ASPECTS OF TERRITORIAL BEHAVIOUR AND THE APPROPRIATION OF SPACE IN URBAN ENVIRONMENTS

ASPECTS OF TERRITORIALITY

Ethology, the systematic study of animal behaviour, has developed a number of spatial concepts such as crowding, spacing and territory, which may be helpful in describing and interpreting human behaviour. Man and animals have indeed a number of important qualities in common: they have bodies that are located in space and that need to go from one place to another in the satisfaction of needs and desires, so that orientation in space is necessary. We should, however, beware of over-simplification, bearing in mind the fact that human life has more dimensions than animal life. Man has language and culture, including religion, ideologies, history, literature, traditions, values, visions of the future and of an ideal society. All these dimensions may have some influence on what men do and on the way they use and experience the spatial environment.

Rapoport[1] has rightly pointed out that in applying the concept of *territory* to human behaviour we should avoid vagueness, so that it is advisable to use a number of terms to refer to the patterns of interaction between people and specific places, viz.: *personal space, jurisdiction, territory, core area(s),* and *home range.*

Personal space and *personal distance.* Sommer[2] and Hall[3] have done much to draw attention to these aspects of human spatial behaviour. Personal space has been described as the "bubble of air" round individuals which plays a role in face-to-face interaction. There are culturally conditioned rules as to the personal distances that people should observe, depending on the relations between them and the definition of the situation. The phenomenon of crowding (psychological stress in connection with perceived shortage of space) should also be mentioned in this connection[4].

Jurisdiction is defined as "ownership" or control of a certain area for a limited time and by some agreed-upon rules. In urban areas this occurs e.g. when a political party or action group is allowed to hold an open-air meeting or demonstration in a public square.

Territory: this is a particular area exclusively owned by a certain individual or group. Ideally the owner of a territory can to a certain extent control the access of people, animals, objects and physical variables (light, sound, air) to it. Territories have a number of different sizes and functions, while the time during which they are occupied may also vary greatly.

Core areas: these are areas within the life space of individuals which are the most commonly used and best known; a limited number of places round the dwelling, in shopping areas, town centres etc.

Home range: the entire area that is regularly used by an individual or group, consisting of a number of localities with their linking paths. Each individual has a typical extent and shape of home range which may differ for daily, weekly, monthly and annual movements, and members of particular groups will tend to have similar home ranges, varying with social characteristics such as age, sex and class.

The advantage of this five-fold model is that it links various scales and makes possible the systematic study of the interrelation of behaviour at various levels, while at each level it is possible to relate the spatial aspects of behaviour to variables such as social status, roles and subculture.

One more very useful concept is not borrowed from ethology, but has been developed by Roger Barker in his Ecological Psychology[5], viz. that of the *behaviour setting*, consisting of one or more standing patterns of behaviour with univocal temporal and spatial coordinates, e.g. a football game, a worship service, a piano lesson. In a behaviour setting there is synomorphy or congruence between behaviour and environment, which

is achieved by a number of factors such as rules of admittance, self-selection by participants, perception, learning and physical factors.

One of the characteristics of the urban environment, and more especially of the urban core, is that it can accommodate a great number of different behaviour settings in the same area but also much leisure-time behaviour that is not structured according to fixed rules and allows a great deal of spontaneous activity.

RELEVANCE OF THE CONCEPTS FOR THE PRESERVATION OF HISTORIC SITES AND BUILDINGS IN TOWNS AND CITIES

Our historic urban cores should not become open-air museums but remain the places where the action is. Therefore the use of the open spaces and buildings should be planned so that they can accommodate many different kinds of behaviour settings that are congruent with the places in question. For squares in the central urban areas, the traditional forum functions of market, processions, open-air meetings and speakers' corners are some of the most obvious examples.

In the cores of our historic cities we generally find a combination of high-class modern facilities with beautiful monumental buildings and sights. This makes such areas so attractive that visitors are willing to put up with high densities even if they do not think being in a crowd an attraction in itself. To a certain extent the number of visitors to a place and the density of pedestrians is a measure of the success of the area. This is especially so for certain markets, department stores, historic buildings, public squares and shopping streets, where everybody expects "to rub shoulders with the crowd".

