Transition requires collaborative work. Discovering and defining actions that support supermixed cities.

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Abstract: This article starts from the hypothesis that design can contribute to a transition towards a more sustainable future for our cities if it supports work and living environments to 'collaborate' in making this future. The literature section discusses how work environments are increasingly disconnected from their surrounding living environments and the importance of bringing these worlds together again in a collaborative city-making process that takes form through – what we call - "supermix coaching". In order to understand the existing relations between living and working, we explored how 9 Belgian companies developed over time and how important turning points changed their relations with their surrounding living environments. We discuss how companies, policy and people living and working in the city can make use of the insight in these turning points to give form to a supermix coaching process. This involves a more conscious collaborative design of actions on a microscale (architectural space, technology and human actors in the company and its immediate environment); that are then further developed on the mesoscale (the region and the city) and the macroscale (global context).

Keywords: work, life, mixed-use, design

The growing divide between work and life

Economic activities in the Flemish part of Belgium are located in several types of environments, such as in housing environments, city centers and suburbs, business parks, agricultural environments,... Whereas there are disperse economic activities in agricultural environments, business parks are almost exclusively meant for economic activities. Cities know as well a high concentration of economic activities (in combination with other activities on the same parcel or nearby). In the last decades, partly because of the increasing transport possibilities and proportionally low transport costs, many companies became part of specialised networks. The companies operate on a specific scale, and recruit workforce and customers on that scale. This evolution is reflected in their business-models: for certain companies, the link with the local (living) environment is less obvious than in the past. Although companies with no obvious link with their local environment can simply

coexist with their environment without problem, they are missing out on opportunities to give form to sustainable cities where working and living environments interact. Companies can relate to and interact with their living environments in many ways and on different scales. They can be the source employment or an identity of a city, because of the strengths of their local production, processing and distribution processes. When they become disconnected from their living environments, they can simply coexist with their environments and the strengths pass unnoticed. In certain cases, this coexistence may lead to difficult situations: the companies are seen as issues of concern, like unemployment, sound pollution or traffic and can force the companies eventually leaving the city space. Although there are processes particular to companies that cannot be mixed with housing, it is not uncommon for companies that do not conflict with environmental and safety rules to move outside the city (Vlaamse Overheid, 2014a, 2014b).

The strategy of mixing living environments and companies' production and service based activities within the city space is commonly addressed as "mixed-use" (e.g. Coupland, 1996). This concept has been a part of several Flemish policy documents (Ministerie van de Vlaamse Gemeenschap, 1997; Vlaamse Regering, 2018). However, in recent literature the concept of "supermix" was foregrounded to take the step of mixing functions in the city a step further (We Made That, 2017). The "supermix in the city" proposes to develop a sophisticated design strategy to create hybrid spaces beyond different isolated zones of work, living and nature; not by merely bringing functions together, but by radically aiming to strengthen and diversify workspaces in the city that benefit the community. To be able to reach this aim, this contribution explores the potential for cities to tap more consciously into the collaboration between work and living environments - two "worlds" that seem more and more detached from each other - in a more sustainable future. The focus on collaborative city-making (in this case between work and life) as a strategy to achieve a supermixed environment that supports more sustainable futures for our cities, builds on the work of authors, like Gehl on making cities for and with people in his 'Cities for People' (Gehl, 2010) and Manzini and Friedman 'Design When Everybody Designs' (2015). The latter have mapped what design experts can do to trigger and support meaningful social changes by focusing on emerging forms of collaboration.

We will start with a literature study that explores the concepts of mixed-use and supermix, to then discuss how a supermix in the city can be enabled through design. In a fieldwork section, we aim to further deepen this concept by understanding how companies, citizens, policy makers and work environments are already developing collaborative activities that support this supermix. In the discussion section we will further try to understand the nature of this collaboration in order for designers to give more consciously form to it on different scale levels. We will conclude with a short summary of the results.

From mixed-use to supermix

Mixed use has been a popular strategy by urban planners and designers in developing more sustainable cities. There is a rich body of literature on this topic, which can only superficially be touched upon here. We discuss the current discourse on 'mixed use' (levels of mixed use, the scale on which it operates and its difficulties) and the strategy of the 'supermix'.

