

Renate Bornberg

## Categorising public open space

### Von Kategorien des öffentlichen Raumes

#### Abstract

Currently, public open space design is among the key issues for urban designers, architects and town planners as well as political authorities. In the process of competing cities and towns a successful design of public open space is seen to be very important and normally results in lively and well accepted areas. Therefore, a broad debate about the ideal layout of the public realm is ongoing. However, public open space is often treated as monofunctional spaces where all activities are possible and the only commonly used distinctions are the terms public, semi-public, semi-private and private. Although nobody would treat the design of a small space in a neighbourhood in the outskirts of a city the same way as a down town plaza, there is no clear and deeper understanding of the differences between such spaces; urban design is lacking a vocabulary where space is described with these differences, their purpose and finally their social function.

When looking to the grand design of spaces, such as Plaza Luna in Teotihuacan, Red Square in Moscow, St. Peter's Square in Rome, or the Meidan el Shah in Isfahan, it is quite obvious that these spaces were never designed to be lively environments, where masses of people swamp into outdoor cafes and restaurants or go window shopping and the like. However, these spaces are most splendid in outlook and design and many of them are world heritage. The design of these spaces obviously follows other rules than what is assumed in the contemporary urban design debate.

Looking at public open space design in historic cities and towns, as well as vernacular villages and compounds from around the world, it is obvious that public open space was designed according to a large variety of needs that helped inhabitants to organise technical issues, such as transport or work, but also social needs, such as for prayers, social interaction, or in order to create place bound identity. Each space was treated in a way in order to support the activity most efficiently.

It seems that the knowledge about the interplay of a social or technical factor and a particular layout and design of space has been lost in recent centuries. However, re-introducing categories of public open space design is still important and would be a very useful tool in the process of creating well accepted public open spaces. To demonstrate how such a categorisation of public open space looks like and how manifold the underlying requirements are three categories will be introduced in this paper. The first category, termed *Topos*, is the creator of place bound identity of a group of inhabitants. Secondly, *Eisodos*, the gateway and transit space of a town, city or village will be discussed. Finally, *Plateia* is the category of public open space for every day purpose, namely for all sorts of commonly done work or for leisure.

There are many more categories that would be necessary to introduce. However, to describe all would be an endless publication, and secondly,

many would be only necessary in a few regions of the world: as described in the paper, each society only creates those spaces that are necessary for them. *Topos*, *Eisodos* and *Plateia* turned out to be very robust, i.e. they were and are created in almost all investigated cities, villages or compounds. Therefore, it can be assumed that the three here described categories are deeply rooted in human behaviour that is expressed in public open space. *Topos*, *Eisodos*, and *Plateia* are thus very good examples to demonstrate the concept of categories in public open space and the principle of categorising public open space.

### Inhalt

Die Gestaltung des öffentlichen Raumes wird als eine der zentralen Aufgaben für Städtebauer, Architekten, Stadtplaner und Stadtpolitiker gesehen. Viele europäische Städte stehen heute untereinander im Wettbewerb um attraktiv zu erscheinen sowohl für die Einwohner als auch für Besucher, und der Gestaltung des öffentlichen Raumes wird in diesem Prozess eine zentrale Rolle zugesprochen. Daher gibt es eine weitgestreute Debatte um die Gestaltung des öffentlichen Raumes, in der Soziologen, Architekten, Städtebauer, Sozial- und Wirtschaftsgeografen sowie Politiker involviert sind. Doch obwohl dem öffentlichen Raum eine sehr große Bedeutung beigemessen wird, wird dieser als monofunktionaler und gleichförmiger Raum angesehen, in dem eine große Bandbreite von Aktivitäten möglich sein sollen. Wenn dieser sowohl morgens als auch abends belebt ist, meint man, dass es sich um einen erfolgreichen Platz oder Straßenzug handelt. Unterscheidungen gibt es höchstens, wenn man vom öffentlichen, halböffentlichen oder halbprivaten Raum spricht. Obwohl niemand einen kleinen Platz in einem Wohnquartier in derselben Weise gestalten würde, wie einen in der Innenstadt, gibt es keine klaren Gestaltungsvorstellungen darüber, wo die Qualitäten und Unterschiede liegen. Im Städtebau gibt es kein Vokabular, das die Unterschiede im öffentlichen Raum beschreibt.

Betrachtet man großartig gestaltete Stadtplätze, wie den Plaza Luna, Teotihuacan, den Roten Platz in Moskau, den Petersplatz in Rom, oder den Meidan el Shah in Isfahan, ist es offensichtlich, dass diese Plätze nie dafür gedacht waren, lebhaft, bevölkert, mit vielen Straßencafés und kleinen Geschäften übersät zu sein. Trotzdem gehören diese Plätze zu den Schönsten und viele von ihnen sind heute Weltkulturerbe. Dieser Umstand läßt darauf schließen, dass sie anderen Regeln folgen und andere Gestaltungsabsichten zugrunde liegen, als diejenigen, die im gängigen Diskurs um den öffentlichen Raum diskutiert werden.

Bei näherer Betrachtung des öffentlichen Raums in sowohl historischen Städten, als auch Dörfern und indigenen Siedlungen innerhalb und außerhalb Europas, wird schnell klar, dass der öffentliche Raum fast überall nach verschiedenen technischen und sozialen Rahmenbedingungen gestaltet wurde. So entstanden öffentliche Räume für technische Belange, wie die Organisation von Verkehr und Gütern oder für gemeinschaftlich zu verrichtende Arbeiten, und solche für soziale Bedürfnisse, wie etwa Gebetsplätze, Trauerplätze, Zeremonienplätze oder einfach Orte für geselliges Beisammensein und für den Austausch von Informationen. Jeder dieser Räume wurde so gestaltet, dass er bestmöglich die jeweilige zugrundeliegende Funktion unterstützt.

In der momentan geführten Debatte um die Gestaltung des öffentlichen Raumes scheint dieses Wissen um die Vielfältigkeit der Nutzung des öffentlichen Raumes verloren gegangen zu sein. Wie in diesem Artikel beschrieben und argumentiert wird, ist es jedoch von großem Nutzen, den öffentlichen Raum (wieder) in Kategorien einzuteilen; Kategorien wären ein sehr hilfreiches Werkzeug, um eine breitere Bandbreite von Räumen zu errichten, die von der Bevölkerung angenommen werden, auch außerhalb der Geschäftszonen in der Innenstadt.

