Tuning Residential Subdivision Rhythms

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Introduction

Since the sixties, Flanders suburbanized at a high pace, supported by a housing policy ocusing on private homeownership and the construction of single-family houses through private initiatives (Van Herck & Avermaete 2006). Subdivisions of free-standing single family houses popped up everywhere and became the symbol of the post war success of the middle class. Still today, this is one of the most preferred mode of living for the majority of Flemish, providing social status and (part of the) identity to its residents (Dedecker 2013). However, this mode of urbanization is facing a number of significant challenges. The first challenge is ecological: the ecological footprint of residential subdivisions is too big. They are land and energy consuming. The second challenge is social. Residential subdivisions become increasingly socially and culturally differentiated, comparable with what happened in Flemish cities during the seventies and eighties, leading to comparable social tensions. The third challenge is economic. Flanders is heading for a real estate crisis (Vermeulen & Martens 2015). The land supply is much greater than the demand for land. This means that many land owners will not be able to sell their property unless it is well located, has an exceptional quality or is very cheap. Unfortunately, this doesn't count for many residential subdivisions. Our hypothesis is that the residential subdivision has to reinvent itself into a more diverse environment to respond to these three-folded challenges. This doesn't mean that the allotment should radically urbanize or ruralize. The answers will have to match the housing preferences of its residents and will therefore differ from those of the city or countryside. The aim of this paper is to give some clues on how these subdivisions may evolve.

According to Meeus & De Decker (2013) the success of the suburban residential model is largely based on the desire to continue living close to the homestead or in an environment that feels familiar. Their research show that once the (single-family) home is built or purchased, one will, when the living needs change, rather decide to adapt the dwelling or to commute than to move. Therefore, they argue it is easier to strengthen the suburban model, to refine and supplement it, than to radically change course (Meeus & De Decker 2013). This regeneration is not just about building and remodeling, it will need to seek bond with the identity that residents give to their neighbourhood. This identity is (next to status) defined by daily tasks and routines that consist of regular walking, transport, living, shopping and working patterns. The French sociologist Henri Lefebvre (2004) speaks in this context of everyday rhythms that characterize the space we live in. Lefebvre declares that "*depending on the case, interventions are made, or should be made, through rhythms, without brutality*". These interventions demand for a collaborative process, as he adds that for change to occur, "*a social group, a class or a caste must intervene by imprinting a rhythm on an era, be it through force or in an insinuating manner*" (2004). This paper discusses a research project in which such a collaborative process is initiated in a residential subdivision in Heusden-Zolder, Belgium. The aim of the project is to analyze whether such a process could lead to practices that can transform the subdivision into a more diverse living environment in order to address the three challenges listed earlier, while at the same time respecting the housing preference of its residents. Together with local and regional actors we investigate new alliances and new arrangements to connect local aspirations with greater societal ambitions and to probe into alternative models of ownership, use and management. As such we explore light, temporary and selective practices, attuned to the rhythm of the residential subdivision at hand.

This paper will first explore the context of the case study and the method used to initiate the collaborative process. Then we will theoretically explore Lefebvre's rhythm analysis to give insights in what constructs everyday rhythms in the case study. Subsequently, we will describe the collaborative process itself and discuss a number of 'rhythm' scenarios that were generated throughout this process. Finally, we will discuss a number of strategies to implement these scenarios and start the transition towards a more diverse neighbourhood.

Fig 4: Case study (source: Bernakiewitcz)

Changes and Challenges of a Flemish Residential Subdivision

The residential subdivision in Heusden-Zolder, a small city in Flanders, is located near the historic center, with a school and supermarket in walking distance. When we walk through this quiet neighbourhood we notice single family houses with gardens in different architectural styles. Here and there an open plot waiting for development, is temporary used to grow crops or stall pony's. Since the seventies this neighbourhood underwent significant changes that increasingly generate a series of challenges.

The first challenge is infrastructural. The housing stock is not adapted to contemporary ecological demands, such as more durable systems of energy, heating and (waste)water management. As such, it becomes ever more costly to convert this stock to contemporary standards. As a consequence, these houses tend to perform bad on the housing market. The second challenge stems from demographic changes: How can this mo-

notonous neighbourhood mainly built by and for young families correspond to an increasingly socially and culturally differentiated population. While in the end of the eighties inhabitants were mainly under forty, since 2010 the population is simultaneously aging and rejuvenating (figure 5). Relocation movements (figure 6) confirm the trend of first home builders that move out and younger people buying up their homes. Another trend is that these second generation of inhabitants tend to stay less long in their homes. As well, these new inhabitants have more and more diverse cultural backgrounds. All these trends make for an increasing diversity in lifestyles, aspirations and needs which tend to evoke misunderstandings and tensions.

