The Axiology of Space: 
Unnoticed Dimension of Mobility Management

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Abstract
The article presents the axiological aspects of mobility management. On selected examples of space design, illustrated with pictures from Polish cities, it shows how choices in the area of organization of transport and space are connected with values, even if the authorities are unaware of the ethical aspects of their choices. The examples analyzed in the article were selected to demonstrate how values can differ in different space designs. At the same time they highlight the importance of ethical issues raised by planning mobility in cities. They aim of the article is providing the reader with pictures and accurate descriptions of model situations, in order to introduce these issues to a broader public and show the ethical dimension of city planning to readers not familiar with these issues.

Key words: mobility, axiology of space, city planning, road design, value embodiment
INTRODUCTION

The following article is an extended version of a presentation we gave on 30 May 2014, during the conference *Local Aspects of Global Responsibility* at the Academy of Special Education in Warsaw, Poland. We are going to argue that the development of public space in cities can be viewed in terms of axiological problems. Namely, the normative views of decision-makers and other stakeholders towards the public spaces in cities, including streets, dictate the final effect of how streets are designed and look. These normative views quite often seem not to be conscious to the stakeholders themselves, but rather result from certain axiological hierarchies they hold, concerning such values as mobility, safety, comfort, etc. To put it in simpler words: how the streets of a city look is the consequence of certain views on how they should be used and what they should be for. Moreover, street infrastructure in cities might also be viewed as a manifestation of ethical beliefs, even if those beliefs are not explicitly stated or consciously perceived.

The structure of our article is as follows. Initially, we are going to describe some examples of street infrastructure from different places in Poland. The descriptions will be illustrated with pictures and divided into two different stages. At first, we will merely describe the street space and the way it is furnished by its infrastructure. We will concentrate merely on the semantic and proxemic codes of the infrastructure. We will also provide a probable answer to the question, why the infrastructure was designed that way, and what the people in charge of the process wanted to achieve or have intentionally or unintentionally accomplished. Then, in the second stage, we will analyze from what axiology the infrastructural schemes presented result.

The discussion of some examples according to this scheme will eventually result in a broader reflection upon the question of how axiological systems and values of the contributors to road design influence the final way the road infrastructure in cities is designed and built. However, the article aims mainly at raising questions and showing examples of the importance of these questions. The problems connected with city planning and mobility management are complex and this text should not be seen as an exhaustive description of the whole topic, but as an introduction.
**PRIORITY FOR DIFFERENT TYPES OF TRAFFIC (CARS, PEDESTRIANS)**

Let us take a closer look at the following picture¹:

![Image showing Jasna Street in Warsaw, Poland](http://goo.gl/maps/Bbp98)

It shows Jasna Street in Warsaw, Poland. The design type of the street might be described as rather typical for the car-orientated era of city planning. Jasna is a two-lane one-way street. There is a clear optic separation between the space dedicated to moving traffic and non-moving vehicles by means of different surface. The area devoted to pedestrians is clearly separated from space for cars by curbs. The flow of pedestrians intending to cross the street is directed to the zebra crossing.

The fact that the street appears to be quite straight and the impression that the flow of pedestrians is separated from car traffic and canalized on marked spaces, where it crosses the car traffic, might encourage the car drivers to speed up, giving them the impression that at least on the lanes nothing unpredictable might happen. This feeling is – as can be seen on the picture – clearly false, given the fact that one of the pedestrians on the right side is apparently intending to jaywalk the street at a different spot than marked by the zebra markings, which in Poland is illegal, at least in such a situations with a pedestrian crossing within sight.

It should also be noticed that in front of the gate to the left the sidewalk is crossed by curbs and its surface in this area is marked by a different color (red). This implies that in this area the sidewalk might be crossed by cars passing the gate. What ought to be noticed is that the curbs give a signal to the pedestrian that in front of the gate he or she is no longer within a safe, car-free zone and implies that he or she has to be cautious. On the other hand, the road markings and the curb lines in front of the gate seem to imply that cars are an obvious element of this part of the street.