Um das Prinzip der Kategorien darzustellen, werden im vorliegenden Artikel drei näher beleuchtet: Topos, der identitätsstiftende Ort, durch den die Bewohner ein Zugehörigkeitsgefühl entwickeln können; Eisodos, der Eingangs- und Transitbereich einer Gemeinschaft und schließlich Plateia, der Alltagsraum für Arbeiten und Freizeitgestaltung in der Gemeinschaft.

Die hier vorgestellten Kategorien sind bei weitem nicht alle vorhandenen Klassen von öffentlichem Raum. Die hier Beschriebenen sind nur exemplarisch zu interpretieren. Da jedoch jede Gesellschaft nur die Räume entwickeln wird, die für sie relevant sind, werden viele Raumkategorien nur singuläre Erscheinungen sein. Topos, Eisodos und Plateia sind jedoch in fast allen untersuchten Regionen der Welt aufgetreten, egal auf welcher kulturellen und wirtschaftlichen Ebene sich die Gesellschaft befand. Daher liegt der Schluß nahe, dass gerade diese drei Kategorien tief in zwischenmenschlichen Verhaltensmustern verankert sind, die sich im öffentlichen Raum ausdrücken. Daher eignen sich die drei Beispiele besonders gut, um das Prinzip der Kategorien im öffentlichen Raum zu beschreiben.

## Introduction:

"Think of a city and what comes to mind? Its streets. If the city's streets look interesting, the city looks interesting; if they look dull, the city looks dull (Jacobs: 1965, pp39). Although Jane Jacobs wrote about the interplay of well used environments and dead zones more than 35 years ago, her arguments seem to be truer than ever. Particularly in recent years people enjoy using public open spaces, they like to meet, go shopping, or use the various facilities that are installed nowadays in many European cities. Outdoor cafes, down town shopping areas and the like are even heavily used in times where the rigours of weather are often not so inviting. However, with gas lamps, parasols or distributed blankets the inconveniences of bad weather can be overcome and the outdoor season is extended. (Fig. 1)



Fig. 1

The heavy use of public open space led to a practice where town planners and urban designers try to make the environment lively and well accepted. One of the core factors seems to be a mix of uses. Public open space works best, if many people are around at all times of the day. Therefore it is important to have shops and restaurants as well as cafes, with differing opening times covering the whole day. If a space in a city is lively at eleven p.m. as well as in the morning hours, it can be assumed that the environment is well accepted and represents a good example of a successful public space. The presence of other people is very important. It seems that the best attractor for people are other people (Whyte: 1980). Therefore, public open space must appear crowded and many people must be attracted by the environment, but must also be invited to stay. Considering the factor time, activities can be divided into movement patterns, such as "coming", "leaving" and "passing", and stationary patterns, such as "sitting" or "watching others". The activity grade for both sorts of activities will be 50 %. This means, that movement activities will happen as frequent as stationary activities. On closer examination of the time factor, stationary activities will occupy nearly 90 % and movements only 10 % (Gehl: 1987). This highlights the importance of facilities that help people to prolong their stay, for example steps, deckchairs, benches, natural elements such as trees, flowerbeds, outdoor shopping, outdoor restaurants and cafes, and finally all sorts of street acts will facilitate longer retention times (Whyte: 1980).

Such considerations led to very successful public open spaces, when success is measured in terms of well used public open space. A balanced mix of uses of the adjacent buildings, moderate traffic flow, staggered opening times of cafes, offices and shops are the core elements in establishing successful public open spaces. However, there are public open spaces that do not follow these suggestions, but are widely believed to be most beautiful: the Meidan El Shah in Isfahan (Fig. 2), Red Square in Moscow (Fig. 3) Tianan Men Square (Fig. 4), Plaza Luna of ancient Teotihuacan (Fig. 5) or St. Peter's Square in Rome (Fig. 6) to just name a few, are not only most splendid in outlook, but are also believed to be masterpieces of public open space design. This suggests that their design follows different rules than the above described. With a closer look to most cities, villages and even vernacular compounds it turns out that public open space has various functions, most of them rooted in the need to organise life of its inhabitants and interacting in a community. Consequently, layout and design follows these functions to make them more efficient. The primary function of public open space determines design and layout. Therefore it is important to understand the primary function before starting to design a new or to regenerate an existing area within a city, town or village.



Fig. 2



Fig. 3



Fig. 4

**Fig 1,** Heidelberg, Neunheimer Markt: blankets are provided in outdoor cafes to extend the outdoor season

**Fig 2,** Isfahan, Meidan el Shah

**Fig 3,** Moscow, Red Square

**Fig. 4,** Tianan Men Square, Beijing



1 Although R. Park described this interplay of built environment and human behaviour only for urban communities; it also can be transferred to environments with less complex societies, such as vernacular compounds and villages.



Fig. 5



Fig. 6

In European town planning and urban design debate, the fact that there is a function behind the space design is either forgotten or denied. Therefore, it seems to be quite useful to (re-) introduce the interaction of function and space design and to categorise public open space, since each social function should be treated differently and allows talking about a certain category of public open space. For example, one category of public open space could be religious spaces, such as initiations spaces, spaces for mourning, worshipping gods, meeting points with spirit beings from forests, sea or underworld. Other categories could deal with social interaction, for examples with clan members, with the whole group of inhabitants, or with outsiders, for buying and selling goods. Public open space could facilitate the demonstration of power, maybe of gods or ancestors, or of living emperors. The primary function could be to organise traffic, often found at harbours, or more contemporary airports or railway stations.

In the following sections of this paper a few of these space categories will be discussed. The chosen categories follow one common principle: their underlying meaning is a social function. In detail this will be *Eisodos*, *Topos* and *Plateia*. *Topos*, the Greek word for "meaningful place", is defined here as the creator of identity for a group of inhabitants. The second category, "*Eisodos*", the Greek word for entrance, refers to the social need of a group to differentiate between outsiders and insiders. Finally, "*Plateia*" is the space for every day purpose, for coming together, meeting others and working cooperatively. These three categories were chosen to underline the general principle that public open space has various purposes and is not just a monotonous space with one unique quality. Following the arguments it will become quite clear that more categories are possible to be implemented in an urban fabric. Therefore, any other category could be discussed here in

order to explain the general principle. However, in the broader research it turned out (Bornberg: 2003), that particularly these three categories were found in almost all investigated settlements, villages, towns or cities, no matter of cultural, social, climatic or economic circumstances. These categories seem to be a set of spatial patterns that are deeply rooted in human behaviour, and therefore they are of particular interest. To get a better understanding of the link between human behaviour and a related spatial pattern a short theoretical introduction follows below.