The third challenge is caused by the complicated and nontransparent building regulations. Over a period of two decades, the neighbourhood grew by means of big parcels being subdivided step by step. Agricultural land was subdivided and roads were built on former field tracks and parcel boundaries, mainly during the seventies. This incremental development led to dozens of

1980
2014

1990

2010

2014

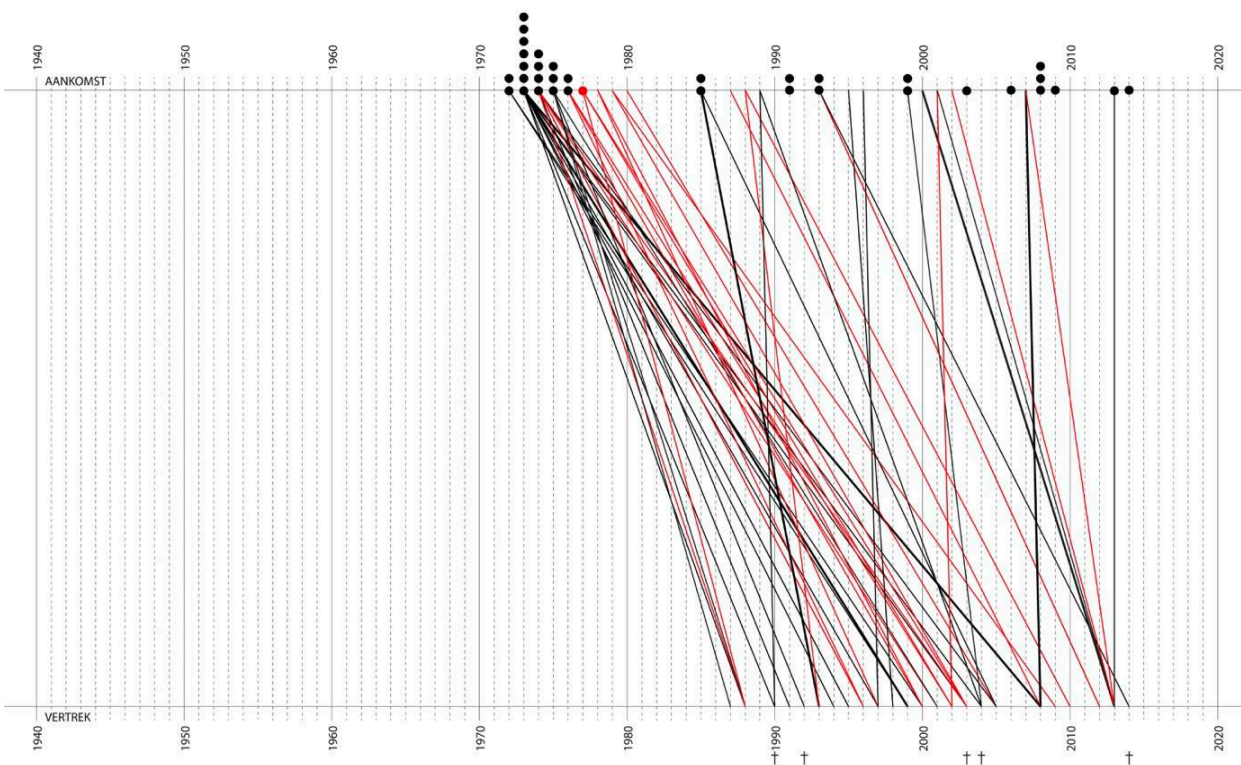Fig 5: Age distribution in the subdivion, Zolder (source: Civil Services Heusden-Zolder)

Fig 6: Relocation movements Langeweg, Zolder (source: Civil Services Heusden-Zolder)

allotment regulations, one per subdivided parcel, overlapping with two land use plans. In some cases it is not clear which regulation is prior, in others, neighbours do not have the same building rights. Moreover, according to the spatial planning department of Zolder these regulations provide few opportunities for alternative types of housing, functions or landscape interventions. For these reasons, the planning department started the procedure to revise the complicated regulations and develop one set of building rules that apply to all. At the same time, this procedure is seen as opportunity to densify the neighbourhood (from 8 to 20 houses per hectare) and to address the above challenges by leaving room for a more diverse use and development of the subdivision.

