



It is time to give back part of the public space to children to support their social, cognitive and emotional development. Currently most of the public space is occupied by motorised vehicles – the METAMORPHOSIS project starts to use this big potential of space and transforms it with the needs of children in mind. The motto is to change machine space into people space.

Problem description

Jan Gehl, the renowned Danish city planner who advises cities all over the world, repeatedly stated that the simplest and very reliable indicator for the quality of life in a city is the number of children seen on streets and squares. When many children are on the street, it proves that a city is planned in a human scale and human speeds – and not to the needs of the automobile. And when a neighbourhood is child-friendly – it is also well designed for everyone else.

The well-know “placemaker” David Engwicht states that “HOME” is not a location, but rather

a feeling. “In the past, this sense of home was not limited just to the house one lived in but encompassed the whole village or the entire city. As children matured, they explored their neighbourhoods in ever-widening circles, incorporating more and more of this area into their sense of place. However, modern living has seen a dramatic shrinking of the space people consider their home territory.” City planning of the past half century was strongly oriented towards motorised traffic – leading to some disastrous results: terrible non-human-scale design of most streets and squares, reduced quality of life and increased accidents, noise and pollution. The EU stressed these problems and possible solutions in several policy papers. This is not to say that there aren’t also positive developments, but these are mainly focused on city centres. Whereas the clear majority of city districts and city neighbourhoods in Europe still have a very car-oriented design and therefore fewer children on the streets and a lower level of street life.



One of more than 180 living streets within the City of Freiburg (Germany)

How does it work

The main goal of Metamorphosis is to transform car-oriented neighbourhoods into children-friendly neighbourhoods achieving behavioural change and an increase in the quality of life. This unique and innovative approach of the project is built around the idea to involve children not

only in certain aspects of the project, but to make them for the first-time important players during all project stages. The project will involve children aged 3 to 18 years, with the main age group involved being children between the ages of 6 to 16.

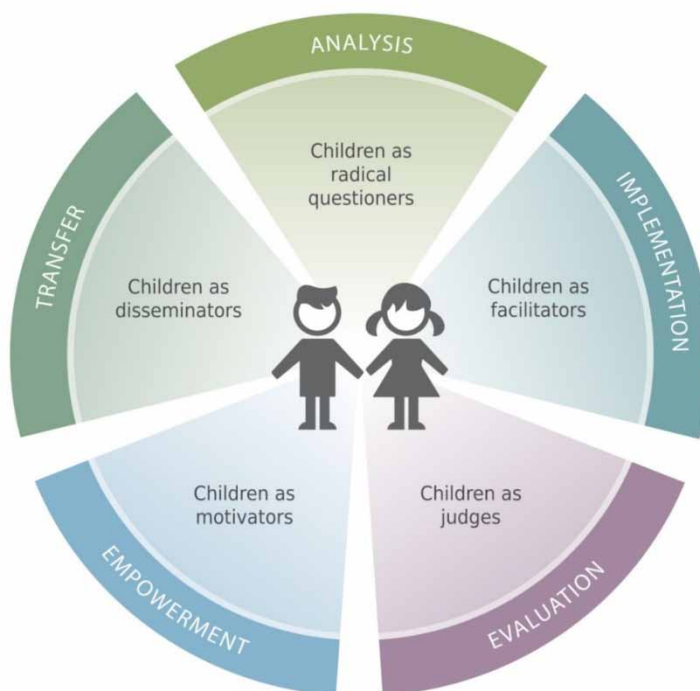


Figure 2: Roles of children during the Metamorphosis Project describing the project's methodology

1. At the beginning of the project – during the Analysis Phase - children are included in building a vision for such transformations of their neighbourhoods. By holding workshops and by involving end-users, including children, and stakeholders with vision building methods like time travel or vision mapping the transformations are achieved. Children, especially young children can question everything. This ability is utilised for local investigations and analyses. Schools integrate this work in their regular educational activities like in drawing or writing lessons.
2. Based on the outcome of the Analysis and Vision Building Phase the project partners set up e.g. plans for temporary transfor-

mations of road space together with children during the Implementation Phase. Such temporary closures include “holiday street” or “birthday street” or interventions like temporary parking space transformation e.g. for a public breakfast etc. During this phase project partners implement e.g. temporary road allocation for children together with children e.g. use school surroundings as an innovation lab for living streets and outdoor school lessons or for on street playing activities; This is carried out either with teachers or children organisations. Alternatively, a neighbourhood group carries out the planning of workshops. It is also expected that children communicate with their parents about the measures.

Most adults regard the safety and protection of children in public space as a priority. Therefore, it is likely that Metamorphosis measures that aim to increase the safety of children in road space find the approval of partners.