### Investigating Categories:

Human beings can be characterised as intentionally acting individuals who have the ability to organise both, their own lives as well as the way of living together in a group. For living together a set of rules will be created that organises every day life, which are the *dos* and *don't dos*. This set of rules will form a particular culture. The built environment of a settlement, city, or town, is the three-dimensional image and manifestation of this cultural programme (Weiske: 2007). The structure of the built environment determines the place where certain activities take place, which areas are to be used by whom and what for, it determines movement patterns, patterns of social interaction and so on. A market place, a school or a hospital can be seen as settings within a user can and will act, since these structures contain information for the way of using them (Park: 1925)<sup>1</sup>.

Therefore it is not surprising that for all purposes that are essential for organising a society, a particular location will be assigned within the urban fabric or village area and the design of the location will support the purpose. It must be clearly to all members of a group which areas are for private use only, where private homes, meadows, gardens fields, or, as in contemporary towns and villages, industry and offices will be located and where communal infrastructural facilities should lie within the built environment. It must be clear which parts of the settlement; its inhabitants and which parts already belong to another group or are no ones land assign city or village for usage. Therefore, the urban fabric generally contains much information as well as public open space in particular.

The task of public open space is to structure activities of users and to provide information for this use, which is done by spatial codes that are embedded in the layout and design of public open space. Having this in mind, it is only logic to assume that public open space must have various functions and therefore many categories.

### The categories:

#### 1. Topos

The first discussed category is the central plaza of a town, city or village. This category was termed *Topos*, the Greek word for "meaningful place". It is the plaza or widened street that acts as an ever-remaining sign of a community, visible at

Fig. 5, Teotihuacan: Plaza Luna (photo by Erich Lehner)

Fig. 6, Rome, St. Peter's Square (photo by Kurt Bauer)

all times for everyone. This place deals with the identity of a group in order to tie them together. Topos helps creating civic pride and place bound identity. Therefore, it must be impressive by design, by architecture of the adjacent buildings, and often by its size, too. Topos must be unique and culturally specific in its appearance and highly legible within the town or settlement.

Topos is always combined with a certain event, celebration or rite. Unlike other public space categories, Topos is created around and about the major celebration; the event itself and the

circumstances to carry it out are responsible for the outlook of Topos. Ceremonies and space design are inseparable linked and the choreography of the celebration will shape the plaza.

Form and appearance of the Piazza del Campo in Siena can only partially be explained if no attention is paid to the main celebration, the Palio. The Palio is a horse race where each clan of Sienese inhabitants contributes a Contrada with flagpole- and standarte-bearers, musicians, the horses and jockeys. At the times of the Palio, the colourful Contradas parade around the Campo, get into position and finally the jockeys race the horses around the plaza, cheered up by the masses that swamp into the space to watch the spectacle (Cecchini: 1958). The Campo is designed according to the Palio: an outer path, that goes round the plaza is separated from an inner area by poolards. This path is used for the horses when they race around and the inner area is provided for watchers. In front of the Palazzo Pubblico, the town hall, a stand for the presentation ceremony is easily attached. And finally, from the many balconies of the Palazzi of the Nine Noble Families the Palio can be watched (Fig. 7). The layout of a Topos space must also allow

ideally all members to participate the major events. Therefore, Topos often appears as a vast open space. Since ceremonies and celebrations happen only infrequently, Topos will often appear as a fairly populated space. This image changes rapidly at times when a ceremony is taking place. Then Topos will be overcrowded. Therefore, it is important to understand that Topos will normally be a very large and hardly populated space. The special function of Topos, namely to be the creator of identity, must be expressed in order to avoid mixing it up with other spaces in the settlement or town. This is partly done by its size. Topos plazas, such as Red Square in Moscow (Fig. 3), Tian an Men Square in Beijing (Fig. 4) or the Meidan El Shah in Isfahah (Fig. 2), are vast open fields, clearly standing out from all other places within these cities.

Topos, as all other spaces, will be on everyone's mind, even if the celebration is gone and the space looks deserted. Humans have the ability to reflect any sort of happening, which is taking place at a certain spot, particularly if it is impressive or shocking. For example, if we watch an accident, we will always be aware of it as often as we pass the particular spot.

That this connection between space and a certain event is possible was used by many dictators around the world, for example by the Incas and their "land of the four quarters", as the Inca called the biggest empire ever south of the equator. Huanuco Pampa, one of the Inca cities, is the best preserved town and therefore reveals the town planning ideas of the Inca perfectly, since all Inca cities had the same layout than Cuzco, the capital. In the centre of the town lies a vast open space, nearly occupying one third of the city in total, which served as Topos (see Fig. 8). The centre of it is highlighted by a massive platform, the usnu, with a stone seat perched on top, which served as the throne for the Inca when he came to town on his rare visits (Gasparini,



Fig. 7



Fig. 8

**Fig. 7,** Siena, Piazza del Campo with the townhall and the Torre del Magna

**Fig. 8,** Huanuco Pampa, Peru. Plan of the Inca town with the central plaza and the usnu as its centre piece (after: Gasparini, Margolies: 1980)



Margolies: 1980). From here he followed the military parades, watched several rituals, but, too, held justice and supervised executions – being intimidating in order to underpin the legacy of the Inca. The spectacles were so impressive – if not oppressive – that riots were seldom and hardly any military apparatus was needed, which was mainly stationed in Cuzco, 2000 km away from Huanuco Pampa (Morries, Thompson: 1985).

Topos must have the function of being an ever remaining symbol for the community. The symbol must be unique and represent a group as much as possible. These symbols must be considered carefully, and are in vernacular as well as historic examples often rooted in history, tradition and culture. A symbol may be a temple of gods or ancestors, ritual stones, or any sort of structure, as long as it is an exceptional feature and every member feels his or her affiliation.

In Nias, for example, several ritual stones are displayed on Topos, which are used for the ceremonies and rituals. Adjacent to Topos is the chieftant's hut, which also facilitates men's meetings (Bier: 1990), (Fig. 9).



Fig. 9

Structures for decision making are often a symbol. The Palazzo Pubblico is the biggest building on the Piazza del Campo di Siena and every other architectural feature of the adjacent Palazzi of the Nine Noble Families is subordinated to the town hall. Besides, there is the Torre del Magna, a tower, which can be seen from far and is a highly legible symbol for Sienese society (Cecchini: 1958). (Fig. 7) Similarly, the town hall of Münster has a prominent spot on Topos, lying on the intersection between Prinzipalmarkt, and the Domplatz. This example reveals lots of the history of Münster. The Domplatz (Fig. 10), which once was the "Dom Immunität",



Fig. 10

the space of the bishop, with the dome and the episcopate's seat with a different set of laws, was the first Topos in Münster in order to express the power of the bishop (Gruber: 1983). In the course of time, Münster became an important trade city in late medieval times. Münster's merchants gained power and wanted to express it by creating their own Topos, the Prinzipalmarkt (Fig. 11). On the Prinzipalmarkt, the palaces of the ruling merchant's families were built, as well as the highly decorated town hall and a church, St. Lamberti.