Already in 1961 Jacobs proposed in 'The Death and Life of Great American Cities' to mix diverse uses to create vibrant neighbourhoods. She defined these on two levels: mixed primary uses of residential and economic, employment or service functions that are focused on attracting flows of large numbers of people. Mixed secondary uses refer to bringing into the mix the resulting demand for shops, restaurants, bars and other small-scale facilities. In the current discourse, Grant revealed three levels of a mixed-use strategy: the first level is focused on increasing the intensity of land use, the second involves increasing the diversity of uses by encouraging a compatible mix (e.g. mix of commercial with residential uses) and the third level aims for integrating segregated uses by overcoming regulatory barriers, related to environmental impacts, noise, or traffic (Grant, 2002, p. 73). Next to the level on which it operates, mixed-use has been also defined by many on

different scales: the building block (Coupland, 1996), the neighbourhood (Jacobs, 1961) and the local scale (Grant, 2002). Finally, many have discussed the difficulties of implementing mixed use in practice (Grant, 2002). As Hoppenbrouwer & Louw state in relation to an Amsterdam-based study that the centrally determined goals of mixed-use "require local solutions to deal with frictions between environmentally sensitive and environmentally intrusive functions (Hoppenbrouwer & Louw, 2005, p. 982)."

This has motivated many people to search for more locally sensitive approaches, without losing touch with the ideal of creating more sustainable cities where work and living can co-exist. After a study of 1000 businesses that operate from industrial sites, the design practice 'We Made That', introduced the concept of "supermix". They define supermix as a strategy to rethink the city that considers forests, villages or water and as "facilities" and "resources" and develops working, living and nature in separate "zones". They conceptualise the supermixed city, which is a city that actively searches interaction between diverse actors and activities that are developed in these zones in a common strategy and creates hybrid spaces. Very important is that the supermix concept does not start mainly from a housing-led strategy, as is often the case in the mixed use strategy. They also provide room for further development of industrial sites in the city and to create a more diverse range of work places and thus employment opportunities in the city, such as retail environments, manufacturing industry or schools that can accommodate housing, (health) care or nature. Last but not least, it considers a supermix strategy as a sophisticated and situated design process and not as a universal method (We made that, 2017) (Future Architecture Platform, 2017, p. 17 & 27).

Methodology: Towards a supermix approach

Our hypothesis is that if we want to develop this sophisticated and situated design strategy, we need to further explore how a supermix strategy can take form through collaboration between work and living environments. In order to do this, we need to take into account the different actors that play a role in this and how this design process unfolds in space and over time.

First, different authors have stressed different actors in collaborative city-making. Very important – and still often forgotten - actors to involve in city-making are the people who live and work in the city and who give form to the city and who "intelligently" and collectively can take the city into their own hands through the communal production of public meeting spaces, platforms and technology (e.g. Gehl, 2010, Foth and Brynskov 2016). Also non-human actors, such as information technology and platforms and nature play a role in improving the quality of life in the city (Mahizhnan, 1999 and Latour, 2017). The private and public institutions play a role too, because they govern the people and the spaces where they live and work, such as the companies in the city space, the municipalities, public organisations and urban planning agencies, the vendors of city services, and developers of platforms (Huybrechts, Benesch & Geib, 2017; Lodato & Disalvo, 2018).

Second, as became clear from the study of literature, acknowledging the three key actors in collaborative city-making, being people, technologies and institutions, also involves the articulation of the spatial scale on which they operate. It is important to note that collaborations between work and life do not develop solely in the neighbourhoods or in the small circles around the companies, but involve decision-making and relations with actors on various spatial scales (Ibid.). These include the micro-scale of the single spatial artefacts (buildings, playgrounds etc.), the meso scale of the city and the region (road networks etc.) and the macro scale of the country, Europe (e.g. the impact of EU policy) or beyond Europe.

Third, to be able to articulate how a supermix strategy develops over time, we need to pay particular attention to turning points in how a company develops relations with its environment. In Huybrechts, Hendriks & Martens (2017) we describe turning points as moments in a history of a particular place or organisation where it is plausible that the course of things could have taken a different direction. For instance, a company decides to grow and as a result also decides to create more parking space for its employees. This changes its relation with

the neighbourhood. Discussing these turning points during design processes makes it transparent to others how the decision-making in the design process is affected by the personal role of actors (who is acting); the overarching macrostructure or by coincidence. This gives designers concrete input and inspiration to start imagining minimal rewrites of these turning points in the form of (designed) actions that could support a supermix strategy better.

