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Land as a Scarce Resource, Work and Workspaces as a Common. The Case of the Metropolitan Region Amsterdam

Bernardina Borra, Gert Urhahn

(Bernardina Borra Ph.D, Rotterdam University of Applied Science, RDM Campus, Heijplaatstraat 23, 3089 JB Rotterdam, bernardina@spciti.org)

(Gert Urhahn, Rotterdam University of Applied Science, RDM Campus, Heijplaatstraat 23, 3089 JB Rotterdam, gert@spciti.org)

1 ABSTRACT

"The city needs work, work needs the city" (Bobbe, CEO Housing Corporation De Key, Amsterdam 2018).

One could argue that since urban designers took a critical stance towards modernism and functional zoning, mixed use became one of the most advocated success factors for thriving urban developments. Yet, how to approach mixed use at different scales of the city and its metropolitan region is still a challenge for all actors of the quadruple helix. This is the case, for instance, for several recent Dutch urban developments.

Since 2014 the Dutch economy ranks among the fast-growing economies in Western Europe, driven by a sturdy consumer trust and steady growing domestic expenditures (Statistics Netherlands CBS). Around 2016, the housing market started expelling work activities from city boundaries as if it were a hinder to its growing demand for room. Our urge to counteract was driven by two main assumptions. On the one hand, urban livelihood cannot solely rely on housing - workspace is essential just as much; on the other hand, "work landscapes" are currently changing at incredible speed and there is lack of vision about future spatial impact. This led to a design research MensenWerk (People's Work) focused on the Metropolitan Region of Amsterdam (MRA), carried out through qualitative methodology, based on archiving, interviews, study of best practises, and workshops on site.

The claim of the research is that the current transition of work is not only of social and economic relevance, but also an urban spatial matter, strictly entwined between scarcity of room, land use efficiency and complementarity of urban activities.

First, we analysed current situations and next possible developments. Then, we sought for urban strategies, tools and typologies to keep and integrate most of the working activities (production as well as services) in the city in order to contribute its urban resilience. It all revolved around the question: how do we now create urban frameworks for future mixed used living environments? As a provisional epilogue and opening of a new phase of the research we would like to introduce a new understanding of work and workspaces as a Commons.

Keywords: Mixed Use Urban Development, Housing Market vs Work Activities, Transition of Work, Metropolitan Region

2 THE CITY NEEDS WORK, WORK NEEDS THE CITY

2.1 Raison d'être

"The idea of working areas with workers is out of date. We must think into working milieus and inhabitants: workforce are the inhabitants of a working milieu." (van Antwerpen, Schiphol Area Development Company 2017)

When the Netherlands came out of the 2008 economic crisis, financial euforia swept the country - easying transactions that had been on hold for almost 8 years, especially in the building sector. The housing market started swelling and, as an immediate aftermath, working activities began facing difficulties finding room or staying within the city close to their clients and networks.

This trend is still ongoing. In 2019, the Metropolitan Region Amsterdam set its goal to achieve 230.000 housing units until 2040. Overall, 100.000 units are due between 2018 en 2025, half of which within the municipality of Amsterdam (Metropoolregio Amsterdam, 2019). Pressure on scarcity of land use within the metropolitan region is high and is complex to relieve. Land use allocation has become an urban battlefield between housing and any other activity of collective relevance, including work.

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Yet spatial plans are being settled for several coming decades. So, already in 2016, we felt the urge to counteract the overarching forces of the housing market. The reasearch we initiated was driven by two main assumptions.

On the one hand, this new stance has no precendents in urbanistics history. Whilst in the past working activities often created the city (Benevolo, 1963), or left it finding room elsewhere to relocate (Abrahamse 2003); nowadays transformation areas for expansions of the city (both inward and outward) come to grip with existing and functioning working areas. Besides the tangible aspect that there is no more available land for new developments of working areas, relocation is hard to organize and might not benefit the entrepreneurs, nor can it be dealt without causing a huge impact on local economy (Plabeka, 2018). Moreover, entrepreneurs and civil movements are raising attention to how urban livelihood cannot solely rely on housing; workspace is essential as well (ORAM, 2018). Under such crimcumstances, the Metropolitan Region of Amsterdam, in short the MRA, can be taken as a paradigmatic case.