3. During the Evaluation Phase, children act as judges of the implemented measures. They are involved in “investigations” (counting and observation) in the concerned area related to the use of road space before, during and after the intervention. As part of their school activities they also collect feedback from the (adult) residents (interviews) on the plans and possible ideas for implementation. The results of the investigations and the experience of the temporary closures are discussed in a moderated discussion group of children – this way they work on a plus /minus list for adaptation and regular implementation.
4. By adapting the interventions in a way that allows to ritualise them or transfer them to other neighbourhoods or cities, children act as motivators. To achieve this, children are also empowered with various training programmes (bike repair workshops and bicycle trainings) for the newly learned skills to be strengthened. At the same time the project develops other capacity building tools to empower different stakeholder groups. For instance, tools are created to support the project’s innovations, e.g. teacher curricula and teaching materials in schools for the information of children in other schools.
5. During the Dissemination Phase facts and figures, but also stories and impressive pictures that have been collected during the project and evaluated by children and project partners, are used to disseminate the actions.

Benefits - and for whom they are

Traffic calming, liveable streets and thus a more active mobility behaviour lead to:

- healthier residents (as they are more likely to walk and cycle)
- better development of children’s skills and abilities (physical, emotional and social)
- an increase of the personal space for interactions (especially for children) and therefore to an increase of social contacts (number of friends and number of visits in the neighbourhood)

5 year old children and their parents

Source: Hüttenmoser 2002

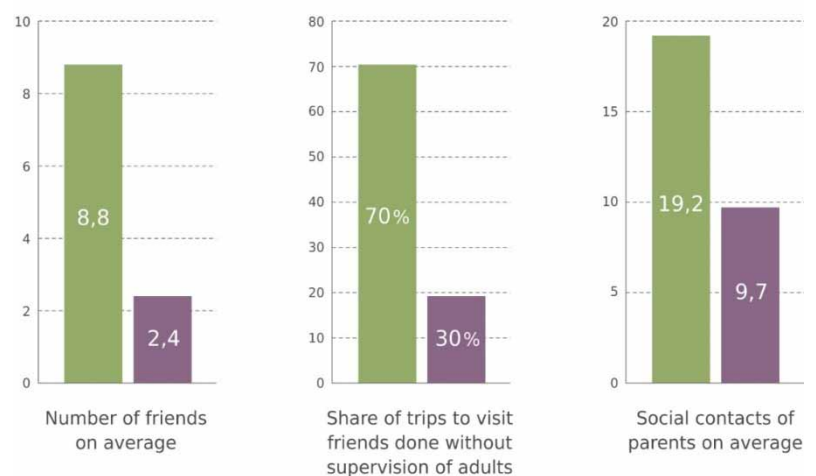


Figure 3: Car traffic influences number of friends and social contacts (Source: Study by Hüttenmoser 2002)

- a decrease of leisure and shopping trips due to improved conditions to spend time in the area
- an increase of safety and (perceived) security
- a cleaner neighbourhood regarding air quality and less noise.

Hüttenmoser, M., Sauter, D., *Bewegungsraum – Spielraum – Strassenraum*. In: Marie Meierhofer-Institut für das Kind (Hrsg.): *Und es bewegt sich noch! Und Kinder Nr. 70 Zürich 2002*

The role neighbourhoods play for children and the role children can play for the development of the neighbourhood:

- Independent and safe mobility is an important precondition for a healthy physical and mental development of children. If it is not guaranteed, the development, abilities and social behaviour of children will suffer
- Children are a very strong catalyst for neighbourhood contacts and networks and can break up prejudices and old ways of thinking
- Children can help to develop positive emotions for the neighbourhood (and this is a key issue, as behaviour and decisions are mostly determined by emotions, and only to a much lesser degree by rational arguments such as cost-benefit). Thus:
- children can easily find a direct way to their parent's hearts
- to be against children's needs and demands isn't socially well accepted.

Disadvantages, dangers

Within Metamorphosis the danger might be represented in the fact that car parking spaces are reduced because of the project measures and implementations. But, following the logic of the project – to pursue the reduction of public space dedicated to cars – this is a success of the project. Thus, disadvantages created are mainly of importance to citizens who want to park their car in the neighbourhood. They must walk for a certain distance like users of public transport who usually must walk to the next stop of public transport. So, it is less a disadvantage but more a measure that improves the fairness of access among the different transport modes.

Parents might consider it too dangerous for their children to play on the streets. Therefore, the project provides information material on the advantages of Metamorphosis measures through educational institutions and schools.

Stakeholder analysis - who are drivers, who are opponents

Children don't have any formal power and usually no structures exist for them to take part in the municipal decision preparation or decision making. In some cities child organisations play a role as supporters for the children and their needs, whereas in some cities there are also children parliaments that allow a more structured way of child participation. However, the topic of space transformation from car space to children space is not often on their agenda. Pre-school and school teachers who are usually interested in the development of children can be drivers for interventions on the road and transformation of road space.