To sum up, the street is designed in such way that in first place it addresses car traffic. A quite large amount of space is dedicated to the needs of this type of mobility. The pedestrians have to submit to it and for example take a way around to cross the street. The semantics of this design give a clear message to the driver that the street itself is the space dedicated for cars and that other road users have to pay attention, if they use it (e.g. the red marking in front of the gate). The straight street and the apparent regulation of pedestrian traffic rather encourage a feeling of safety while driving, which might result in drivers speeding up. The surroundings of the street give the impression that it was built to facilitate the flow of car traffic.

What does this design of the street and its surroundings tell us about the values promoted in this space? What are the main purposes and qualities of it? The speed of the flow of cars is seen as an important goal, which probably means that the most important value put into effect here is mobility. The car is implicitly seen as a primary tool to fulfil this value. Other means of transportation, though they also can give the opportunity to move fast from place to place, are not seen as a proper means of fulfilment of the need of free passage and the infrastructure is not prepared to allow such a way of movement (Jacobs, 1961, pp. 346, 347).

If we would like to search deeper and understand this scene in a broader context we should take into consideration that “the experience of speed was not a natural one in the history of humans, but demanded special training of our senses to become used to another mode of perceiving space in motion” (Bergmann, 2008, p. 13). Therefore the organization of the space in Jasna needs to be seen also as an example of the socialization of citizens to see high speeds and fast movement as an important part of life in the city. This scene can also be seen as only a few steps away from “radical monopoly,” about which Ivan Illich writes, “the radical monopoly cars establish is destructive in a special way. Cars create distance. Speedy vehicles of all kinds render space scarce. They drive wedges of highways into populated areas, and then extort tolls on the bridge over the remoteness between people that was manufactured for their sake. This monopoly over land turns space into car fodder. It destroys the environment for feet and bicycles” (Illich, 1973, p. 66).
Taking this situation into the context of social status and means of showing high position in the hierarchy, we might see it as an example of connection between the car and the ability to move freely with social significance. We can perceive stress on being in motion, mentally connected with success, work, earning money, access to a better car, etc. Those who do not want to have a car or cannot afford one are not seen as a desired user of the street shown on the picture. In an indirect way it shows them the proper place: lower on a social ladder, on the margin of society.

Now let us take a look at a similar street, Kościuszki Street in Grodzisk Mazowiecki nearby Warsaw, Poland, which also used to be a two-lane one-way street, but was later refurbished:

Compared with the first picture, the street space has been significantly changed. Its organization is still strongly car-orientated, as a significant number of its elements are dedicated to managing car traffic, such as road markings and signs, which still quite significantly dominate the general street panorama. However, several infrastructural road safety schemes have been implemented. The result is a generally different impression the street makes in comparison to the previous example. Most significantly, the two-lane pattern, which the street used to have, was

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2 Picture by Michał Dobrzński.
abandoned. The lines of the curbs clearly show that also in this case the street could have become a long, straight two-lane road. Instead, only one lane was created and the remaining space was used to create bends into the lane by means of road markings and traffic islands. This solution is widely used as a traffic calming measure. It is based on the observations that if the lane does not appear straight, car drivers tend to drive slower than on similar streets that appear straight. In the area of zebra crossings a significant amount of space was also used to construct a pedestrian refuge in the form of a peninsula. This solution enhances the visibility of a pedestrian intending to cross the street to the car driver, as it enables them to enter the space between the curbs safely. As the refuge is elevated the visibility of the pedestrian is better, and, simultaneously, the refuge narrows down the part of the street, where the pedestrian will actually cross it. Given the fact that the refuge creates one of the bends of the lane, it raises the probability that the driver will stop when they actually see a pedestrian next to the crossing. It also should be noted that a significant amount of street space (i.e. space between the curbs) that is practically excluded from car traffic by the other traffic islands and road markings provides protected space for those pedestrians who might jay-walk the street at places different from those marked by the zebra crossing, which – although it still will remain illegal – contributes to the general safety of the unprotected traffic participants.