All the same there seems to be a certain ambivalence in most people's appreciation of crowded urban centres. Thus in the core of the historic Dutch town of Utrecht many visitors complain of overcrowding, traffic noise, refuse and other functional, hygienic and aesthetic shortcomings of the place[6]. Centres of cities in West Germany are on the whole experienced by visitors as *varied, stimulating, beautiful, friendly, hospitable* and *practical,* but also as *noisy, narrow, crowded* and *fatiguing*[7]. While the environment in the centre of a town or city evidently attracts and stimulates people, it may for those who are exposed to it for a longer period of time produce an overload of information resulting in fatigue. Therefore it would seem desirable to provide in the vicinity of crowded areas quiet precincts where people can come to themselves for a while. The Beguinage near the Kalverstraat in Amsterdam is an example. Interesting work has also been done by the Metropolitan Public Gardens Association of London, which has i.e. converted a number of old parish churchyards into rest gardens. The objective of making a number of city streets and squares, or even entire districts, inaccessible to motor cars so as to make these areas quieter and safer for pedestrians is too well known to need further discussion. It should be stressed that where this is done

[1] A. RAPOPORT, *Human Aspects of Urban Form,* Oxford-New York-Toronto-Sydney-Paris-Frankfurt 1977, pp. 277 e.v.

[2] R. SOMMER, *Personal Space,* London-New Jersey 1969.

[3] E.T. HALL, *The Hidden Dimension,* New York 1966.

[4] D. STOKOLS, *The Experience of Crowding in Primary and Secondary Environments,* Environment and Behavior 8 (1976), n° 1 (March), pp. 49-86.

[5] R.G. BARKER, *Ecological Psychology,* Stanford, Cal. 1968.

[6] G.H. JANSEN, *Centrum en Stad, gebruik en beleving van het centrum door bewoners van Utrecht en Zeist,* Utrecht z.j.

[7] H. WEEBER, *Als Fussgänger beim Einkauf in der City,* Stuttgart 1973.

good facilities for car access and parking should be provided at reasonable distances, say at a quarter of a mile. The English town of Chester is a good example. The question also arises whether for urban centres the "woonerf" idea deserves more attention. This means that cars may come in the area, while their speed is slowed down by obstacles and also by traffic rules that do not allow motorists to hinder pedestrians and that also limit the time and the places at which parking is permitted. Thus there are various means to compensate for the *shortage of personal space* and for the overload of information and stress that may result from being in the midst of crowds.

Another method is the provision of opportunities for people to occupy temporary and permanent *territories* within urban areas. Permanent territories are generally based on some sort of ownership and tend to be enclosed by boundaries such as walls, fences, hedges and gates, and identified by symbols such as door-plates, coats-of-arms and decorative lanterns. These are not only cues that are understood and obeyed, but also visual features that may contribute to the variety and identity of places, provided the owners show some restraint and adhere to style and good taste. In this respect traditional historic symbols are on the whole the most satisfactory, since they help to enhance the character of the place in question.

Interesting suggestions for increasing the identity of outdoor spaces have been made by Newman[8], who points out that open spaces around housing blocks should be demarcated and should be arranged and run in such a way that they provide possibilities for residents to regard certain areas as an extension of their homes for which they are responsible. Although some of Newman's ideas about the incidence of crime and the possibilities of reducing crime rates can be questioned, most of his recommendations for the design and maintenance of spaces around housing blocks seem to be sound as well as in line with people's preferences for small-scale personalized open spaces around their homes. The presence of various social groups with their distinctive subcultures and styles of life enriches the possibilities of enjoying towns and cities, by contributing to variety of experience which is one of the key qualities of successful urban areas. Specific groups and sub-cultures should have opportunities to live in their own environments, adapted as much as possible to their particular needs and preferences. This possibility of countervailing the strong levelling tendencies in present-day society should be combined with mutual tolerance as one of the conditions for preserving the valuable qualities of the urban way of life.