We thus can define the collaborative city that nurtures a supermix strategy as the city that (1) provides platforms for the development of collaborative design processes between three main actors: people, non-human actors (technologies, buildings or nature) and institutions (the local, regional and supralocal governments and companies) (2) in different moments in time and (3) on different spatial scales.

From mix to supermix: the project and its approach

To now deeply understand how, when and where collaboration takes place that (can) enhance the productive relation between work and daily life in the city, the Flemish government gave the assignment for an in-depth study of the field. The study built on previous studies in Flanders such as 'Kameleon' (Leiedal, 2016), 'Labo XX werk' (Verhaert, 2016), and 'Made in Brussels' (2017). They involved a consortium of academic researchers, intermunicipal organisations and spatial agencies into a design research into the past, present and future of 9 companies' interactions with their living environments, 3 in 3 Flemish regions/cities, being (the environment of) Kortrijk, Roeselare and Herentals. From big to small these involved a large-scale media company andbrewery, a medium-scale to large-scale company providing services for the health field (cleaning/sterilising sheets, materials, logistics), a social employment company, a wood company, a glazier, and a small-scale lawyer firm, a wine shop and an electrician.

The first step in the research, carried out by the intermunicipal organizations, consisted of an analysis of regional history and regional planning context. In addition, they shared knowledge on their previous studies, such as project 'Kameleon' where an analysis was also carried out of the extent to which the companies are today intertwined with their environment. The focus was on spatial, economic, social, ecological and mobility characteristics. They also identified the specific permits context and officially registered complaints for each of the companies. Next to that, a mapping of economic activities was conducted in order to be able to capture the specific position of the companies in a work-living-environment (Giaretta, Zaman, Pennincx, and De Mulder (2019). Given the fact that some of the field researchers have a background in participatory design research (Robertson & Simonsen, 2013), in the second phase, the strategy was developed of gaining a deep understanding of the existing collaborations between citizens, institutions (companies and policy) and the 'things' that mediate their collaborations (technology, buildings, green and public spaces) and how they exchange or conflict with each other on different spatial scale levels (Huybrechts, Benesch & Geib, 2017). This happened in close dialogue with a participatory design process that aimed for changing collaborations between these actors necessary to support a supermix strategy.

The process started with interviews, observations and field mappings on site with the 9 companies during the period from March to June 2018. The resulting bottom-up insights were processed in 9 visual historical timelines that represent the various turning points (e.g. a growth of a media company and its need for parking space) in the interactions between the companies and the surrounding living environments and the various actions that the companies had taken to deal with those turning points to keep a good relation with the living environment (e.g. share parking space with the neighbourhood). In September 2018, a series of co-design workshops took place between the companies, the intermunicipal companies, the local and Flemish government and the neighborhood. In those workshops, the (1) timelines with turning points and actions were discussed and (2) collective actions were designed that could direct the supermix between living and working in an even more qualitative way than before. These actions were then evaluated between the same groups of actors, extended

with a group of interested members of Flemish municipalities and governmental organisations in collaborative sessions

As a result, we were able to present an overview of important turning points in the relations between work and daily life. We also were able to formulate actions that were/can be taken by businesses, governments and citizens to deal with these turning points and that (potentially) support a supermix strategy. We studied enough cases to start discovering recurring patterns, to make the results of this study sufficiently responsive to future economic, social or ecological shifts and trends.

Fieldwork results: turning points and actions

The research process resulted in a deep understanding of what it means to design for closer collaborative interactions between work and daily life. First, through making the timelines of turning points with the companies, it became clear that there are frequently recurring events, where designers, policy, companies and neighbours can pay attention to when they want to prevent work and life to grow even more separate and enhance the collaborative interactions. These entail:

● changes in the family structure of the business (e.g. children taking over the business),

● growth of the business (e.g. more employees),

● spatial changes (e.g. a move to another location),

● technological changes (e.g. digitalisation of production),

● changes in the regulation (e.g. new environmental policy),

● sectoral changes (e.g. decline textile manufacturing),

● organisational changes (e.g. globalisation of the company),

● changes in the economic and political landscape (e.g. economic crisis),

● changes in the real estate market (e.g. companies selling and buying property for development of residential housing to gain income),