The Collaborative Process of Introducing Change

When a planning department decides to start a procedure to revise building regulations, it is obliged to also start a participatory process in order to involve the residents in this revision. All too often such a participatory process remains stuck in procedures, reducing the citizen involvement to a formality (De Bie et al. 2012). But, because the three spatial challenges cannot only be considered from a 'technical perspective or expertise' alone (De Certeau 1984), and because space is essentially about diverging opinions and viewpoints (De Bie & De Visscher 2008), we could convince the

planning department to experiment with a more open participatory process in the residential subdivision. This allowed us to start up a collaborative process with residents, local NGO's and local authorities, as suggested by Lefebvre (see introduction). Throughout this process the researcher (and main author of this paper) takes an independent role working in close dialogue with all involved actors to gradually build up a shared vision for the future of their neighbourhood; a future that addresses the three challenges and respects the dominant housing preference. This vision should finally be translated into new building regulations.

To meet this ambition, we set up an open and collaborative process with the following goals: (1) to MAP the social-spatial evolution of the neighbourhood in order to gain insight in the diversity of visions, needs and aspirations of all actors involved; (2) to CONNECT this diversity of opinions, needs and aspirations in order to build future scenarios, and to (3) to ACT in order to trigger a productive dialogue on these scenarios. Collaborative mapping plays a central role throughout the entire process, to communicate and to document the process, as well as to trigger dialogue.
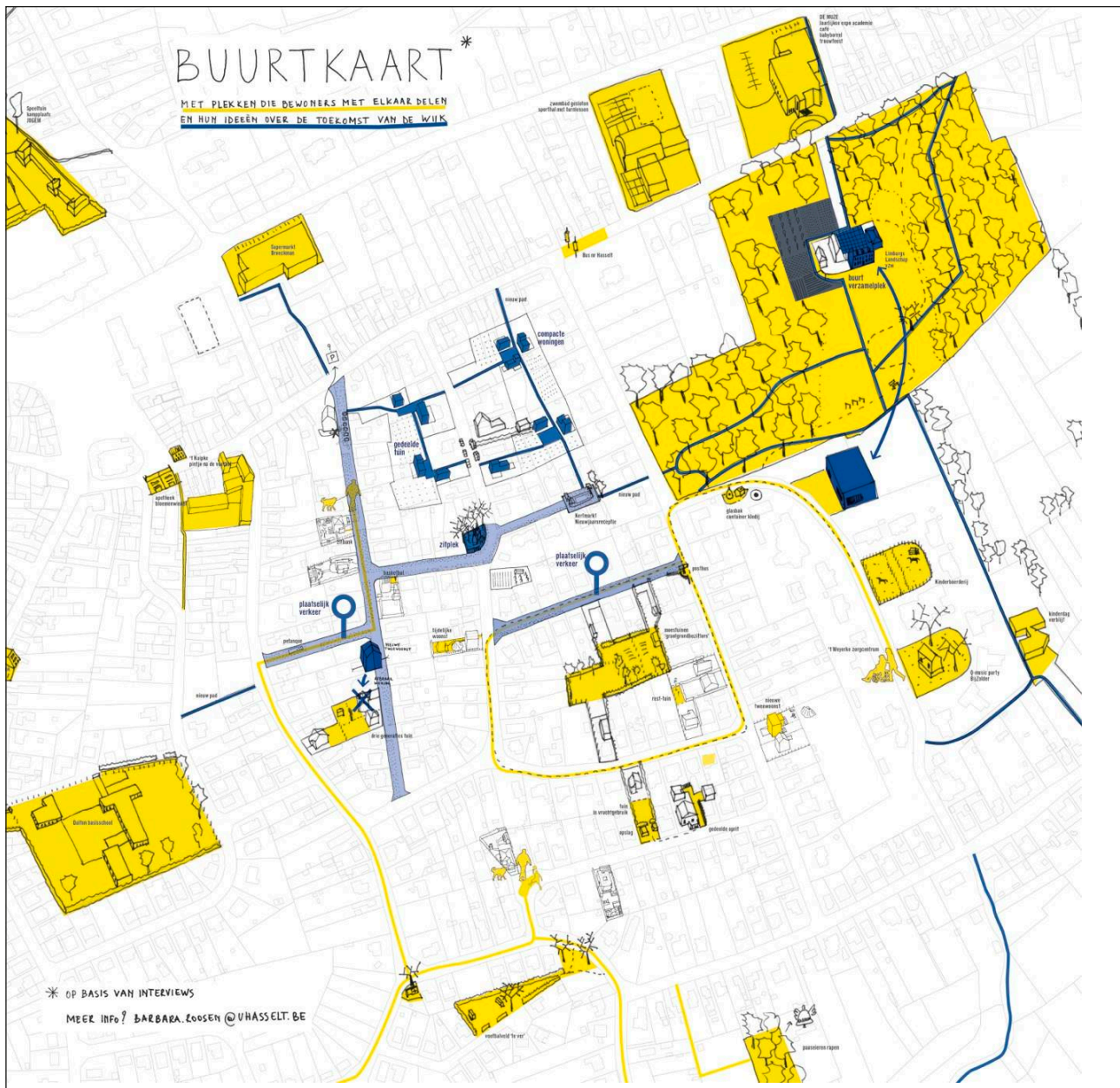