But the lobby for the space privileges of car users is very strong. Especially shop owners and shop associations, like the chamber of commerce often see the right for driving and especially parking as a "human right". Also, the media are strong supporters for the privileges of car use. They are often influenced by the huge amount of advertising money from the car industry that can also lead to supportive articles especially in boulevard media.

Children are often seen as a group of the population that must be trained and drilled to respect the traffic laws to protect their lives. Lots of children safety organisations don't address the source of danger but try to educate children to avoid potential casualties. Following this logic, they promote safety equipment like reflecting jackets or bicycle helmets etc. The main idea of this lobby group is to keep car privileges unchanged while insisting that the vulnerable segment of the population has to adapt to the needs of the motorised transport system.

Researchers like Marco Hüttenmoser, who have the healthy development of children as their field of research can contribute with facts that support a change in the priority of urban space use.

The research results show that children who can play in the streets of their living environment soar higher regarding their emotional and cognitive

development than children that stay at home or that are just driven from one activity to the next.

Hüttenmoser suggests changing the car system and reducing privileges for the car use is to help our children to develop in a healthy way.

Legal framework

The Swiss researcher Hüttenmoser states: “The Swiss Animal Welfare Act stipulates that chickens have to be offered a certain space for moving around in fresh air. For our children we don’t have any legal provision”.

When it comes to the legal framework it can be referred to the international rights of children which are laid down in the “UN Convention on the Rights of the Child” which are ratified by almost all countries in the world and the national road codes which mainly cover the topic of child friendly public space.

UN Convention on the Rights of the Child



United Nations classify the rights outlined in the Convention on the Rights of the Child as the „3 Ps“: Provision, Protection, and Participation.

- Provision: Children have the right to an adequate standard of living, health care, education and services, and to play and recreation. These include a balanced diet, a warm bed to sleep in, and access to schooling.

- Protection: Children have the right to protection from abuse, neglect, exploitation and discrimination. This includes the right to safe places for children to play; constructive child rearing behaviour, and acknowledgment of the evolving capacities of children.

- **Participation:** Children have the right to participate in communities and have programs and services for themselves. This includes children's involvement in community programs, youth voice activities, and involving children in decision-making.

The right to have safe places to play and to recreate is related to the issue of reallocation of road space for children's play.

National road codes

The road codes of many countries offer the possibility to introduce home zones/living streets/playing streets. Usually in these streets children can play, and cars are restricted and have to move at the speed of pedestrians. The German city of Freiburg (230.000 inhabitants) offers more than 180 home zones for children.

Some road codes allow encounter zones or shared space areas with a max. speed of 20km/h for motorised vehicles and priority for pedestrians.

In the field of on-street car parking the legal framework is very fragmented. Sometimes the cities have the possibility to influence that, but sometimes regional laws are concerned. In many cities there exists a procedure on how to transform parking space into commercial space like street cafes or outdoor sale space for shops. For non-commercial use the legal framework and the allowance procedures are less developed. But in more and more cities, the temporary transformation of car parking space into parklets is becoming popular. The city of Vienna even provides guidelines for interested persons to apply for parklets and offers the space free of charge.

In some road codes like in Belgium there exists the possibility to close residential streets for two weeks per year for example, the cities of Ghent and Leuven made use of this regulation. See also in the case study section.

Policy options for cities

Each Metamorphosis city will perform an analysis of the existing SUMP (or of equivalent plan-

ning documents). Based on this analysis it will be determined to which extent the integration can be formally achieved.

For the integration, the following two elements are considered:

- **Text integration:**

How do the new Metamorphosis strategies need to be described – in what length, depth, format, and what data are necessary?

- **Political/procedural/administrative integration:**

How can the political decision for such a modification be achieved? What administrative and procedural steps are necessary? How can resources (labour and finance) be reserved (also for management, monitoring and evaluation)?

Each Metamorphosis city develops a plan for the integration of the new and innovative strategies into the SUMP.

Who (in the city administration) has to deal with it

In some cities the social department takes the initiative and offers the service of temporary playing streets to their citizens. Good examples for this strategy are the German cities of Griesheim, Frankfurt and Bremen. The Austrian capital Vienna also offers a playing street program and guidelines on how to apply for temporary street closures.

Usually the permission to close the road must be issued by the road department. But other departments that are responsible for event permission or the reorganisation of bus routes if a bus line runs in the street can also be affected. If a city is really interested in making it easy for their citizens to start with the reallocation of road space for the use of children, then they offer a one “stop one shop” solution to their citizens. This means the interested citizen must approach only one central contact point to apply for a road closure or parking space transformation and re-

ceives the answer from there. All the administrative paperwork with other departments is carried out internally by this department and is kept to a minimum for the applicant.