● changes in local entrepreneurship (e.g. competition between growing amount of lawyers)

● mobility transitions (e.g. increase of traffic slows down company transport)

● challenges with parking opportunities

● celebrations (e.g. anniversaries of the company)

Second, the actions that were developed by businesses to anticipate on, remediate or react on these turning points that disturbed the relation between work and daily life, were mapped. Very roughly clustered, these entailed:

● Anticipation on spatial change or changing regulation

- Re-organisation of space, mobility, employment, products, services and activities,

- Investment in sustainable and innovative infrastructure and in the human network

- Sharing of space, information, people

- Co-design of services and products, the border space between living and working, permanent or temporary shared space, (spatial, environmental,...) plans

From fieldwork to co-designing supermix coaching

From the fieldwork it became clear that in the field the shift to more mixed work and life environments, was made by gaining insight in turning points and taking more conscious design actions. During the co-design sessions it was therefore concluded that this activity wants to anticipate on possible conflicts in the relations between work and life and is thus not a process of designing solutions, but rather a design coaching process. We call this process "supermix coaching" which involves coaching of companies, policy makers and communities in anticipating on certain turning points of companies' development through conscious design actions that restore or enhance their productive collaborative interactions with the city. It makes use of insights in turning points that require supermix actions on the one hand and "designed" supermix coaching actions on the other hand.

During the co-design sessions, this supermix coaching activity was made more concrete on how it could address the different spatial scale levels. This was done by designing actions that were based on the reality of these companies, but at the same time transcended this daily reality and aimed to give form to a supermixed city. During the co-design sessions with the involved policy makers, businesses and community representatives; we translated the observed daily actions into supermix actions that can be taken collaboratively by businesses, policy makers and citizens to restore, improve or enhance the supermix in the future in relation to important turning points in the development of companies in their environment. We will describe these actions here, starting from the micro-perspective – being the perspective we took first – to then build up to the macro.

Micro

We started with observing and co-designing on the micro-scale of the architectural space, people and technology and share some first conclusions there.

First, from the perspective of the architectural space, it was interesting to see how certain spaces facilitate interactions between the company and the environment more than others. It showed that spaces can be consciously designed as urban interfaces between living and working to encourage some type of material and digital sharing, such as (entrances to) car parks, workspaces or border areas. Currently, regulations pay little attention to these interfaces, and directing funds to them is cannot be taken for granted. So funds and regulations that facilitate sharing need to change or be created. Concretely, the co-design sessions articulated that in supermix coaching spatial design requires a movement from private design of business premises to hybrid 'public/private design' of…

• spaces or visualisations that make occupation, time or type of use tangible to encourage sharing.

An example: The law firm is situated in the middle of the city, with limited space as a result. They have meeting spaces, which are sometimes insufficient, but also sometimes empty. They already exchange people and knowledge with other small firms in the city.The firm could benefit from this network to exchange their meeting spaces in the city. This could be supported by digital applications and urban screens that visualise data on which moments in the day, the meeting spaces are occupied and available for use by others.

• (parts of) business premises as private spaces with public properties, semi- or public spaces. This can be space for networking, instead of conflict avoidance, to facilitate events, such as individual or collective company visits, neighborhood parties, etc.

An example: The wine company organised yearly neighboorhood networking parties and wine tasting to improve the relations with the neighbourhood. The brewery even created a more permanent meeting space between neighbourhood and company by collaborating in the creation of a neighbourhood restaurant with beer tasting.

• border areas as shared spaces, such as parking garages and buffer zones.

An example: The media company turned a border area into a green and wild ecological space. This could be further developed – in collaboration with the neighbourhood and the city - to contribute to the whole city's green corridors (Image 1 Border area).
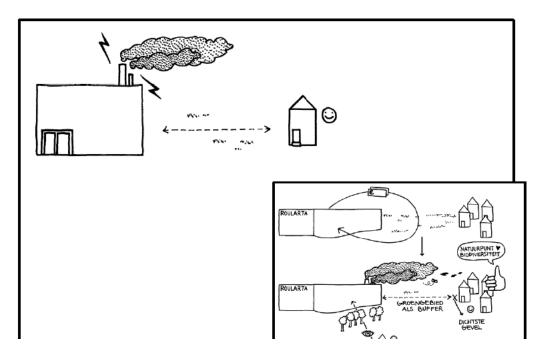

Image 1. Border area became a green ecological space @Jenny Stieglitz

• re-organisation of space so that the most private and sound-intensive spaces are on the inside and the more public on the outside.