Fig 7: Collaborative neighbourhood map (source: Roosen)

The MAPPING started with the researcher analyzing demographic data, historic maps, and policy documents. Next she did a series of observations in the neighbourhood. In parallel, she conducted interviews with inhabitants, local organizations and authorities. Participants were asked about the use of their home, garden and the neighbourhood as well as their daily routines; both concerning the present and how they changed over time. Added up, these mappings gave insights into their needs and aspirations concerning their home and the neighbourhood. All data was documented on a 'collaborative neighbourhood map' as a way to pass stories and insights to the next conversation (figure 6).

To meet the second ambition TO CONNECT the researcher organized a series of workshops with small groups of residents mixed with designers, local officials or organizations. These workshops, which were called 'overlegcafés' built upon ideas that were generated during the interviews. These ideas were visualized on a large collage which became the subject of debate in the workshops. In a first phase participants reflected on these future ideas and built future scenarios on the collage. The results of the workshops were on the collaborative neighbourhood map to find connections between the different scenario's and the original ideas. In a second phase, the participants had to reflect over how they could initiate these futures and had to set an action plan with a concrete timeline. All groups decided to begin with an action that could support a dialogue with a bigger audience in the neighbourhood over the proposed future scenarios.

This brings us to the next steps of this collaborative process (to ACT) where we aim to test the output of the workshops according to the principles of 'design by doing'. Greenbaum & Kyng (1991) see *"doing as a central concept for active involvement of users and designers working together at activities (…) learners shouldn't be spectators or passive participants in the learning process."* In other words, the idea is to organize a series of collective actions and experiments that will allow participants to experience and gradually explore the impact of the proposed future scenario's on their everyday rhythms. And as such, to finally build a future vision that can address the above explained challenges, and that all actors are willing to go for. This is not evident as this future will require that the neighbourhood has a greater diversity of housing types, program, facilities and landscape. This means that the area

will look different and will be used by other actors, in other roles and relationships, as such having an impact on the current everyday rhythms.

Residential Subdivision Rhythms

Lefebvre's concept of rhythm analysis starts from the notion that places are in constant evolution, shaped by repetition of a multitude of movements and actions that possess *"particular rhythmic qualities whether steady, intermittent, volatile or surging"* (Edensor 2009). In everyday life, Edensor (2009) presumes that familiarity and predictability originates from multiple habits, schedules and routines that organizes our lives. He argues that familiar places tend to be or become 'unquestioned settings for daily tasks' and accepted 'as the way things are'. And whenever change occur people tend to associate it easily with discomfort and nuisance. Lefebvre (2004) makes the distinction between normative and counter rhythms to depict, and sense a place.