Another safety solution can be noticed in the picture. To the left there is a person in orange-colored clothing, who operates the movable stop-sign to manually stop the traffic if needed. This is sometimes used in Poland in the proximity of schools (which is the case here) to ensure that children do not cross streets unguarded. However, in this case, with several infrastructural traffic calming solutions, it appears rather unnecessary.

Interpreting values that were intended to be put into life here, we can see that the biggest stress has been put on providing safety. These methods make car drivers go slower and pay special attention to pedestrians crossing the street. In this way, not only the children going to school are safer, which is left not only to infrastructural solutions but also is ensured by a special person responsible only for that. Also other pedestrians (adults) and even car drivers are safer. Even if a collision occurred between cars, their speed would probably be lower, thus making the accident less damaging. The space is not only made safer in practice, it also makes it a safer space in the mental perception of its users.

This situation can be seen as an example of a modern obsession with safety, as a realization of ideals characteristic for a risk society, as described by Ulrich Beck: “the utopia of the risk society remains peculiarly negative and defensive. Basically, one is no longer concerned with attaining something ‘good,’ but rather with preventing the worst; (…)” The movement set in
motion by the risk society (...) is expressed in the statement: *I am afraid!* (Beck, 1992, p. 49). This space provides a safe way of passing and crossing for all users, including protection of human life looked after by these measures. Other goals and values are subordinated to those.

Let us now consider another example. The following picture presents the intersection of Nowy Świat and Smolna Streets in Warsaw, Poland.

Nowy Świat is the street on the left side of the picture, whereas the Smolna Street is the paved street to the right. Unlike what might appear on the picture, Smolna is a very small street with hardly any traffic, but Nowy Świat, although closed for private car traffic, remains one of the most important streets in Warsaw for public transport and taxis. Apart from that, it is one of the most important generators of pedestrian traffic in the center of the Polish capital, with many shops, cafes, and restaurants.

What cannot be seen in the picture is that right around the corner to the left, behind the pharmacy (the red sign with the Polish word *apteka* can be distinctly seen) there is a very busy stop for several bus lines going straight to the University of Warsaw, Academy of Fine Arts, the Old Town, and several other important destinations for the life of the city. On the other hand, opposite to the pharmacy, i.e., to the right behind the back of the photographer who took the picture, there is a very busy tramway stop. For this reason, every day huge numbers of

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3 Picture source: Google Maps. URL: [http://goo.gl/maps/bGECg](http://goo.gl/maps/bGECg) Date of access: 29.08.2014.
pedestrians are constantly on the way between these two stops, having to cross Smolna Street exactly at the spot where the pedestrians in the picture can be seen.

Astonishingly enough, the fact that this very place is strongly dominated by pedestrian traffic, the semantics of the street suggest quite the opposite. Not only does the infrastructure not even suggest that Smolna might be heavily crossed by pedestrians (there is even no zebra crossing!), but the natural path of the pedestrians moving between the two public transport stops is visibly blocked by infrastructure obstacles, most significantly the flowerpots. On the other hand, the street design seems to suggest that there might be some heavy traffic of cars turning right from Nowy Świat into Smolna, which is not the case. Altogether it can be said that the semantics of the street infrastructure and the actual use of it are at complete odds to each other, which definitely results in lesser comfort for the predominant pedestrian traffic and might even result in dangerous conflicts between them and car drivers.

An example of what could be done is shown on the next picture, which shows Półwiejska Street in Poznań, Poland⁴.

This street is an example of how a street, where pedestrian traffic dominates, might look. What can be seen is that at the point where the main current of pedestrian traffic crosses the car dominated street, which is a situation quite similar to that of Smolna, the infrastructure actually

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⁴ Picture by Michał Dobrzański.
underlines this fact. The surface of the pedestrian street is preserved also at the area of the intersection. Thus, the car drivers are given a clear optic signal that the pedestrian traffic has the right-of-way. Although there still is a zebra crossing, the surface of the intersection clearly indicates that the cars crossing the pedestrian street are rather “guests” in this area. The street panorama is no longer so strongly dominated by the needs of car traffic. Most significantly, there are no curbs in the way of the pedestrians that would present an obstacle to them and give the impression they are leaving the safe area of the sidewalk while crossing the street. Instead, the curbs are built across the path of the car traffic, indicating to drivers that they are leaving an area where car traffic dominates.