An example: the beer brewery created the outside circle of its building for more public functions and the inside for more sound intensive and private functions. This could be a design strategy for many companies.

• hybrid spaces that interface in-between work and knowledge exchange with the outside world (which is more interactive than sharing information) at a local and supra-local level.

An example: The studied media company used technology to share their sustainability reports in a systematic way with their surrounding environment. Based on these reports they invite neighbours to come and inspect technical installation live in the company. This sharing of information could be more interactive, in the sense that the digital platform can become a platform for conversation – instead of only information - on sustainability issues in the neighborhood.

•   space that makes the company's products and services a clear asset for the neighborhood.

An example: The wood company has a historical relation with the surrounding community. They sponsor and craft artefacts for the community, such as the Christmas nativity scene. Today new housing is developed next to the company. Instead of thinking about how the in-between zone functions as a buffer to reduce noise and enhance privacy, the wood company can become a partner by designing a wooden playground as a display of their product and a public space for the neighbourhood.

•   space and mobility as interface between local and supra-local interests.

An example: Initiatives such as the Rodenbach Brewery's 'House of Food' are an example. This house was the result of a retrofitting of part of the business premises of the brewery in collaboration with the region, EU and the neighbourhood as a European center of excellence in food, which fulfills a touristic and potentially a neighborhood café function (Image 2: House of Food).
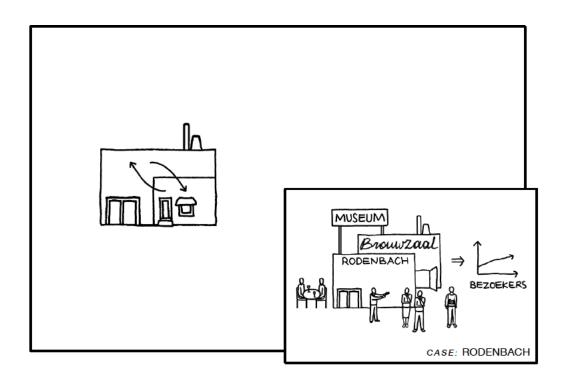

Image 2. House of Food @Jenny Stieglitz

Secondly, we found that the supermix coaching actions are only effective if the human actors, the company, the local residents and policy have the openness, the desire and the resources to strengthen the relationship between work and life.

We observed that company owners with a family relationship with the living environment or who lived close to or in their company took more actions that would benefit the collaborations between work and life. Also neighbourhood residents who had a long relationship with the company environment were more positive about collaboration with work environments. Examples are the brewery Rodenbach, where the houses around Rodenbach used to be occupied by employees. Also many craftsmen in our study, such as the wood company and the electrician lived on their business premises, with their atelier close to home. We saw that the scale of the company defines its interactions with the environment. Large companies such as the media company, the brewery and the healthcare service company maintain a good relationship with the environment through

investments in (expensive) sustainable machinery, good communication and participation platforms. Small businesses such as the law firm and the wine shop network more organically and are more likely to participate in collective initiatives, such as company or neighbourhood network associations or shared car parks.

In many situations, however, we observed that the real estate logic was that dominant that the relationship between work and living was irreparably disturbed, because companies are very easily tempted to sell their company grounds in the city. Companies indeed indicated they benefit from selling real estate in the city, but that they would also like to negotiate with the government about new residential developments in their environment, about the destination of zones and about support in finding creative solutions in the optimal use and management of several - too small - premises. At this moment governments were most involved in the purchasing of parts of the real estate when the business premises had a heritage value in order to give it a public-private interpretation, as was the case in the 'House of Food' at the brewery Rodenbach. However, the co-design sessions made clear that it is important that designers give form to platforms that facilitate the collaborations between businesses, governments, neighbourhoods and real estate also outside of heritage cases, because of the large impact of real estate development on qualitative city planning of work and living relations. This can give birth to new typologies that can encourage company owners to live close to their companies or allow (smaller) companies to explore new shared activities.