The multitude of routineous practices that people follow happen often synchronic: everyone does more or less the same thing at the same moment, but mostly on their own. There where individual paths cross, arise geographies of communality within which social activities are co-coordinated and synchronized (Edensor 2009). Together they form collective choreographies of congregation, interaction, rest and relaxation, what Seamon (1980) calls 'place ballets'. As such these rhythms give insight in the way a place is used and how this use bestows it identity. So if we interfere in rhythms, we (often) intervene in space. And the other way round. Lefebvre distinguishes two key elements that help to understand the impact of this interference. Firstly, he argues *"no rhythm without Measure, without repetition in time and space, without reprises, without returns"* (2004). Consider the hour schedules, transport systems and arrangements we make with others about when, where and how to organize our daily life. But also the opening and closing of shops, the flow of postal deliveries and arrangements (rules) about how we (collectively) manage and use a space.

When groups of people agree to create new arrangements or refuse or break existing ones, they disturb and recompose everyday rhythms (Lefebvre 2004). Consider a school opening its door for sports activities in the evening. Or two neighbours deciding to share the back end of their garden. This brings us to the second key element, namely Alliances. The introduction of new

alliances can introduce some degree of harmony between rhythms, while breaking harmony between others.

In what follows, we reconstruct the Measures of and Alliances between everyday rhythms in the residential subdivision in Heusden-Zolder. This reconstruction is based on a series of interviews and mapping sessions.

Everyday rhythms

Inhabitants describe their neighbourhood as calm. Even too calm for some. This stems from the monotony, stability and slowness of its choreography. Consider a group of children walking to school in the morning, people stepping in their car on their way to work, a man walking his dog and the postman on his scooter doing his round. These everyday rhythms seem to pass slow, because of the small amount of people and activities. But also because they happen merely individual and parallel with rare moments of interaction and congregation. This rhythm is consolidated in the spatial layout of the residential subdivision. For instance, there is hardly any 'public' space. The only public domain, the street, plays a minor role in social life. Moreover, it is sometimes seen as a source of annoyance.

Considering playing on the street is dangerous and an unknown hiker suspicious. In the seventies and eighties, when the majority of the settlers were young families, residents met more regularly. Now that some moved and new young families moved in, the diversity increased, paths cross less and social life is less synchronized. Life in the subdivision takes place behind curtains, hedges and fences. Everyday rhythms are orientated towards private life and are capsular. Residents do meet, but on private property. For example, for hobbies such as the restoration old-timers or antique furniture, or gardening. But only by invitation, and preferably not every week. Although the choreography changed over the years, it remained slow, monotonous and capsular. The question is how to speed up these everyday rhythms, make them more diverse and less capsular without resolving to an urban rhythm? Because then residents will opt out.

Measure

Residential subdivision rhythms are determined by the measure of building regulations and rules. These rules are infrastructural and constitute a connection between built structures, land structures and their use. According to Lehnerer (2009) they describe processes and are not mere passive forms of description but instead also

active steering elements for future development. Ben-Joseph (2005) points at their persistent effects, because they are hard to change once adopted. Some of these effects are unintended. Ben-Joseph points for instance at the sprawl inducing nature of subdivision codes: the inflexible design standards on street widths, lot sizes, setbacks and open space promote excessive land consumption and impervious surface.

In the case study of Zolder, building regulations only permit single or two family homes. Only limited added program (like a small shop or workshop) is permitted when it is discrete and doesn't disturb the neighbours. Small scale renovations and extensions, the splitting of plots and the insertion of semi-detached houses and apartments do bring about change and densification. However, the spatial quality and durability of these mutations are questionable. The regulations are so strict that the changes hardly generate any 'noise'. The rhythm remains uniform. But beyond these formal rules, residents are still creative.

Consider a plumber warehouse or car workshop in an (oversized) garage. Or a young couple that constructed a wooden holiday bungalow in the backyard as temporal home during the construction of their house. Once moved, his sister moved into the bungalow.

