invariant relationships between spatial and vital forms. This problem of the "archetype" requires a comment. It is undoubtedly correct that any Gestalt possesses a limited capacity for receiving a "content." If this were not the case, it would be impossible to express oneself in a meaningful way. It is also a fact that the capacity consists in the establishment of an isomorphism. I have already pointed out how such isomorphisms depend on the development of human consciousness from childhood on. Archetypes therefore do exist, but we ought to consider them elements rather than concrete wholes. The fundamental structures over and over again participate in new combinations, and it is therefore dangerous to consider them the real "truth." When I have talked about place, way and zone, I have asserted that they may form part of infinitely many wholes of various character. The tension between fundamental structure and temporal whole expresses that life is "constancy and change," to recall a term of Giedion's.

Conclusion
I have tried to demonstrate that human life depends on the establishment of an "existential space," that is, an image of the environmental structure. I have also pointed out that this image depends on the concrete properties of the environment. The properties primarily consist in the presence of a hierarchy of places, to which man has to orientate himself. The researches of Piaget have demonstrated that existential space cannot be substituted by other types of relationships (social, natural etc.), even if these in general may be more important. Architectural space evidently may comprise mobile elements, since its hierarchical structure includes various degrees of "freedom." But as a totality it cannot be mobile, because a general mobility would make the development of collective and individual existential spaces impossible. A mobile world which does not know the repetition of similarities in relation to a stable system of places, would impede human development. Piaget shows that a mobile world would limit man to mere egocentric schemes, whereas the image of a structured and relatively stable world liberates his intelligence, that is, his ability to understand and feel. A mobile world would also impede the "direct" and "ordered" contact with others advocated by Alexander, and would produce psychic disturbances. The current utopias of mobility are therefore anything but realistic. Rather they are symptoms of escapism, since they evade the real and concrete problems of the present. The wish for mobility has several origins. Superficially it represents a reaction against the monotonous environment of orthodox modernism. In a more profound sense it makes a lack of roots manifest, that is, a spiritual emptiness, since it aims at substituting true identification with physical movement and chaotic consumption of stimuli. We may in this context remind of Sedlmayr's penetrating study Verlust der Mitte.

What do we have to demand from the environment, in order that man may call himself human? My discussion of the concept of place shows that it ought to possess an "imageable structure" which offers rich possibilities of identification. What is implied in the term "imageable structure," has been explained above, but a few more words have to be added. The advocates of mobility maintain that such a structure would reduce the input. This only holds true however, if "imageable structure" is equalled to monotony. I have to emphasize that the term does not mean any kind of straitjacket, which would bring us back to the "cult of the minimum" of early functionalism. The imageable structure should rather offer rich possibilities of identification because of its complex articulation. This is in general a property of any great work of art, which, due to its complex structure, may be subject to various interpretations. The "various interpretations" permitted by a chaotic form are on the contrary more accidental projections of the ego, and burst like soap-bubbles. In the architectural spaces which are structured and at the same time complexly articulated, I see the alternative to the emptiness of mobility and disintegration. Such a unity in plurality is certainly not a new idea, but it has gained a new actuality during the last years. The concepts of "house," "city," and "country" are still valid. They give structure to our space and permit us to be citizens of the world. Man does not become a citizen of the world if he
does not belong to any place. The citizen of the world has to settle within the totality, and he understands that his place forms part of a larger whole, at the same time as this larger whole represents a continuation of his existential space. The contribution of each individual to the totality consists in the articulation of the place to which he belongs.

In general human identity depends on the possibility of concretising existential space. May I recall the words of Saint-Exupéry: "I am a builder of cities, I have stopped the caravan on its way. It was only a seed-corn in the wind. But I resist the wind and bury the seed in the earth, to make cedars grow to the glory of God."