Fig. 11

On the Prinzipalmarkt another important aspect is legible. Prinzipalmarkt was in first place a market, which lay just outside the Domimmunität. But since the merchants were so powerful and successful the function of being a market was widely accepted to serve as a symbol. As in many other cities as well, the market itself is the symbol of its inhabitants, its most remarkable feature where everyone feels affiliated too. By creating splendid looking houses and town halls here, the wealth and power of the town is displayed, also to impress other merchants who come here from far and wide.

Topos should ideally lie on a prominent place within a settlement, if possible in the very centre.

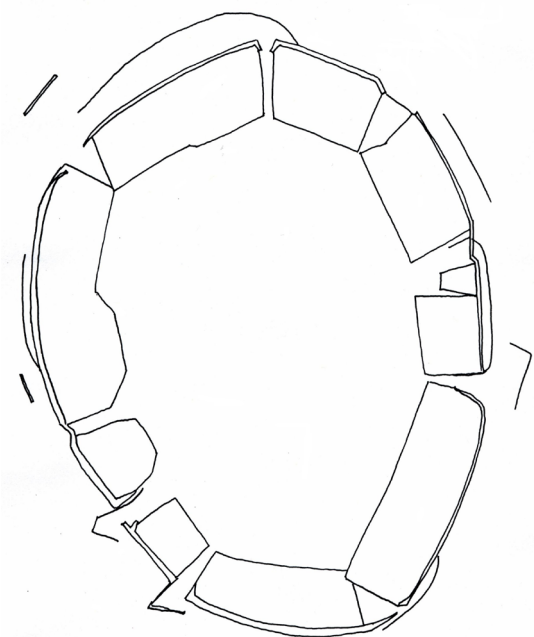


Fig. 12

**Fig. 9,** Ritual stones in front of the men's house. Hilinawaloefau, Nias, Indonesia (photo by Petra Gruber).

**Fig. 10,** Domplatz, Münster, Germany

**Fig. 11,** Prinzipalmarkt, Münster, Germany

**Fig. 12,** Plan of a typical shabono, a Yanoama compound, Orinoco, Venezuela (after Zerries, Schuster: 1974).

Especially in nomadic cultures, where settlements are regularly set up newly and thus the concept of the compound is a direct reflection of the needs of its inhabitants, Topos will always be located in the centre. For example, the Yanoama in Amazonia, Venezuela, enclose a large inner clearing with a ring of monopitch roofs, serving as the private homes of the nuclear families (Fig. 12). The vast inner clearing is seen as the sacred temple, ceremonial ground, their Topos (Zerrise, Schuster: 1974). This example reveals the idea of the special place that Topos has within the settlement: since Topos is the place where everyone feels affiliated to, all member should ideally get their share of Topos, and the easiest method to achieve the latter is that everyone lives directly adjacent to Topos.

However, in permanent settlements, that are much bigger than campgrounds and last for several hundred years, Topos cannot fulfil this any longer. The natural environment, too, often does not allow such a big space. In most permanent settlements, Topos cannot be as big. Nevertheless, Topos will still lie as much as possible in the centre of a town, village or settlement (Fig. 13).

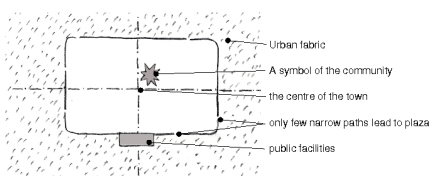


Fig. 13

## 2. Eisodos:

The next discussed class of public open space deals with another set of human behavioural patterns. Eisodos, the Greek word for entrance, is the meeting point of a group of inhabitants with foreigners and the outside world. It is the gateway to a city, town or settlement. As it is evident from human behavioural research (for example: Eibl-Eibesfeldt: 1997) and anthropologists (for example: Johnson, Earle: 2000), inhabitants distrust foreigners. In primitive societies, invasions even from well known tribes were common and could be disastrous for the inhabitants: often all members were killed, even babies and children (for example: for the Yanoama: Zerries, Schuster: 1974, for the Bororo: Levy-Strauss: 1968, Levy-Strauss: 1973). The fear of harmful foreigners was well known in Europe for a long time as well. Most Medieval cities had town walls and city gates that were firmly shut at dusk. All foreigners had to leave and watchmen overlooked the streets and gates so that no one could enter the city before dawnbreak. Certainly, todays intruders are not feared any longer and town walls as well as gates as defensive elements are not any more in use. However, Eisodos is still an important element in a city, village or compound, since it is important to understand foreigners do disturb the daily routines, would possibly enter private areas and do not understand the social codes, and therefore cause stress, which is evidently seen in many smaller towns or villages that are nowadays major tourist destinations. Eisodos is often created in front of

railway stations, although they lie often in the centre of a town (how special this place is demonstrated for Frankfurt in: Bornberg, Jaimes: 2005)

It seems, that every day life is disturbed when foreigners are around. Thus, even people who know little or nothing about planning will create Eisodos. In Berlin before the fall of the iron curtain, as well as many other cities in Germany, homeless were allowed to settle in certain brown field areas or industrial fallows. There they gathered and lived in vans or old trucks and formed small compounds (Knorr-Siedow, Willmer: 1994). Normally, the vans formed a circle with an inner central open space. Only a narrow path led from the campground to adjacent urban fabric. Interestingly, the inhabitants carefully controlled this spot in order to prohibit that foreigners would intrude the van compound. This example shows perfectly well that Eisodos has more functions rather than a defensive one. It is an important element to distinguish between insiders and outsiders.

Eisodos has, too, several generic elements that are important to create the successful gateway to a city. These elements are briefly introduced below.

A first necessity for Eisodos is an enclosing borderline and a special place where to enter. A good example of the importance of an enclosing border is evident from Etruscan rites for setting up new towns, which was later on taken by the Romans. After augurs and priests once found a place to set up a new city, a priest marked the border of the future settlement with a brass plough. In Roman and Etruscan believes, all ploughed land was divine and consecrated for humans, whilst other land was thought to be wild. The borderline was holy and could not be denied by others. This story makes quite clear why Romulus, the founder of Rome, had to kill his brother Remulus after he jumped over the very low city walls. City walls that are so low that one can jump across are not made for defense, but mark clearly which parts are reserved for a settlement of human beings and what lies outside and thus is thought to be wildness. The only part where the plough stopped was at the later citygate to mark the special transition point, Eisodos (Rykwert: 1976). Stopping the plough underpins the function of Eisodos being neither the precinct of the inhabitants nor no ones land, but a place of transition.