On the other hand, if the XX century has been considered as the "fast century" (Hobsbawm, 1994), the XXI has been already categorized as the "accelerating" one (Kurzweil, 2001). From renewable energies to circular economy or logistics, actual transitions in many fields are suddenly faster and have a heavy impact on spatial planning (REOS 2017). "Work landscapes" are currently changing at incredible speed too. However, despite the long-held interest in the transition of work in the social and economic field (Went et al., 2015; 2017), it has until now received very little attention from a spatial planning point of view.

Thus, "How do we now create urban frameworks for future mixed used living environments?" became our basic research question.

2.2 Methodology

The investigation has been carried out through qualitative research based on facts and data finding, archiving, interviews, study of best practises – in and outside the MRA. Eventually the results of the first part have been tested with workshops on site at four locations spread across the MRA. The four locations are: The main shopping street of IJmuiden, a small town at the North Sea edge of the MRA; Achtersluispolder in Zaandam, an industrial area that is due to be transformed into a work-living mixed use area; Zeeburgereiland in Amsterdam, a future housing area (from scratch) with room for the creative sector; and the Flight District 1, within the future Lelystad Airport Business Park. The research and workshops have been used as an integral investigation over the entire metropolitan area and gathered a multidisciplinary group of diverse sponsors and collaborators ranging from local authorities to different private actors.

The results of the research deliver a series of specific local advices, as well as insights that could be applicable in similar contexts of other European metropolitan regions (MensenWerk 2018).

3 HIGHLIGHTS FROM THE ANALYSIS OF THE LOCAL SITUATION IN THE METROPOLITAN REGION OF AMSTERDAM

"As a consequence of its triumph the city is letting its own social divisions grow wider. That confronts us with the question if we want to remain an inclusive city. Can you keep up being an innovative, successful, and socially sustainable metropolitan region?" (Karlshoven, De Argumentenfabriek, Amsterdam 2017)

3.1 State of affairs

As previously mentioned, the amount of new housing forecasted to fulfill the need until 2040 (in some documents sketched till 2050) purports impressive figures compared to the size of the metropolitan region, which is 2,580.26 km2, and its actual density of 900/km2 with a population of about 2,332,773 inhabitants.

However, seen from a broader perspective, the MRA can hardly compete with other relevant European urban cores such as the London Metropolitan Region of 8,9 million inhabitants, or Greater Paris of 7,2 million inhabitants. A more suited reference term for the Netherlands is the Randstad region with 8,2 million inhabitants.

Bluntly put, the city of Amsterdam and its region are growing fast depending on Global trends such as demografic changes, as well as, for instance, specific circumstances as the Brexit influence on local economy (Het Financiele Dagblad 12-06-2019). Yet, the comparison with other European metropolises also shows how governance and legal frameworks in the Netherlands might not be up to date for such an unprecendeted



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situation. In fact, areas already in use demand for innovative forms of land use with higher density and technical solutions in which housing and work can be combined. The Dutch government only recently started adressing this issue (REOS 2017-2018). On top of this, housing production has traditionally been a sector with a big influence on the general economy (De Vlettter, 2004), having a strong impact also on policies, overshadowing the needs of working areas and their relation to urban fabric (ORAM, 2018).

Additional issues emerged from the research are of very differente nature. The first is about compartimented professions: The modernistic division of housing and working has shaped education and professions through decades and still endures. In other words: municipal officers, developers, real estate agents and many peers alike revolve their expertise either on housing or working, very seldom on both. The second one is strictly immediate and relates to the lack of overview due to complexity and speed of the process. On the one hand it is difficult for the local government to keep real-time track and formal trace of land use of work spaces, especially concerning informal work (e.g. the amount of free lancers has grown exponentially in the last years in the region). On the other hand, establishing a relocation plan across the metropolitan region entails several government levels to agree and exchange information which requires a governance structure that is still being put in place (MRA, Plabeka, 2018).