Or a car mechanic that occupies the road verge and front garden to sell second hand cars (figure 8). And
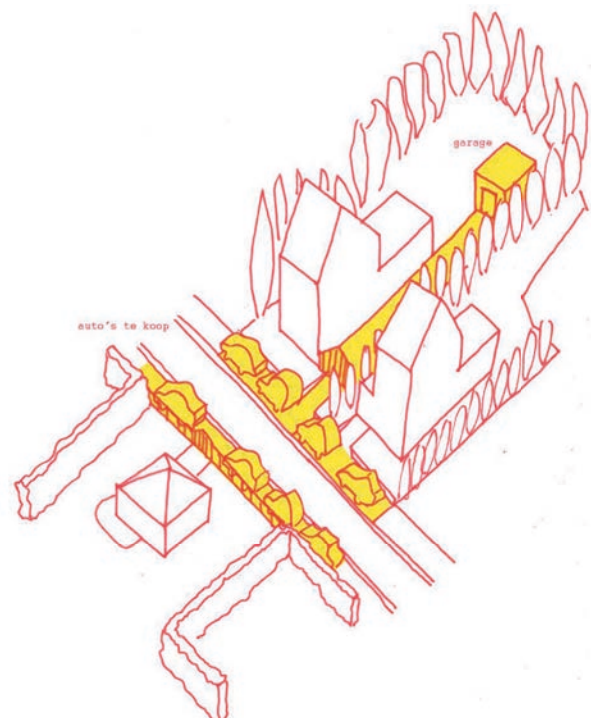

Fig 8: Sketch street use of car mechanic (source: Roosen)

inhabitants that leave their front hedges grow too high to be able to use the front garden as private terrace.

These examples make clear that capsular rhythms can be quite diverse, in spite of the precise and un-ambiguous formulation of the regulations, producing a multiplicity of alternative realities (Lehnerer 2009). According to Lehnerer rules should define 'degrees of freedom' that leave room for negotiation. In contrast to his plea for 'open' standardized rules Ben-Joseph (2005), on the other hand, urges for place-based but flexible building codes, supervised by a local planning authority. Both approaches to building regulations can be used to diversify the Measure of a residential subdivision, as long as they fit in a larger spatial vision.

Alliances

"Rules themselves are not productive, those who adhere to them are" (Lehnerer 2009). Residential subdivisions are characterized by a fragmented ownership structure counting a large amount of private home owners. Public actors are often restricted to the municipality that maintains the public infrastructure. 'Bigger' stakeholders like a social housing company, a big enterprise or a social organization that can initiate a project and as such introduce a new rhythm, are scarce. In short, the big amount of small and similar private stakeholders makes it difficult to get things done.

Similarly, alliances in the residential subdivision in Zolder are small and mainly concentrated in the private sphere between two neighbours, between family members or between parents whose children attend the same class. We refer to them as micro-alliances. In Zolder we observed that these alliances make social arrangements about the use and maintenance of their parcels. For instance, two neighbours made a written agreement to share their driveway. The owner of the plumbing company turns his van on the lot of his neighbour. In return this neighbour can turn his driveway into a garden (figure 9).

In another street block three neighbours decided to buy and divide the communal playground in their backyards and turn it into an allotment garden. For two decades they garden together. In recent years, gardening became less and the hedges grew. Still they go to the backyard for a regular chat.

In a dead end street neighbours made openings in their hedges and allow each other to pass through their gardens to go to the local park (figure 10).
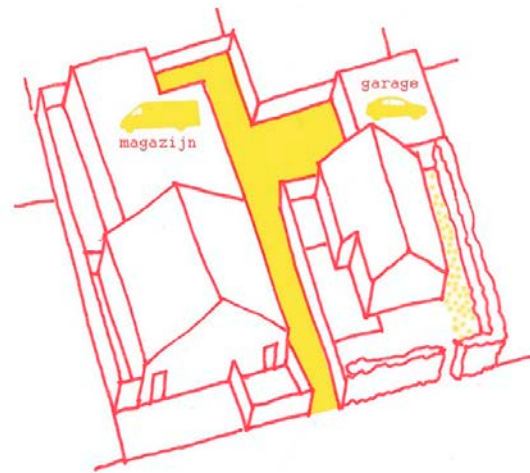

Fig 9: Sketch shared of shared drive
(source: Roosen)