In Feng Shui, the guidelines for ancient village planning mainly for villages in Anhui, South China, the borderline of a village is described as an important feature to seclude insiders from the outside world. It is believed that a village must function like a bowl to not let Qi, the spirit of the village, leak out. Therefore, in Feng Shui it is suggested that the natural environment, planting, walls or other enclosing elements should secure that the borderline is closed (Wang: 1997).

Eisodos is only effective if the major road or path leads towards the main entrance. This path may be a small footpath, a caravan route, a motorway, or the coastline with the port.

The main path or road must clearly stand out

Fig.13, Scheme of an ideal Topos.



2 Pashai villages and their culture were destroyed by the Taliban regime in the 1980-ies and only ruins are left.

from any other paths that do not end at Eisodos. For example, Pashai villages in Afghanistan<sup>2</sup> have one main path leading to the village and end in front of it on a square called Wastal. The village itself appears like a fortress and all other paths connecting the pastures and fields with the residential areas are narrow and dark, since they lie in the basement area of overhanging houses. In this labyrinth of dark and winding roads visitors would soon be lost. Therefore, a visitor's first choice would be to use the main path and go to the Wastal (Wutt: 1981) (Fig. 14).

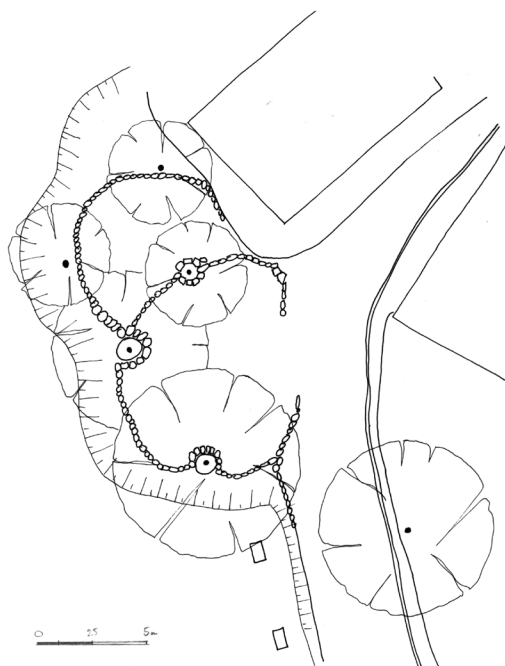


Fig. 14

Eisodos is also known in larger towns or cities. But as cities become bigger, more paths will lead to town. Therefore, Eisodos is often only preserved in cities, where either topography did not allow more than one road, or if this path was so big and heavily used that it still made sense to create Eisodos as one single plaza. Especially in cities with big harbours, Eisodos in front of a city existed for rather a long time. The old city harbour of Lisbon lay in front of the city, at the river Tejo. The river Tejo in this case must be seen as a main route that was used by the largest part of foreigners. Consequently, Eisodos lies exactly between the main route, the harbour and the city (Soares: 1993).

But not too many of the bigger cities are lucky enough to have a main port where most ships and therefore most foreigners landed. In many cities there will be more than one connecting road. But still, in previous times an Eisodos was created at the end of each of these major routes. For example most railway stations have an Eisodos Plaza, since this is the main point of entering a city until today.

The next generic element to be discussed is the sing of the entrance. To ensure that visitors do not enter anywhere, it is important that there is no doubt about where and what the gateway is.

In Maramures, Romania, for example, the gate that leads to the farm is higher than the fence and has a little gable roof (Fig. 15). On first



Fig. 15

sight, the roof has no function at all: it does not protect from rain, storm or snow, and is constructive meaningless. However, the effort for building such a gate indicates that the inhabitants wanted to clearly mark the entrance and form a small Eisodos, which lies around the gable roof.

In Ksour, the fortress like Berber towns in South Morocco, a very similar pattern can be found. The enclosing and high wall that surround the towns show no decoration at all; it is quite monotonous and repelling. The only element that stands out from this wall is the entrance building. Although part of the city wall it clearly legible for passers by that come across in the desert (Adam: 1981) (Fig. 16).



Fig. 16

To make Eisodos work efficient there must certainly be an area where contacts are welcome and possible. On Eisodos foreigners should have a chance to meet inhabitants, who in the turn will prohibit that foreigners intrude the adjacent urban fabric; inhabitants would feel disturbed by the presence of foreigners. However, foreigners will only stay on Eisodos, if they get in contact with inhabitants, and therefore some inhabitants have to populate the space. Besides, the presence of inhabitants on Eisodos has also a controlling aspect. Particularly in small villages and towns inhabitants can watch the coming and going and secure that no one can enter unseen the village's backquarters, and daily routines can be carried out in piece and quiet.

These arguments are perfectly visible in Pashai villages in Afghanistan (Wutt: 1981). The space in front of the village, the Wastal, is big

Fig. 14, Schematic layout of a Pashai Wastal, Hindukush, Afghanistan (after Wutt: 1981).

Fig. 15, Doorway in Maramures, Romania (photo by Alfons Dworsky)

Fig. 16, Schematic layout of a Ksour, South Morocco (after Adam: 1981).



enough to host villagers and visitors. Sitting on one of the stone-seats, the valley below is easily overlooked and foreigners are spotted long before they actually arrive (Fig. 14)

A much bigger area was necessary in cities, where many people came to visit. In Lisbon, for example, merchants came from far and wide with their goods, brought from all corners of the Portuguese Empire. The today called *Praca do Comercio*, once between the old harbour and the citywalls, was then the place where merchants first entered Portuguese land. Certainly, the space was big enough to not only host all newcomers but also provided space for the goods to be declared (Soares: 1993) A similar situation is also to be found in front of most Railway stations. Most railwaystation do have a huge plaza in front of the station building. It is not evident how much it was an explicit planning strategy and how much old patterns of *Eisodos* simply were adopted. But the result is the same: the massive plaza in front of the station is exactly situated where foreigners first enter the city, and provides enough space for casual meetings as well as a first orientation.

Often inhabitants do not want to get into too close contact with foreigners, since they interrupt daily routines, or could turn out to be enemies, in the worst case. On the other hand, visitors do come and often citizens live on them, for example in merchant towns, but also on tourism nowadays. Inhabitants have to deal with the problem of social stress caused by visitors, but on the other hand they are welcome for many reasons. Therefore infrastructural features that keep visitors off the residential parts are a very important element on *Eisodos*.