Such a solution gives the drivers a clear signal they have to pay more attention than they usually do while driving through this intersection. It takes the burden of being attentive in order to prevent an accident off the pedestrians and places it on the drivers. This is the semantic message of this infrastructural solution. Significantly, it is expressed merely by means of street design, as both solutions, i.e. Smolna Street and Półwiejska Street, exist simultaneously in the same legal framework of Polish law.

The example from Warsaw shows us what happens when decision-makers are not paying attention to the values embodied in the space they are organizing. Although in practice the space around Smolna Street is used mainly by pedestrians and functions as an important connection in the movement of people not using cars, the space is organized in favor of car drivers. However, the lack of reflection about values and goals does not make the space value-free, i.e. something equally good for all categories of its users. It provides obstacles for people with any type of difficulties in movement and is not comfortable for all pedestrians. At the same time the space encourages a relatively fast movement of cars, although they are scarce there, and, according to the broader context of nearby streets, should not move fast there. In a nutshell, the space in the area of Nowy Świat and Smolna intersection gives an impression of inertia, which can be seen as a sign of lack of reflection about functions and values that are realized with it.

In the example from Poznań, we can see a conscious decision to provide space that will be designed in favor of the needs of its main users – pedestrians. The reflection, together with a will to realize ideas born during it, organizes space for the safety of pedestrians and reminds car drivers about other users of it. Lower speed and fewer cars also makes walking more pleasant – starting from lower levels of traffic noise, ending at higher quality of air, which is less polluted by fumes. We can see this example as a situation of a proper connection between the declared value of space, the infrastructure used to achieve this value and the behavior of people spending time in it.
ROLE OF PUBLIC SPACE IN CITIES (TRAFFIC CORRIDOR, HABITAT)

Let us consider now another example of how the street space might be designed and distributed. The following example shows Krakowskie Przedmieście Street, probably the most representative street of Warsaw, in two different designs:

The picture to the left was taken in the late sixties of the twentieth century, but this infrastructural design remained very similar well into the first decade of the twenty-first century. The picture to the right presents the results of a large-scale reconstruction and revitalization project, which started in 2006. The street infrastructure was rebuilt from scratch, with the intention of eliminating private car traffic from the space. Additionally, the street was strongly pedestrianized, as the sidewalks had become much wider and several street crossings were eliminated due to the closure of side streets. In consequence, this led to a noticeable revitalization of city life in the area, and Krakowskie Przedmieście has become one of the most important meeting points and strolling areas in the center of the Polish capital. Nowadays, on weekends during summer months, the street is closed for every type of vehicle traffic (with the exception of bicycles), which turns it into a typical pedestrian zone. It is also one of the few examples in the Polish capital, how the street space can consciously be redesigned and redistributed in order to achieve certain goals and change its character. Before the renovation in 2006, the street was one

5 The picture to the left by Józef Kicman, courtesy of Aneta Kicman. The picture to the right by Michal Dobrzański.
of the main routes for private car traffic in Warsaw and was widely considered vital for the whole car traffic system of the city. Thus, its space was, as can be seen on the left picture, mostly dominated by car infrastructure, leaving the pedestrians only narrow sidewalks, which in later years were provisionally turned into parking places for cars. The domination of cars led to the construction of an underpass for pedestrians and, generally, to a significant decline of the quality of public space on the street.

This example is a very good opportunity to mention a broader problem of values which are important for public space. What goals should we achieve with it? Are there any purposes that are good in themselves? Who shall decide about values embodied in the way a city is designed? Shall it conform to the current state of its users or should we also accept a mission of shaping minds in a desired direction? Coming back to our example, in the situation on the left side of the picture we can see space which achieves one main goal, namely freedom and speed of movement. In other words, the main purpose of the depicted space is to allow its motorized users to move through it as fast as possible, to leave it and get to another place. Searching for the consequences of such an organization of space and, perhaps exaggerating a bit, we might say that it removes space from its own goals and makes it only a means to another goal, which can end in “displacement, that is, a forced loss of spatial relatedness. Displacement of people is known to have psychological effects. Displacement erodes the traditional psychological support system” (Nynäs, 2008, p. 168). The situation depicted on the right side of the picture provides the space which can also have some goals in itself, which encourage its users to meet other people, to walk, to spend time in it, which also can be a goal of a trip. The goal of providing a fast way to move to another place is a minor one, whereas the major goal is to build a space for people (Gehl, 2010).