Finally, our fieldwork and more particularly the 9 timelines showed that technology has both encouraged as disturbed collaboration between actors in the city, in two major waves. The first automatisation wave created the need for larger spaces to be able to install machines and the second digitalisation wave led to a reduction of the machine park and a surplus of space for the environments, which offers opportunities for a mix between work and life. Both had an impact on less local deployment of staff. However, technology can be designed to create collaborations between work and life, like it was used in the case of the media company who shared sustainability reports. Based on the co-design sessions, we can conclude that in order to support a supermix coaching strategy, designers can take the responsibility to design these kind of technological evolutions together with the company's employees, the neighborhood and policy in ways that benefit the environment. In this way, there is also a better coordination between technological installations at various locations in the city and possibilities for shared use of, for instance, energy. We observed that it are often the companies that share their environmental impact with the neighborhood, like the media company, but neighborhood and policy do the opposite too little. If all parties collaboratively register their consumption/emissions, they can make sustainable improvements together. As a result, companies can become hubs for local energy knowledge hubs or cooperatives. Also, technological development of more sustainable modes of transport and their organisation (eg on shared electric car parks between companies and neighborhoods) can be picked up jointly by cities, companies and neighbourhoods.

Meso

On the meso-scale of the city, we see that the way in which a city develops has a great impact on mixed use. This means this can also be designed more consciously. First of all, the history of a city defines how living and working interact. This is immediately clear if we look at the built heritage of the city, which is sometimes owned by companies. Less tangible, but just as important is the more intangible historical landscape. For example, the city of Roeselare has a historically good breeding ground for the growth of one-man businesses in the urban fabric, because it had the 'Nieuwmarkt' - a big market - from the start of the 20th century, where small businesses sold their goods. The textile industry - and more specific flax- put the region around the city of Kortrijk in the 19th century on the world map, in response to the agricultural crisis. Within the flax community - often former farmer's sons - a unique economic network was created. Today, the spaces that remain from this past are still very useful for companies, because they offer space for workshops and storage. The former entrepreneurs from the flax industry also still have entrepreneurial blood in their veins and have used it for other types of industry and trade: the electrician, the health services company and the wine shop all started in the flax
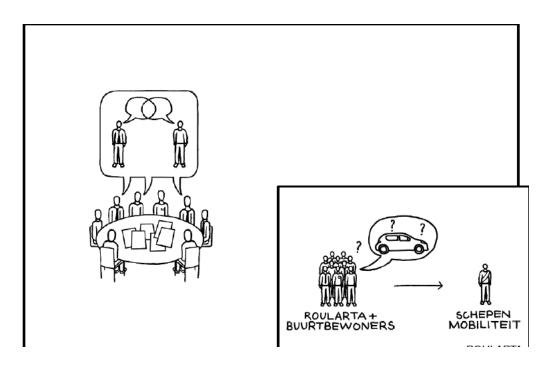
industry. Next to this, the available space on business parks in the area is rather limited: this makes the relocation of a company from the urban fabric to a location outside the city more difficult. Conversely, the culture of some cities sometimes disturbs a good relation between work and daily life. For example, in environments such as Herentals, there was a tendency for companies to move to business parks outside of the city centres due to a surplus of space. This stimulated a 'business park' culture for companies.

The co-design sessions led to the insight that in order to prevent the disappearance of the (potential) built heritage that could support a supermix strategy, designers should initiate collaborative retrofitting exercises of (parts) of buildings between companies, policy and neighborhood. This is an opportunity, for instance in case of the buildings of the brewery Rodenbach, the old flax workshops that are used by the electrician as industrial heritage and the characteristic home of the lawyer firm. Designers can also bring the intangible entrepreneurial culture that is very close to the history of the city to life again, in a contemporary way. It was suggested during the co-design workshops that new city residents should not only visit the town hall, but also the main companies in the city to nurture more understanding of inhabitants about the way companies work (Image 3. Law firm heritage)

Image 3. Law firm heritage @Jenny Stieglitz

Second, the road connections of business sites with and outside the city proved to be very decisive for the fact whether a company wants to develop its business in the city or not. They must therefore be closely studied and collectively redesigned where necessary. Some of the bigger businesses started up participation platforms (regular meetings on the business' premises) to discuss city planning of road and mobility networks between a company, policy and the neighborhood. These platforms sometimes grew out as being the main participation platforms of other shared issues on the level of the city planning, as we saw in the case of the media company. The co-design sessions demonstrated that cities and the companies still under-explore the potential of setting up these platforms in a supermix coaching strategy, because they sometimes have negative experiences with "complaining" neighbors. Designers could supply companies with good practices, knowledge and methodologies to develop these types of platforms in a positive way and to enter into a productive dialogue with the environment (Image 4. Participation platform).