In Moroccan Ksour, the Berber towns, such infrastructure is part of the gateway building. Foreigners will find fresh water from a well, something to eat and sleeping facilities if overnight stays are necessary, all secured by a watchman and gatekeeper (Fig. 16).

More primitive are infrastructural elements in Pashai villages in Afghanistan. Here, fresh water will be provided, next to sitting space on one of the stone seats that surround the *Wastal*, and shadow from the large trees that circumsence the *Wastal*. But foreigners will be infrequent on one side and thus a closer relationship will be set out between visitors and inhabitants. Normally, a visitor who wants to stay longer will be a guest in one of the private homes (Fig. 14).

Similarly, the gateway building in Maramures hamlets can be interpreted: besides the above described small pitched roof a little bench is attached to the gateway building. Visitors or passers buy can wait here, chat for a few minutes, but there is no need for them to enter the farm plot (Fig. 15).

The last described generic element is the need of communal infrastructure. As already discussed, *Eisodos* is a place that on one hand is a "friendly" gesture of inhabitants to welcome foreigners and guests. But it also secures that visitors will not enter at any point, but on one clearly defined spot, *Eisodos*, the space for transition and waiting. However, *Eisodos* only works well, if inhabitants themselves populate the space in

order to get in contact with visitors. Therefore infrastructural elements are often integrated on *Eisodos* itself or in the adjacent areas.

In small villages, like the Ksour in Morocco, a watchman will have control of who is getting in and out of the town. He will also control the town at nighttime, and overlook the hustle and bustle of visitors staying overnight in the guestrooms that are provided in the gate tower. During daytime, when gates are open, a mosque is in an adjacent area of *Eisodos*. Since people do have to go the prayers five times a day, and men will stand and chat afterwards, the plaza will always been well populated and visitors will only wait for a short time before they are recognized (Adam: 81).

Similarly, the *Wastal* of the Pashai has to be seen. The main meeting point of all men is the *Wastal*. The blacksmith, the hairdresser and other craftsmen have their stalls on the *Wastal* and the focus of the plaza is the Mosque. These infrastructural elements will ensure that people - in the Islamic tradition solely men - will have a look at who is coming and going (Fig. 14).

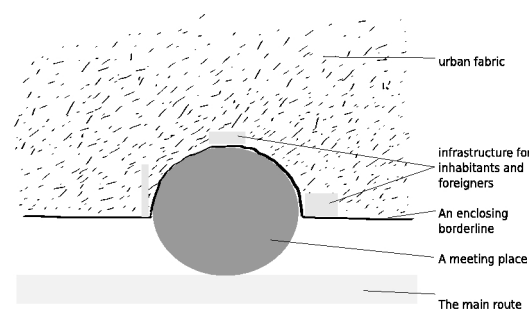


Fig. 17

### 3. Plateia

In contemporary Greek language *Plateia* is a place with various every-day purposes. Other than in the previous discussed categories, where design and outlook mainly is done to express civic pride, in this category the architectural elements are not necessarily splendid and design and outlook will facilitate the main action. Its outlook follows the main purpose of the space, which are manifold and therefore *Plateia* design is quite diverse. Generic elements cannot be as clearly delineated as with *Topos* and *Eisodos* and it is more helpful to describe the main action combined with the generic morphological pattern. In the next paragraphs a few *Plateia* spaces will be discussed, but are by no means the only places that would fall into this category.

#### Working Spaces

These spaces are found especially in vernacular settlements. They are shaped by the sort of work that is carried out here, depending on tools, materials and working procedures.

In Yanoama compounds the area where work is done, like dividing game between the hunters, or processing harvest, lies in the shadowy area between the poles of the ridged roofs and the

ledge of these roofs. This area is clearly not private, but, too, not as official as the central temple like clearing. It is used for all sorts of work that has to be done by more than one person. Its design is limited to the fact that shadow is provided for the workers, but apart from that nothing is added (Zerries, Schuster: 1974) (Fig. 18).

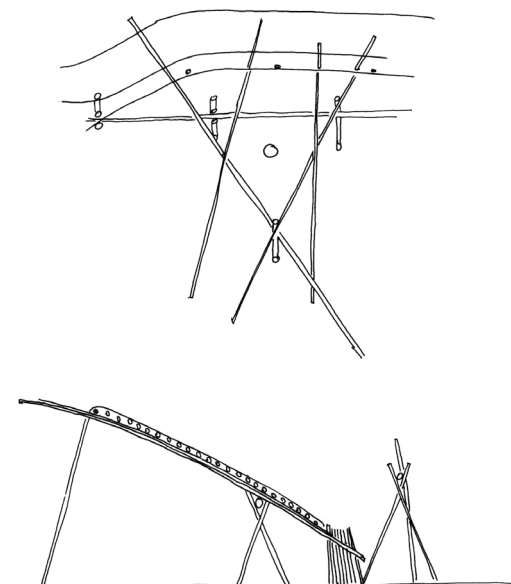


Fig. 18

Another sort of work that is done in public is baking bread. The time and energy consuming work of heating a big oven is only efficient if more than one household is baking bread. Thus, baking houses, fired once a week or so are common in rural areas, such as many European villages, for example in Alpine areas, but also in North German villages. Only recently they were given up, since bakery stores are common nowadays everywhere.

Ovens for baking bread and a related area are also known on other continents, for example in the vernacular pueblos of New Mexico and Arizona. In Hopi and Zuni pueblos, for example Taos, the baking ovens give the whole village a distinct character (Fig. 19). In the centre of each clan's sector within the pueblo, a baking house is built and women will come here to bake their bread together. Certainly, there is plenty of time for a chat or exchange of news, which makes these spaces also socially important.



Fig. 19

**Fig. 18,** Section of a shabono, Yanoama, Orinoco, Venezuela. The pillars divide the private retreat and the working space, which lies between the supports and the roof ridge (after Zerries, Schuster: 1974).

**Fig. 19,** Taos, New Mexico with the sheds for drying blue corn and other crops.

**Fig. 20,** A fountain space in Marrakech, Morocco (photo by Erich Lehner).

For other works, such as drying and processing harvest, other spaces are provided. In pueblos, permanent weather sheds are constructed, where the blue corn, the main crop of these tribes, will be hang up for drying after preparation procedure, which is done in the shadow of the shed. This Plateia is, as in all other examples, a social focal point, too. The work leaves plenty of time for chats and exchange of information.