These alliances are very light and often temporary, as long as both parties need to. But they are important in the everyday lives of the residents. They do have some resemblance with the governance of commons, which always contains a social agreement (Ostrom 2003). And just like commons, micro-alliances dissolve often when there is no more utility for its users. In other words, when the balance between contributing and receiving is gone. De Moor (2015) describes commons as an historical form of an institution for collective action, formed by direct stakeholders that collectively agree upon group norms. These norms define access rights, excluding 'others'. These features should be kept in mind when experimenting with new alliances to obtain a more diverse neighbourhood.
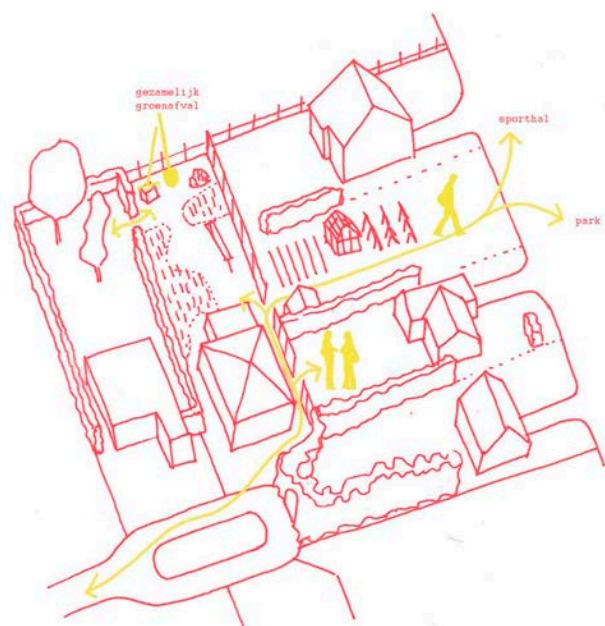

Fig 10: Sketch passage through private gardens
(source: Roosen)

To conclude, even though the building regulations support slow, monotonous and capsular everyday rhythms, the mapping of spatial behavior show that these regulations allow for slight and temporal 'aberrations'. So if the regulations allow for the introduction of diversity, and thus the addressing of the three challenges, what is then the problem. The aberrations are too small in number, too isolated and not always qualitative. As such, they may even increase, rather than address the three challenges. The question is how to allow for and even amplify these aberrations, while at the same time guaranteeing spatial quality and preventing negative conflicts.

Tuning Residential Subdivision Rhythms

The workshops generated three future scenarios for the residential neighbourhood. All three were triggered by ideas generated during the interviews: a shared street, a shared garden, a neighbourhood facility node. These scenarios are not particularly novel. What is novel is that they are being developed collaboratively by groups of actors directly involved in the subdivision, be it residents, local authorities or organizations.

Shared streets (woonerf)

What if the street would be car-free for a period of time and would turn into a shared street (Ben-Joseph 1995), open to use by all its residents? Today, the prominent role of the car in the street prevents residents from using the street to play or meet. The workshop makes clear that the participants see great potential in allowing only local traffic in order to revitalize social life. They imagine the street and verge to become one zone for walking, playing and local slow traffic. To convince more inhabitants in the street, they propose to measure the degree and speed of through-traffic and decide to organize a small festival during summer. With this event they hope to initiate a dialogue with more inhabitants about alternative street design, traffic regulations and maintenance of the street. In the long run, they hope to inspire other streets to do the same, as such building up a local network of soft tracks and shared parking that offer alternatives to short car drives and connect different neighbourhoods and different social facilities. This network will not only bring in diversity in the street pattern but will also give stage to new place ballets (Seamon 1980). People meet, whether or not by accident, where trajectories cross or overlap. A local network could, for instance, activate a chapel in the neighbourhood as a node with space for hikers and cyclists to hang out or play on their way to school or to the adjacent park.

Although street life maybe becomes more diverse, it remains capsular as it is mainly used by those residents living in the street. As such, the changes have a minimal impact on the calm and slow nature of the neighbourhood. What does changes is that it involves more than two neighbours who will have to agree upon the use

Fig 11: Workshop 23/03/2016 (photo: Roosen)

of their street. They will have to negotiate upon where to park and when and where the street will be closed for traffic. At the same more diverse and capsular street use will result in more diverse modes of street management. During the workshop, a local nature organization expressed interest in the maintenance of the greenery around the chapel, as it is a way to conserve the historical cultural landscape.

Shared gardens

What if you are allowed to build in oversized or underused backyards? So that the elderly can stay in the neighbourhood, while their larger homes can attract young families. The neighbourhood counts many elderly. Most of them prefer to stay in their home as long as possible. But for many the house and garden becomes just too big to maintain. This is one of the reasons why inhabitants think about alternatives. But current regulation doesn't leave them many options, only allowing for the reconversion of their house into two-family homes under strict conditions. During the workshop participants explore the potential of developing their gardens collectively. They agree that it can allocate multiple uses to the inner garden, such as (semi-public) soft tracks or local water treatment . Additionally, it opens up possibilities for new housing types and clustered care facilities, that, in the long term can replace some of the underused villa's. To achieve such a collective development, the participants conclude that they need to experiment with Measures and Alliances that disconnect use from ownership. For example applying transfer of development rights on the scale of a large street block. Or applying alternative ownership models such as cooperatives, building groups (Baugruppen) or Community-Land-Trusts to the context of an existing residential subdivision, with new and original land owners.