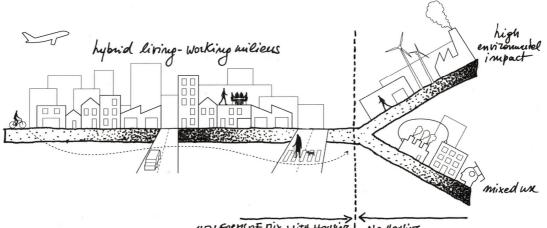
Despite all controversialities, already in the time span between 2016 and 2018, initial positive signs potentially leading to a future change in policies could be noticed. Since then, the way to apprehend and approach an urban mix of housing and working at different levels across the region is becoming a sensible issue, scrutinesed by all stakeolders. Clear evidence for this is for instance stated in the new spatial policy document (Omgevingsvisies NH2050) of the Province North Holland, which is partially included into the MRA. The document states the following guidelines to which all municipalities have to abide and contribute: Acknowledging the region as a great city, including sustainable economy and innovation as relevant factors, and supporting area related work (gebiedsgericht). However, during the research time span we could identify what we categorised as persistent challenges to guarantee resilient spatial planning for the future of work in a metropolitan region.

SPATIAL PLANNING CHALLENGES FOR THE FUTURE OF WORK 4

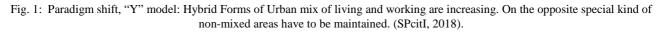
The following five challenges - along with potential guidelines or instruments how to adress them - might appear basic, and they actually are. Nevertheless, the true discrepancy between the abstract planning realm of research and daily practice for instance of the four case study workshops, made evident that these challenges yet need to be more clearly outlined in order to find efficient solutions throughout practice.

4.1 Organising a diverse range of living and working milieus

"Mixed programme is the ideal breeding ground for the (new) economy, attracts plenty of talented people and keeps inhabitants within the city. Mixed programme turn the city into an emancipation machine, strenghtens agglomeration forces and offers people the chance to benifit from its thriving economy. Above all mixed programme reduces spatial segregation." (Municipality of Amsterdam, 2016)



NEN FORMS OF MIX WITH HOUSING! NO HOUSING



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"Traditional monofunctional industrial areas will disappear (except the ones with extremely high environmental impact). Multifunctional areas with also educational premises are the future." (Spork Municipality of Amsterdam, Economic Affairs, 2017)

In the last years the division between working and living has entered an epochal shift: from the modernistic linear dichotomy to a new model shaped in three branches like a "Y" (see Fig.1). In modernistic zoning plans, the cut between living and working was sharp until later local circumstances disrupted the standard design abstraction of life. What can be now discerned is that the urban development trend is moving towards a dichotomy between a broad possibility of hybrid milieus ranging from "living-working" to "working-living" on the one hand; and, on the other, working milieus that cannot be mixed with housing, but with either other activities (e.g. research clusters), or cannot be mixed at all. The whole "Y" creates and sustains a regional spatial-economic ecosystem.

4.1.1 <u>Hybrid living and working milieus (Left half "Y" Fig.1)</u>

Current hybridisation of living and working is stimulated firstly by last years' spurt of free lancers - not only creative class, also small entrepreneurs- who need urban proximity to clients and their network (Priestley, 2013), and secondly by the increasing environmental friendliness of production technologies becoming more compatible with living.

Challenges related to hybrid milieus are for instance: 1. Preserving affordable working space; 2. Organising logistics and mobility; 3. Differentiating programme and related urban typology for the hybrid milieus of a whole region; 4. Steering clear from "false friends" such as the wrong perception of the circular economy land use footprint, which is larger than expected.

The workshops on IJmuiden Centrum and the Sluisbuurt in Amsterdam were both representative for new hybrid milieus, living with a complementary mix of working. Yet, the starting conditions and future outcome are extremely different. In IJmuiden the municipality and local housing corporation have decided for the theme of health and care. Sluisbuurt will become a "creative district". IJmuiden is a secondary city and will keep density to a medium FSI, Sluisbuurt will become the first highrise district of Amsterdam from scratch. Concerning work spaces in both plans (that are now at different stages) the intention is to keep human scale by developing ranges of small working units, mostly at street level and spread through housing units. Despite both plans aim for urban mix, it is evident that the two areas are fairly dissimilar and therefore strategies, processes and results will be utterly different. IJmuiden will have to brand itself and not overestimate its potential, while the Sluisbuurt needs to keep housing market at bay and organise an entrepreneurs platform to pioneer work in the area.