This interplay between work and social interaction is even more evident at fountain spaces. Fetching water is time consuming as long as private households are not attached to waterpipelines. To collect water in buckets and taking them home is until today in some regions the most time consuming work of the day. One must wait until it is his or her turn, wait until the buckets and cauldrons are filled, carry them home, and come back to fetch more water. Therefore, it is not surprising, that chats are usual on such plazas. Interestingly, fountain-plazas are therefore sometimes nicely designed, like in Marrakech, Morocco (Fig. 20). It seems to be very important for the inhabitants to design the small area around the fountain that lies in the centre of a neighbourhood. Men, who are in these regions responsible for this job, design and maintain the fountain-plazas.

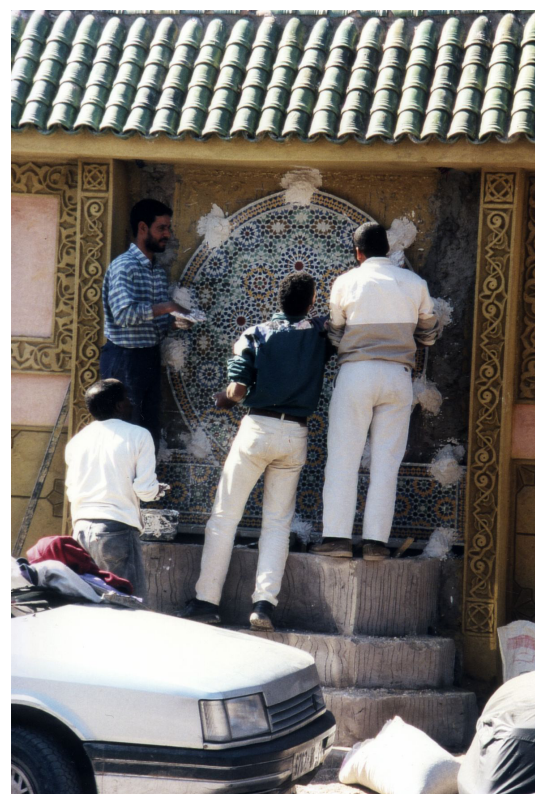


Fig. 20

In villages in Grisons, Switzerland, not only the fountain plaza is designed according to the needs of fetching water, even the layout of the buildings follows the needs of this work. Grison population are said to be very talkative and like to come together. The fountain plaza is therefore one of the main places to meet, particularly for women, who are in charge of the duty of getting water. To get the best view of the fountain and the things going on there, triangular funnel windows that focus on the fountain have developed (Poeschel: 1984). The bay windows are only placed in front of

the kitchen, where women spend most time of the day. From this window the fountain space and the coming and going are easily overlooked and the right time to join in can be decided easily (Fig. 21).



Fig. 21

### Market Places:

This sub-category exists for a very long time and is still an element of towns and cities today. Layout and design are made to best facilitate the process of buying and selling. As Richard Sennett points out (Sennett: 1991, 1994), on traditional fresh markets there are no advertisements or signs. The goods themselves have to attract the potential buyer. Therefore, passages have to be narrow, like for example in bazaars, so that the goods are as close to the buyer as possible. Long narrow lanes are therefore best for a market, as long as items are small. Since there are other goods to be sold as well, several different markets evolved in Medieval Europe, such as hey markets, fruit markets, meat markets, fish markets, livestock markets or timber markets. Each market worked independently, and was of size and design to best support the process of selling.

These markets served, too, as communication points and therefore design is often more than just serving the basic needs of selling. Especially in market towns, where the community in large parts lived on trade, market spaces can be highly decorated. The Piazza del Erbe in Verona is until today the fruit market of the town. The plaza has a linear layout, best for selling small products such as fruits. A fountain marks its centre, which was important in previous times to clean the plaza after the market had closed (Fig. 22).



Fig. 22

There are market places that are of grand design, lie in the centre of a town and are often of square shape. Mint and town hall are located here as well as other important buildings. In this case the market function is overlaid by a Topos function, which was discussed previously.

### Leisure spaces:

Leisure spaces are the focus of urban designers. Public open space design is mainly dealing with this category. It deals with the need of people to spend the spare time in the public. This is the space where people come, for example after work, to meet others, drink coffee or just have a chat. In regions, where private homes are small and therefore individual space is limited, these plazas are highly used. This can be seen in many south European countries, such as Italy, Greece, Spain, Portugal and many others. Not only are homes small, it is also hot during long summer months and being outside is more comfortable than inside, and therefore all spend a lot of time in the public open for all sorts of activities. Children will play in the streets, clothes will hang from washing lines that are put up between the houses, elderly will just sit and watch, and women will even partly do their homework in the public realm, such as handcrafting, peeling potatoes and the like. Employees will sit on benches or in outdoor cafes after work and wait for friends or relatives.

Leisure plazas can also be small green areas with playgrounds, parks or other green areas within a city (Cooper-Marcus: 1998). People from a neighbourhood will come for picnics, children will play and old people just enjoy being in natural environment. Such parks are bound to a neighbourhood and mostly used by adjacent residents. Small parks or gardens in inner areas of late 19<sup>th</sup> century residential blocks (Blockrandbebauung), widely found in central European towns, fulfil the same purpose. The adjacent tenants or owners of the apartments solely use them, since access is limited.

In English towns and cities, where residential blocks are unlikely and people tend to live in terraced, semi detached, or detached houses, front gardens are common. These areas are often used in the same sense as above described inner block spaces. Especially in cul-de-sac roads, where through traffic is not possible, people will use the road and front gardens to chat and to sit outside in their spare time. This binds a community together and even street parties for and from neighbours are common (Fig. 23).



Fig. 23

Fig. 21, Fountain plaza in Zuoz, Grisons, Switzerland

Fig. 22, Piazza del Erbe, Verona, Italy.

Fig. 23, Neighbourhood street party in a Cul-de-Sac street in Manchester, U.K.



### Conclusions:

Not all categories of public open space can be found in all settlements, towns or villages, since each society will only create the spaces it needs. For example, initiations spaces are only created in societies where the cultural background and knowledge is transmitted to the next generation by initiations rites.

Transport plazas or traffic hubs are a relatively new category and are only built in towns where goods and people are heavily transported. Such categories of public open space are very important for the societies who created them. However, to explain the general principle of categories in public open space design the above described three categories demonstrated that it is very useful to categorise public open space to better understand an urban fabric and the requirements in public open space that each society creates. If the design of public open space follows the social needs will result in well accepted urban environments, even in residential areas, in villages with today monotonous and unlively public spaces.