CONCLUSIONS

The examples described above in first place should indicate one fact: the way that streets in cities look and are designed is generally arbitrary and thus it becomes an object that has to be shaped by different motifs, which are the consequences of different axiologies. Let us consider the following picture:

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6 Picture by Michał Dobrzański.
It shows a small street in Warsaw, Poland, after a quite heavy snowfall. The snow let the original street design disappear, and thus the street might be considered a kind of a *tabula rasa*. Were there no cars to indicate what the street actually looks like without the snow, one could easily imagine almost every kind of infrastructural solution here. It would be perfectly possible to pave the whole space between the fences and thus make a *woonerf* (i.e. a living street or a home zone) out of it, or, on the other hand, to put asphalt everywhere and let the cars park next to the fences. Or one could construct a sidewalk only on one side and arrange perpendicular parking places on the other. The question that arises from such consideration is: what does actually lead to the implementation of a specific solution in such place?

Of course, there are many factors. Among them we find such as the engineering culture of the area, the *habitus* of the city planners, the historical development of the street, probably also the needs of the neighborhood. However, one of the key factors is also a set of *values* and *beliefs* about what streets *should* be for and how they *should* look like held by all the stakeholders of the design process.

Translating those observations into ethical language, we might say that organization of space is a realization of a particular axiology. Human choices are responsible for the shape and the divisions which are present in our cities. Of course, the natural environment and spatial limits are not without influence, but even they are only factors influencing how the space will actually
look. All these considerations are valid also in the cities and circumstances in which decision-makers are not speaking up or even reflecting on axiology. It is still there and can be interpreted by an outside observer. The unnoticed factors and forces are not always helpful. In the case of mobility management they are making the uneasy task of designing space even harder and quite often lead to negative consequences, not only for people governing cities, but also for all citizens. As Jane Jacobs wrote in her book *The Death and Life of Great American Cities*: “Good transportation and communication are not only among the most difficult things to achieve; they are also basic necessities. The point of cities is multiplicity of choice. It is impossible to take advantage of multiplicity of choice without being able to get around easily” (Jacobs, 1961, pp. 339, 340).

Bringing to consciousness the values embodied in space around us could be an important improvement for management abilities and wiser choice of policies.

At the end please take a look at these two pictures:

![Picture 1](image-left.png) ![Picture 2](image-right.png)

The picture to the left shows an important crossing in the center of Warsaw, which has been changed into a roundabout (or, more precisely, something called an intersection with a central island). The results can be seen on the picture to the right, albeit from a different angle (the left corner of the intersection at the picture to the left is the same corner that can be seen in the lower part of the picture to the right). It is easy to notice what a huge amount of space was needed to make this change possible and how much of space is now taken by the roundabout. This could be an example reminding us that it is not only that space has an axiological dimension, but also that space in itself is something scarce in the modern cities and can be seen as major value to be considered in our reflections about organization of life in our cities. The pictures

7 The picture to the left by Zbyszko Siemaszko, courtesy of Narodowe Archiwum Cyfrowe, signature: 51-535, date 1966-1969. The picture to the right by Stanislav Kozlovsikiy (no changes have been made), CC BY-SA 3.0.
show how the main purpose of space has been changed – from some kind of balance between pedestrians and drivers to a focus on traffic capacity, thus giving a clear (even if possibly unconscious) signal that the needs of drivers are seen as privileged in comparison with the needs of pedestrians in this area. Given that this spot is located in the very center of the capital of Poland, it may be seen as an example worth noticing and reflecting on the message it indicates.

**REFERENCES**