A different matter is the temporary occupation of territories within semi-public areas, such as places or seats in streets, boulevards and parks, in cafés, restaurants etc. Certain preferences in the choice of such seats and in places for standing about in squares, halls of railway stations etc. have been found by a combination of direct observation of behaviour and interviewing. There is a majority preference for spots that provide both back cover and a wide and/or interesting view. *Edge effects*[9] of this kind are found along the façades bordering a public space, and in the boundary area between two spaces of different kinds. Popular areas for standing about in squares are found where there is a "pièce de résistance" in the form of recesses, corners, street furniture etc., so that the space occupied is well-defined. Other attractive places are found in fluid boundaries between public and private zones, e.g. in the form of semi-private forecourts, benches in front of entrance doors, or front gardens[10].

Since urban variety should be one of the major goals of rehabilitation, the character of old urban areas should be preserved as much as possible and rebuilding should be congruent with the qualities of the environment in which new buildings are erected. The central aim should be the preservation of characteristic urban areas as intrinsic wholes, and not just of a few "ilots sacrés", which may then become encircled by incongruent structures, as has happened in the centre of Brussels.

Adaptation of urban areas to the needs and preferences of the social groups living in them will not only promote urban variety and identity of districts, but also contribute to feelings of being at home in the area where one lives. Thus variety of habitat is combined with congruence between life styles and built environments for the different subgroups of the population.

For an interesting urban life it is important that plenty of opportunities should be presented for the temporary *jurisdiction* of groups that organize events over certain areas. Open-air meetings, demonstrations, processions etc. are part of the urban scene and public squares or other kinds of open space should be made available for them at times.

Characteristic of *core areas* is that, while they comprise more land than territories, they are still felt to be familiar. Therefore within such areas affective relations may be established that make the regular users feel at home and in a position to act more or less freely, even if they are not in exclusive control of the area. Familiarity with an urban area, even if it is not your exclusive territory, may lead to feelings of identification and well-being: you are at home there, you feel relaxed and willing to meet new people and entertain fresh ideas. This contributes to one of the traditional functions of city life: to be a source of cultural interchange and innovation.

If core areas (which will often be major urban centres and the roads leading there) are to have this positive effect a number of conditions should be fulfilled. In the first place urban blight and pollution should be restricted as much as possible, as shoddy-looking places invite vandalism, whereas places that are well-tended help to create a sense of order and well-being that is a necessary condition for feeling at home there.

The second point is that the *identity* and *authenticity* of the place should be safeguarded. I can illustrate this by reference to some Dutch towns. In Amsterdam in spite of adaptations to modern industry and traffic the general plan of the town as well as the major historic monuments and landmarks have been preserved. In the inner town the ties with the great historic past can be sensed everywhere. In Rotterdam, on the other hand, some of the major structuring elements of the inner town (such as the course of the river Rotte and the dam that gave the town its name) vanished, and with the exception of a single isolated church building, hardly any attempts have been made to reconstruct ancient buildings and monuments. In consequence the towns lacks visible ties with the past and urban experience there lacks a dimension.

Another interesting comparison is that between the country towns of Middelburg and Coevorden. Both were to a considerable extent devastated in World War II, and both still have retained much of the original town plan. In Middelburg many historic buildings have been restored, and new houses built have been adapted to the characteristic local style. In Coevorden only a single building has been restored and on the whole the built environment is a collection of rather characterless houses. The result is that while Middelburg is still a lovely town, Coevorden is quite uninteresting in spite of its fascinating town plan.

The "hard core" areas in cities and towns, the parts that are known to practically everyone, are on the whole places of maximum identity. That means that there we find most of the things that distinguish the place from all others of the same kind. Some striking examples are the ancient main market squares (grandes places) of Antwerp and Brussels, Parliament Square and Trafalgar Square in London, the Place de la Concorde and the Butte Montmartre in Paris. The unique character of such places is enhanced by their symbolic qualities and their historic associations. If in an urban community there are no authentic places of this kind, one of the important qualities of urban life is lacking. This is illustrated by what Lynch[11] reports a lady in New Jersey to have said:

"This is really one of the most pitiful things about New Jersey. There isn't anything that if someone came here from a far place, that I could say: Oh, I want you to see this, this is so beautiful".