Another result is, that urban designers and architects must be aware of the fact, that by designing an urban environment a set of rules for how to use the space is created. As argued above, the built environment contains a set of rules and determines the activities. Therefore urban designers must understand the implications of the particular space design.

The next conclusion is that *Topos*, *Eisodos* and *Plateia* where found in almost all observed settlements, villages or towns (Bornberg: 2003), but it is important to understand that the categories did not appear everywhere in pure incarnation. Often they appear to be overlaid with other functions. Particularly in permanent settlements that exist for many hundred years the primary function could be shifted, overlaid by other functions, or could also become unnecessary for a society. As time passes by and society as well as economy changes, the needs for other categories of public open space may appear. Therefore, even very robust categories like *Topos*, *Eisodos* and *Plateia* change as well, maybe get useless or will need other outlook and shape. Considering this it was interesting to see that many spaces still have "survived" in their primary function and are still used in their original way, although the creation of the space was a few hundred years ago. Especially these examples where demonstrated here, since they highlighted the concept of using categories of public open space

For future planning as well as urban (and village) regeneration it is important to categorise public open space and find the various social needs that should be facilitated in public open space. As for architecture, where the existence of various differing building types, such as hospitals, schools, residential buildings, airports or the like, is well accepted, this should also be (re-) introduced in urban design as well.

### References:

- Adam, Jürgen Axel (1981): Wohn- und Siedlungsformen im Süden Marokkos. Callway, München.
- Bier, Michael (1990): *Asien – Straße – Haus*. Karl Krämer Verlag, Stuttgart.
- R. Bornberg (2003): Die Gestalt des öffentlichen Raumes. Form, Funktion und sozialer Code. PhD thesis TU Wien, Wien.
- Bornberg, Renate, Jaimes Maria (2005): At the Edge of the Formal: virtual informality at entry situations in global cities, AESOP online publication, <http://>
- Cecchini, Giovanni (1958): The palio and the Contrade. Historic evolution. Monte dei Paschi, Siena.
- Eibl-Eibesfeldt, Irenäus (1997): Die Biologie des menschlichen Verhaltens. Grundriß der Humanethologie. Deutsche Verlagsanstalt, Stuttgart.
- Gasparini, Graciano, Margolies, Luise (1980): *Inca Architecture*. Indiana University Press, Bloomington, London.
- Gehl, Jan (1987): Life between buildings. Using public space. Van Nostrand Reinhold, New York.
- Gruber, Karl (1983): Die Gestalt der deutschen Stadt. Ihr Wandel aus der geistigen Ordnung der Zeiten, Callway, München.
- Jacobs, Jane (1965): The Death and Life of Great American Cities: the failure of town planning, Penguin Books, Harmondsworth
- Johnson, Allan W., Earle, Timothy (2000): The Evolution of Human Society. From foraging group to agrarian state. Stanford University Press, Stanford.
- Knorr-Siedow, Thomas, Willmer, Walter (1994): Sozialverträglicher Umgang mit unkonventionellen, mobilen Wohnformen am Beispiel des Wohnens in Wohnwagendörfern oder Wagenburgen. IRS-Institut für Regionalentwicklung und Strukturplanung, Berlin.
- Levy-Strauss, Claude (1968): Das wilde Denken. Suhrkamp, Frankfurt/Main.
- Levy Strauss (1973): *Tristes Tropiques*. Penguin Books Ltd., Harmondsworth/ England.
- Morris, C. , Thompson, D.E. (1985): Huanuco Pampa. An Inca city and its hinterland. London.
- Park, Robert (1925): The Urban Community as a Spatial Pattern and a Moral Order; cited after: Atteslander, Peter, Hamm, Bernd (1974): Materialien zur Siedlungssoziologie. Kiepenheuer & Witsch, Köln. pp. 90-100.
- Poeschel, Erwin (1984): Das Bürgerhaus im Kanton Graubünden. Slatkine Verlag, Genf.
- Rykwert, Joseph (1976): The Idea of a Town. The anthropology of urban form in Rome, Italy and the ancient world. Faber and Faber Ltd. London.
- Sennett, Richard (1991): Verfall und Ende des öffentlichen Lebens. Die Tyrannei der Intimität. Fischer Wissenschaft, Frankfurt/Main.
- Sennett, Richard (1994): *Civitas*. Die Großstadt und die Kultur des Unterschieds. Fischer Wissenschaft, Frankfurt/ Main.
- Soares, Joao (1993): Atlas de Lisboa. A Cidade ne Espaço e Tempo. Contexto Editora Lda, Lisboa.
- Wang, Lu (1997): Das Bild der Natur. Fengshui als Gestaltungsprinzip der traditionellen chinesischen Dörfer. PhD thesis, Beiträge zum ländlichen Bau- und Siedlungswesen Bd. 37, Hannover.
- Weiske, Christine (2007): Die europäische Stadt. Ein räumlich und zeitlich definiertes Phänomen. Unveröffentlichtes Manuskript zur Ringvorlesung: Die Europäische StadtRegion, Sommersemester 2007, Leibniz Universität Hannover. Wird erscheinen in: Bornberg, Habermann-Nieße, Zibell (2008): die Europäische StadtRegion. Peter Lang, Europäischer Verlag der Wissenschaften, Frankfurt, Berlin, Bern, Bruxelles, New York, Oxford, Wien.
- Whyte, William (1980): The social life of small urban spaces. The Conservation Foundation, Washington D.C.
- Wutt, Karl (1981): *Pashai*. Landschaft, Menschen, Architektur. Akademische Druck- und Verlagsanstalt, Graz.
- Zerrisse, Otto, Schuster, Meinhard (1974): Mahekodotedi. Monographie eines Dorfes der Waika-Indianer (Yanoama) am oberen Orinoco (Venezuela). Klaus Renner Verlag, München.

**Dr. techn. Renate Bornberg**  
Born 1963 in Vienna/ Austria, studied architecture in TUW, Vienna, Austria, where she received her diploma in 1994. After working as an architect, she received her PhD at TUW in 2003. From 1996 to 2000 she worked at the Institute for Regional Architecture and Settlementplanning in the Leibniz University of Hanover. Between 2000 and 2003 she was a lecturer in Urban Design at the Department of Civic Design, The University of Liverpool, U.K. From 2004 until today she is a lecturer in urban design (wissenschaftliche Mitarbeiterin) at the Institute of Urban Design at the Leibniz University Hannover, Germany.

Her research focuses on comparative settlement structures in both, primitive and so called high cultures, including European and Non-European cities, towns, villages and compounds. Of particular interest are the social implications that are embedded in the built environment.

Contact:  
bornberg@iras.uni-hannover.de, bornberg@t-online.de