Good/bad practises (short examples)

Play-able City (“Bespielbare Stadt”) Griesheim (Germany, 27.000 inhabitants)

The city of Griesheim redesigned their streets



for the use by children. The city installed about 100 objects and sculptures on school routes to give children the opportunity to experience and explore their way to school differently. Those objects were designed to relax, play, jump, and climb or to make the way easier to remember.

In Griesheim, people can apply for a temporary road closure very easily by approaching the social department using a form that the municipality offers to all interested citizens. There is just one obligation: the applicant also has to inform his neighbours in the street – again the city offers a predesigned letter to help the applicant.

The playing streets of Vienna



Children take priority on Vienna's playing streets. Selected road segments in various districts of Vienna have been chosen as playing streets for children. These streets offer children the possibility to use and explore public space in many ways and to play in a safe environment.

The playing streets are a cooperation between the department of education and extracurricular youth supervision (MA13), and the department of city development and city planning (MA18).

School Street Odense (Denmark, 180.000 inhabitants)

In order to be a health-promoting city and to stimulate the citizens' taste for physical activity the City of Odense decided to create new urban spaces from 2010 onwards, with the vision "to play is to live". The street Roars Vej is right next to a school, which had two problems: first, during the morning rush hour there was a big chaos while parents dropped off their children; second, the school could not offer the students particularly good conditions during recess, as the school yard was very small.

Roars Vej was the first road transformation into a Play Street opened in Odense. It offers children the opportunity for outdoor lessons in-

cluding physical activities and inspiring games. The street is closed for traffic during school hours.



Living Street Gent (Belgium)- the summer over car-free
www.leefstraat.be



The “Leefstraat”, to English Living Street, in the Belgian City of Ghent is a real meeting place. In Ghent, Citizens can transform their streets

for up to two months into a car-free zone. Cars are being outsourced to public garages for this period.



The residents use the car-free area. They put out planters and benches and roll out artificial turfs, making room for bicycles and create plenty of space for children’s play right on their

doorstep. Impressions from the Leefstraat are available on the following YouTube video:

<https://www.leefstraat.be/video-terugblik-op-4-jaar-experimenteren>

Time frame

The time for changing the frame conditions in the municipality to help their citizens to temporarily upgrade their streets into living streets would be set to half a year to one year, by an ambitious city. Usually there is a need of re-organisation of processes and reallocation of some resources in the administration. Once the system is set up it should be quite fast for the residents to get approval for their request (2-6 weeks).

To ritualise transformations or to create permanent changes can take longer, specially when infrastructure changes and road construction work is necessary (one to three years).

Costs

Costs for the changes in internal administrative processes are moderate. If there is no possibility to reallocate resources of existing staff (working tasks and hours), there is a need to manage the internal process of approvals for the applications of citizens. This person needs to hold a part time (half day) position.

If the city also offers material that citizens can use in the closed street sections, the costs can be calculated with €1000 – 5000 per street. If there is an offer of animation and moderation of activities, additional costs of about €100 -200 per day have to be calculated.

For infrastructure changes normal costs of infrastructure redesign apply, plus additional elements of street furniture.

Open questions

An open question is how to establish a hierarchy of societal/public values that assesses the right of children to develop in a healthy way higher than the right of car users to use the public space everywhere and all the time.

Possible future developments

Freiburg has a long-term experience with the broad application of living streets within the entire city area. The provision of on-street children's playing areas near their living place is part of a long-term strategy. In Freiburg the share of car trips declined from 39% (1982) to 32% (1999) to 21% (2016) and the share of active mobility trips increased accordingly. It can be assumed that this very positive development of the mobility behaviour and the related increase in living quality is partly influenced by the continuous socialisation towards active mobility. In this respect, Freiburg has invested well into the future and is now able to harvest the effects.

Freiburg is certainly an example for many other cities which would also like to invest in their citizens' quality of living.

How and where does it fit into SUMP

The METAMORPHOSIS of machine space into space for children fits very well with SUMP ideas. On the one hand, it reduces the attractiveness of car use as the walking distance to the next parking space will be expanded. On the other hand, it stimulates participation of citizens in the decision making process regarding the use of public space.

The method of road transformation supports the SUMP approach especially in the field of citizens' participation, reduction of car use and socialisation towards active mobility.

Addendum

Not all phases of this process have been tested already as the project Metamorphosis that has been very positively evaluated by the EC has only been running for a 10 months and has just started the implementation phase.

Reference

www.metamorphosis-project.eu

Authors

Susanne Wrighton and Karl Reiter

Forschungsgesellschaft Mobilität FGM-AMOR
– Austrian Mobility Research

Schönaugasse 8a; 8010 Graz, Austria

wrighton@fgm.at and reiter@fgm.at

www.sump-network.eu

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