At the other end of the spectrum of possible diversity of hybrid milieus is the plan for Achtersluispolder in Zaanstad. In contrast to the situation in Amsterdam, here, the municipality owns little land. Yet, they foresee new transformation development for a part of the area from only work to work-living. Present entrepreneurs may continue their businesses there, while the municipality has opened up a dialogue with them about different densification strategies at the level of the plot, block, as well as the entire area. They are experimenting with plot exchanges and incentives such as air rights, alliances and associations. The planning ambition is to keep maritime activities as well as SMEs and few bigger companies. The area is already under pressure because it will form a relevant connection between Amsterdam, the harbour and Zaanstad. Despite this, the FSI is not yet determined: the municipality wishes to first understand what are the minimum and maximum capacity increase the site can stand in a all-around approach.

An important finding is that, within the infinite possible variation of the new hybrid milieus, transparency concerning local qualities and potentials paired with a clear coordination within the metropolitan region is key. This would help municipalities and all actors of the quadruple helix to avoid envisioning wrong investments for programme mixes that are not suitable for the area and would result in failure. Also, reinforcing an efficient mobility system based on new technologies, and promoting business models as sharing economy, are a potential asset to invest in (van Huffelen, CEO GVB)(ORAM).

4.1.2 Special working environment, no mix with housing (Right half "Y" Fig.1)

The other branches of the "Y" are either intrisically needed infrastructures, such has logistis hubs, harbour, powerplants, heavy industry, or special regional assets as knowledge campuses (see also Föllings, 2017).

Here mixing with housing is not allowed nor desirable, it would not benefit neither housing nor work, rather the opposite. Monofunctional working areas deserve special care and land use certainty.

It is about areas that have a specific focus, often clusters of compatible activities, based on a certain production ecosystem or special kind of services. On a regional perspective such areas are economical and technical engines on which the region heavily depends. The obvious reason why not to mix is not only the heavy environmental footprint, but also logistics and amount of people working in the area (e.g. further development the Internet of Things), and safety.

As an example, the case study of Lelystad Airport Businesspark (LAB) and the Flight District I is an area of development that represents both right arms of "Y" model. The green field development is lead by the setting of the future second touristic airport of the region. Due to the airport, living is forbidden, except for hotels. Part of the area is being developed for a mix of medium, large and XL companies, such as the distribution center Inditex (170.000m2 on a 35ha plot). The whole development focusses not only on logistics, but also ICT, hospitality en agrofood. Around the three latter programmes, the Flight District I will host a cluster of companies, hotels and knwoledge institution related to the airport and big companies from inside and outside the area. The highlights of this case study is the collaboration between different interested stakeholders from the beginning on, its regional relevance and the complex mix without housing.

4.2 Optimizing the mix of mutually strengthening activities

The second challenge is to maintain balance and inclusivenss in the mix of housing and working, as well as between different kinds of work. Possible solutions rely on seeking consistent added values. Added values could be generated by supporting weak ties, as well as exploring new blends of typologies.

4.2.1 Weak ties and affordable rent

Same as inhabitants looking for a house, workers - and their companies - seek for added value in their job and its environment. Various statistics combined with interviews we made (e.g. Ten Hoonte, CEO Labour Market, Randstad/Trendrapport Stad) confirm that the added value of an area are key factors for choosing a job position. Following the basics of experience economy, it is commonly acknowledged that the added value is mostly perceived by the amount of likelyhood to meet, both formally or informally, in the open or public spaces, services and so on. These are the places where "weak ties" occur, connecting acquaintances while bearing the highest potential for people to make turns in their life, career, education (Kremer, 2017). It is not only catering, sport venues, public services or shops; it is about all kind of activities that are less profitable, but help consitute social networks. However, such "third places" (Oldenburg, 1989) are not the only vehicle of weak ties. Leaving room for affordable workspace for small entrepreneurs or other groups that do not have full access to the market is essential to contribute to urban livelihood, local economy and characterize the identity of neighbourhoods, as well as the overall metropolitan region.