Introducing such novelties in the context of fragmented ownership structure with many landowners who do not have the experience to negotiate and collaborate with others when it concerns their land, is challenging. To explore these challenges the workshop participants decide to start up a dialogue with all of the land owners about the future of their own parcel. This dialogue will take the shape of a series of collective consultations with architects during which residents explore the synchronization of personal and collective benefits. The final aim is to trigger new alliance between inhabitants to collaboratively develop building guidelines or maintenance schemes for their street block.

A neighbourhood facility node

What if a local park becomes a neighbourhood node for projects concerning gardening, local food and the processing of green waste. This is the shared idea of a local health institution ('t Weyerke) and a nature organization (Limburgs Landschap vzw) adjacent to the residential subdivision to respond to the recent trend of facilities (a cultural center and sports center) to move out of the area. The park is part of an historical site with a mansion. The mansion is owned by the nature organization, the park is communal property and plays an important role in de everyday life of the neighbourhood. Inhabitants use it to pass through, to walk their dog, to run, fitness and picnic. The nature organization would like to open up their mansion to the neighbourhood with a local restaurant, offering meals served by the health institute, and meeting rooms for local organizations. During the interviews, many inhabitants favored this idea. Especially elderly see it as a new meeting place. During the workshop participants formulate the idea to add a neighbourhood allotment garden in the park. Gardening makes part of the health program of 't Weyerke. If accessible to wheelchair patients, they are happy to take care of the maintenance. If this experiment works, the mansion could also house a sporadic local market or shop for food products from the gardens. And 't Weyerke can decide to extent their green waste collection by patients to the entire neighbourhood. All these ideas thicken the park as a node for 'light' facilities, taking into account the slowness and low demand in the residential subdivisions. And also in this scenario, new alliances introduce a new beat in the residential rhythm.

At the end of the workshop, the participants decide to organize a public debate in order to develop the maintenance plan for the entire park. This debate will be set up as a big picnic event in the park.

Towards Rhythm Strategies

If we follow the logic of the three rhythm scenarios then durable transformation into a more divers living environment will start off thanks to a multitude of small projects and actions, rather than through one large development project. Light or temporal interventions that gradually or by reproduction get more impact and more scale in the neighbourhood. The rhythm scenarios therefore don't require a master plan from the start. A shared local vision can grow little by little, during the process, out of the shared experience of these light in-

terventions (and the dialogue that they produce). In time, this vision can be formalized in a spatial implementation plan or maintenance plan, when the opportunity presents itself.

Inherent to the discussed rhythm scenarios is that they are created by new alliances. Alliances between two neighbours, between a group of inhabitants with similar needs or aspirations, but also with new regional actors such as a farmer, ecological organization or a care facility. These interdisciplinary alliances allow local and individual ambitions to intertwine with wider ecologic, social and economic challenges. Because the vast majority of land in the residential subdivision is privately owned, these alliances will allow for semi-public, selective use, with restricted access. And they will last as long as users or partners experience sufficient personal benefit. Therefore, these alliances acquire adapted measures and norms for collective use and shared management. Consider the maintenance of a communal allotment garden by a health institute (Scenario 2). Or a street that agrees upon traffic and parking regulations in their street.

Out of these temporal, selective and light projects will emerge novel everyday rhythms. With different movement patterns, that change the way inhabitants meet. With other activities and facilities that are clustered to meet the low demand typical of the residential subdivision. All together, these altered rhythms will increase the diversity of the residential subdivision, but without radically change its course.

As a final note, most inhabitants of a residential subdivision do not want anything to change. They live their housing dream. The collaborative process therefore not only takes time, to let these residents experience that alternative futures may also comply with their housing dream. The process will also face a lot of resistance, of residents that do not want to join in, of residents that will even obstruct the process. But time will prove them wrong, because the impact of the three challenges will only increase.

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