[8] O. NEWMAN, *Defensible Space*, New York 1972.

[9] D. DE JONGE, *Seating Preferences in Restaurants and Cafés*, Delft 1968; idem *Het gebruik van recreatieruimte in het Amsterdamse Bos*, 's-Gravenhage 1953; J. GEHL, *Mennisker til fods*, Arkitekten 70 (1968), n° 20, pp. 429-446; idem, Livet mellem husene, Copenhagen 1971.

[10] GEHL 1971, p. 208.

[11] K. LYNCH, *The Image of the City*, Cambridge, Mass. 1960, p. 29.

Lynch's own comment on New Jersey is: "Again and again, subjects reported that 'nothing special' came to mind, that the city was hard to symbolize, that it had no distinctive sections".

Of course it is quite possible for towns and cities in modern society to produce new objects that in course of time come to have an identifying function: Tower Bridge, the Eiffel Tower, the Euromast in Rotterdam, the National Monument on the Dam in Amsterdam, the Arch in St. Louis, and the Atomium in Brussels. But this does not mean that the old urban symbols, especially if they have aesthetic value, should not be preserved very carefully.

If such old areas, buildings or monuments are destroyed or removed and not rebuilt or restored, it is generally an irreversible process; it is impossible to replace them by anything which has the same value. On the other hand, if there is really a strong collective will to treasure these relics of the past, it is possible to reconstruct entire historic areas, as has been shown in the rebuilding of war-damaged cities and towns such as Warsaw and Middelburg.

Home Range: This includes all the areas mentioned before. Both for the United States[12] and for France[13] it has been shown that home ranges are on the whole more extensive for people with a higher social status. The home range of an individual tends to increase in area in the course of his (her) life until old age causes people to restrict their movements to a somewhat limited range. There are also indications that the home ranges of girls and women are on the whole smaller than those of boys and men. However, with mass motorization and emancipation such culturally conditioned differences may become less[14].

The major determinants of the home range of a person or household are the situation of the home, the places of work and recreation, and the situation of the homes of friends and relations[15]. In modern Western society where there is a widespread use of fast mechanized means of transport the home ranges of many people are discontinous, consisting as they do of various areas that may be widely dispersed over geographical space (e.g. in holiday resorts) and only be connected by thin transport lines.

Even before the separation between work places and homes which is characteristic of modern urban life certain people (such as monarchs, noblemen, rich patricians) had both a town house and a country residence, and were in a position to live alternately in two or more different areas within their home ranges.

In our days there has been a tremendous increase in mobility, while our entire environment undergoes many rapid changes. It is my conviction that under these conditions it is of great importance to have a number of firm anchor points in the built environment, not only of the home as the centre of the life space of the individual person but also of the community as a whole. Such collective centres should be situated at places of good accessibility, and preferably have symbolic value as well as qualities that make them visually attractive and easy to identify.

While modern society will certainly go on producing new symbols of this kind, the preservation of the best that our ancestors have left us should also be one of the major goals of those who see it as their task to safeguard and improve the quality of life in this dynamic world.

A good built environment is a set of conditions that may help people to live a good, satisfying and creative life, as it contributes to the organization of their behaviour at various levels and scales[16]. However, in many cases developments are taking place that produce new built environments of doubtful value, while destroying or deteriorating existing environments of which we know that they contribute to the satisfaction of deep-felt human needs. There seems to be too much truth in the saying that jungles of asphalt and concrete keep growing in spite of the dislike that most people feel for them. But let us keep hoping that psychological and sociological research will make it clearer what qualities of the built environment are preferred because they make it possible for people to develop their identity and creativity. And we may feel sure that at any rate our collective sense of identity is fostered by the careful preservation of historic sites and monuments.