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Macro

Viewed from a macro-perspective -the global context and contemporary trends - it became clear from the fieldwork that (large) companies in the manufacturing industry, such as the glazier or the social employment company, are finding it increasingly difficult to develop their production activities in Flanders. This is partly due to competition from low-wage countries. Too remain competitive, they chose to make a shift in their business models and they started to involve aspects of real estate: in Flanders the ground value of housing is higher than that of (productive) economic activities. And so, space for economic activities tends to be converted into space for housing. The competition with low-wage countries has resulted in a predominance of small businesses in our entrepreneurial landscape. This research shows that we can learn a lot from companies that have always operated on a smaller scale, such as the law firm we studied. They show us that "collective organisation" and "sharing" benefit the somewhat smaller-scale and even the larger-scale company that wants to remain active in the European city. For instance, after an increase of law firms in the city, the law firm we studied built an intense network with other small (law and other) businesses in the city, shared administrative staff or co-organised multidisciplinary trainings in a shared training centre to turn competition into collaboration. The co-design sessions show that designers can facilitate this kind of shared practice even better by getting to know the right regulations; by studying good practices and by supporting these by interesting spatial strategies (e.g. designing shared educational centres for diverse businesses and neighbourhoods in the city) and technologies (e.g. shared training platforms). (Image 5 law firm, shared educational centre)
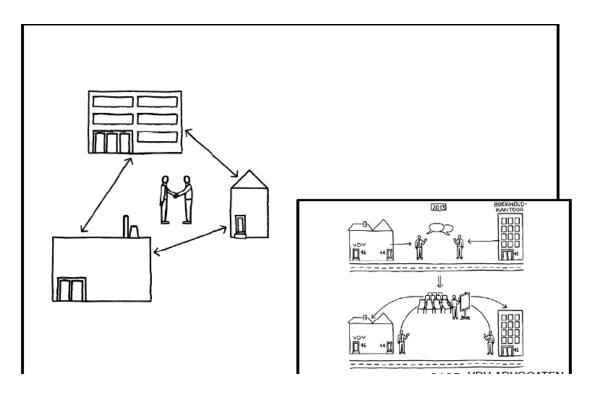
Image 5. Law firm, educational centre @Jenny Stieglitz.

Though small scale companies can be exemplary, we noticed that large companies or companies, who operate on a more regional or global scale, do not necessarily pay no attention to their living environments. Some good practices, such as a good collaboration between company, residents and policy, were found there too.

Conclusion: a toolbox for supermix coaching

This conclusion returns to the research question at the beginning and from there draws some conclusions on the future of collaborative and sustainable city making. The article questioned how designers can give form to, strengthen or innovate collaborative city making that enhances the supermixed relation between work and daily life in the city, through understanding how and when collaborations (can) take place between technology, the people living in the city, the local, regional and supralocal governments and companies.

Our answer is clear: there is a need to develop pro-active collaborative design work and policy that involves in "supermix coaching" via two activities. On the one hand, we can achieve this by gaining insight into the turning points in the interrelationship between living and working environments. On the other hand, we do this by taking more conscious collaborative design actions in relation to those turning points. These turning points and actions can now play a role in the "supermix toolbox" of members of the companies, policy or the people in the neighbourhood who want to draft closer relations between work and living environments. We also stressed the importance to consciously address them first from the situated micro level of the architectural space, the human actors and technologies to make them concrete and attractive for those who are immediately involved. Based on that, the perspective of the meso scale of the region and the city and the macro global context and contemporary trends can be developed. Given the fact that working from micro to the macro is a reversed perspective for most urban designers, planners and policy makers, many aspects of the supermix coaching practice still have to be poured into instruments to make them workable on these different scale levels in the field. The richness of the 9 cases, however, has provided a good basis to get started. As a first design output, we have gathered two elements in a manageable kit: the timeline that supports mapping turning points in the relation between companies and their environment and an action toolbox. This kit can be used in new cases during the practice of supermix coaching, in order to be able to anticipate on possible divisions and tensions

between living and working and to explore new interesting collaborative ways of giving form to transitions of our cities together.

Acknowledgements

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