Derk de Jonge

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[12] W. MICHELSON, *Man and his Urban Environment*, Reading, Mass., 1970, p. 127.

[13] P.-H. CHOMBART DE LAUWE, *Paris et l'agglomération parisienne*, tome I, *l'espace social dans une grande cité*, Paris 1952, pp. 106-107.

[14] E. PFEIL, *Die Familie im Gefüge der Grosstadt*, Hamburg 1965, p. 66.

[15] PFEIL 1965, p. 43.

[16] Cf. J.J. EDNEY, *Human Territories, Comment on Functional Properties*, Environment and Behavior 8 (1976) nr. 1 (March), pp. 31-47.

ASPECTS DU COMPORTEMENT TERRITORIAL ET APPROPRIATION DE L'ESPACE DANS L'ENVIRONNEMENT URBAIN

La territorialité est un concept emprunté à l'éthologie, étude systématique du comportement animal. Bien que ce concept puisse aussi être utile dans l'étude du comportement spatial humain, on devrait avoir présent à l'esprit que le comportement de l'homme est beaucoup plus complexe que celui des animaux étant donné qu'il est influencé par d'importants facteurs historiques et culturels, ainsi que par une vision de l'avenir.

Rapoport a proposé d'effectuer une distinction entre diverses sortes de comportements territoriaux humains; les concepts qu'il utilise sont : espace personnel, juridiction, territoire, zones, noyaux, et domaine familier.

L'espace personnel, la bulle d'air qui entoure chaque individu joue un rôle dans les relations les plus directes. La juridiction est définie comme la possession ou le contrôle d'un certain espace pour un certain temps et en vertu de règles fixées par un consensus général. On parle d'un territoire lorsqu'une zone précise est possédée exclusivement par un individu ou un groupe donné. Les zones noyaux sont les parties de l'espace vital des individus les plus habituellement utilisées et les mieux connues, tandis que le domaine familier est constitué par la totalité de l'espace habituellement utilisé par un individu ou un groupe. Bien sûr il y a beaucoup de recoupements et d'interactions entre ces différents types d'espaces territoriaux humains, la zone la plus vaste incluant toujours les plus restreintes. Ainsi l'espace personnel fait toujours partie du territoire, et le domaine familier comprend les zones noyaux.

Dans la préservation des sites et édifices historiques on ne doit pas chercher à constituer des musées de plein air, mais des lieux permettant à chacun de ces comportements territoriaux de s'exercer.

La qualité des espaces collectifs peut être améliorée s'ils sont bordés par un certain nombre d'espaces privés dans lesquels le style de vie spécifique à certaines catégories de la population peut se manifester. D'autre part les espaces publics peuvent être une expression de l'identité collective, surtout s'ils symbolisent le passé historique d'un groupe ou d'une culture. Cependant il n'est pas suffisant de protéger un certain nombre de monuments isolés; l'objectif principal devrait être de préserver les zones historiques caractéristiques en tant qu'ensembles intrinsèques doués de continuité. Le cœur d'Amsterdam avec son triple anneau de canaux est un bon exemple d'une telle continuité spatiale. Les études sur la façon dont les gens vivent les centres urbains montrent que ceux-ci sont généralement ressentis comme variés, stimulants, beaux, amicaux, hospitaliers et pratiques, mais aussi bruyants, étroits, encombrés et fatigants. Il est donc souhaitable de ménager dans le voisinage des zones très fréquentées des espaces de tranquillité où les gens peuvent se reposer.

En ce sens, on peut aussi estimer souhaitable de créer un certain nombre d'espaces collectifs où les nuisances causées par la circulation automobile sont réduites, tandis que la zone dans son ensemble demeure accessible aux visiteurs arrivant en voiture.

Il est également important de créer des «zones frontières», c'est-à-dire des endroits qui soient d'une part abrités et d'où l'on puisse avoir un point de vue intéressant, de sorte qu'ils deviennent des territoires d'utilisation temporaire agréable.

Ainsi il devrait y avoir une relation dialectique entre différentes sortes d'espaces et de territoires personnels d'une part et d'espaces collectifs de l'autre. Si ces derniers possèdent un caractère et une identité historiques dûs à la présence de monuments, de sites ou de bâtiments uniques, beaucoup de gens peuvent se les approprier et les intégrer mentalement. Dans ces conditions les espaces privés, semi-privés et collectifs peuvent se valoriser mutuellement.

ASPECTOS DE LA CONDUCTA Y APROPRIACIÓN TERRITORIAL DEL ESPACIO EN EL AMBITO URBANO

La territorialidad es un concepto tomado de la etologia o estudio sistemático del comportamiento animal. Aunque ese concepto pueda servir tambien para el estudio del comportamiento espacial humano, se debe tener presente en la mente que el comportamiento del hombre es mucho mas complejo que el de los animales porque el hombre esta siempre bajo la influencia de importantes factores históricos y culturales y, igualmente, por la visión del porvenir.

El informe propone que se haga una distinción entre las diversas maneras que tiene el comportamiento territorial humano. Los conceptos que utiliza son variados: espacio personal, de jurisdición, de territorio, de ambito familiar y zonas nucléos.

El espacio personal es la burbuja de aire que rodea a todo individuo y que tiene su papel en las relaciones las más directas. El de juridisción queda definido como posesión o control de un cierto espacio, durante un cierto tiempo y por virtud de reglas fijadas por consentimiento común; el de territorio concierne una zona precisa poseída exclusivamente por un individuo o por un grupo de individuos definido; el ambito familiar es constituido por la totalidad del espacio que habitualmente utiliza un individuo o un groupe humano y las zonas nucléo son las partes del espacio vital de los individuos las más utilizadas y las más conocidas.

Claro esta que hay entre esos diferentes tipos de espacios territoriales humanos buen numero de coincidencias y de interacciones; la zona la más extendida incluye la de menor extensión y esto casí siempre, ejemplos: el espacio personal es una parte del territorio, el ambito familiar contiene las zonas nucléo.

En el dominio de la preservación de los sitios y de los edificios históricos no se debe llegar a la formación de museos al aire libre, al contrario, se debe llegar a crear lugares que permitan a todos el ejercicio de esos comportamientos territoriales.

La cualidad de los espacios colectivos se puede mejorar sí se les rodea por cierto numero de espacios privados en los cuales el estilo de vida especifico a ciertas categorias de la población pueden desarrollarse libremente. Por otra parte, los espacios públicos pueden ser una expresión de la identidad colectiva, sobre todo sí simbolizan el pasado histórico de un groupo o de una cultura. Es por eso que no basta solo la protección de monumentos aislados, hay que tener por objetivo principal la preservación de zonas históricas características en tanto que conjunto intrinseco y dotado de continuidad. El centro de Amsterdam, con su triple anillo de canales, es un buen ejemplo de tal continuidad espacial. Los estudios sobre la manera que tiene la gente de sentir los centros urbanos muestran que la gente los ve variados, estimulantes, bellos, amistosos, acojedizos y prácticos; pero tambien: ruidosos, estrechos, atascados y fatigosos. Seria pues deseable organizar alrededor de las zonas de mucho transito espacios de tranquilidad y reposo para la gente.

En un sentido semejante, se puede igualmente estimar deseable crear cierto numero de espacios colectivos donde los efectos dañosos causados por la circulación automóvil sean reducidos, tomando tal vez en cuenta que la zona quede accesible para los automovilistas que acuden en coche.

Es igualmente importante crear zonas «fronterizas» y, por mejor decir, sitios que permitan al mismo tiempo el abrigo y una vista interesante, de manera que sean territorios de utilización temporaria agradables. Así se podria llegar a una relación dialectica entre los diferentes espacios y territorios personales, de una parte, y los espacios colectivos de otra parte. Si los ultimos poseen un caracter y identidad histórica debidos a la presencia de monumentos, sitios o edificios de caracter unico, la gente puede apropriarselos y integrarlos mentalmente. En esas condiciones, los espacios privados, semi privados o colectivos acaban por valorizarse mutuamente.