Interviews and investigations revealed how far such activities are not only vital for the vibrancy of a city, but also more corporate profitable companies partially rely on them and benefit of their proximity.

Key factors are multifunctionality of spaces, an integral approach (space, strategy, business models), flexibility through time especially for contracts, and last but not least "open gaps" to enable later annexes or changes.

As an example, the future learning and working cluster of the LAB in Lelystad is meant to be of high standards and relevance. The goal is to attract highly educated workers and researchers. The outstanding location in proximity of the airport is not enough to induce urban life on a green field area. During the workshop the involved stakeholders agreed that to achieve their goal, they need to engage more small entrepreneurs and other initiative takers that could bring in the added value and enhance a vibrant contrast.

Also municipalities have a role to play in guaranteeing affordable working space. Possible implementation tools are: 1. smart tendering where the developers have to be consulted already during formulation in order to make it feasible 2. "social rent" for working, as in social housing; though this one is not yet elaborated how to implement such an instrument, and many regard it sceptically because of subsidies dependency 3. more complex forms of land lease according to the mixed programme, and/or shifts in the result value 4. incentives at area and regional level. Special business models with differentiated rent can be stimulated within the market itself developing a win-win situation, in Dutch called "social-business case". An example

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is Contact in Amsterdam, a joint venture of a creative hub of small start-ups entrepreneurs of makers (from carpenter, to taylor or 3-D printer) and the corporate engineers office Royal Haskoning. Together they rent a whole groundfloor of a building in a working area soon to be densified with additional housing. They share facilities, amenities, and the "flow". The large company financially backs the smaller ones, and at the same time they all benefit from mutual influence.

4.2.2 <u>New blend typologies</u>

Housing with high ceilings at the ground floor for commercial use, live-and-work units, are well known typologies where living and working can be combined. Nevetheless, this field is still green: design, combined with financial strategies and technologic development can bear plenty of innovation in the way to combine not only living and working, but especially living and being productive. In other words living and working can be combined in new blends, as well as with new means of earning or spending less. This issue it twofold. Firstly, as referred to earlier, recent technological developments allow for a wide range of working activities that before were incompatible to move closer and be combined with housing (at area, block or building level). This opens up a new creative era for typologies of the city of the future (e.g. Casco by Dedato architects in Houthavens, Amsterdam). Secondly there are technologies that can turn housings, or buildings in general, in value generating assets. The most common options are energy production and water or warmth retainment. During Ijmuiden workshop; in order to add other groups to live and work in the small city centre, we discussed about promoting DIY housing for cooperatives interested in high sustainability standards, energy production and water retainment. That could pay-off the new inhabitants, as well as partially serve the surroudings. Besides being sustainable, such interventions are not only value generating, but also community building. In such way, living and producing are blended and locally bound.

4.3 Tackling the trasition of work integrally with other transitions

Transition is anyways about continuous becoming. The actual challenge relates to how to approach the unprecented speed rate and the entangling of the transition of work with countless other transitions of which none can predict, or even attempt having, the overview of the overall outcome. Most of the four helix sectors plan future based on today's urge and knowledge, if not with a rear-view mirror (McLuhan, 1967). In any of the workshops, we observed little awareness of this challenge.

Obsolescent legal frameworks and long term investments or contracts that are not easy to break are partially to be blamed for such short-sightedness. In addition cultural and systemic inertia of each sector hinder adequate changes up to pace in time (Hoornstra, 2018). Yet, all transitions happening now direly demand room in time to be planned through, and in space to be embedded. Moreover, there is a clear conundrum in technological choices: all technologies are developing so fast, though it takes so long to put things in place that choices have to be made before being able to unravel all downsides (Bossink, 2018).

It may sound like a worn out refrain to some, but collaboration and open knowledge transfer among quadruple helix sectors is here utterly needed. Our research brought us to stress it once again, because it still does not happen enough (ORAM, 2018). Professionals who have perspective especially from the academia should be matched by government and industry in order to feed implementable insights and prevent investments that would be bygone in a decade. This concerns especially the integral approach of transitions. In a region like the MRA for instance, energy, logistic, and data need to be adressed as integral as possible together with work. For this the triple helix works best at regional scale, whilst the quadruple at local (Quarles van Ufford, 2017).

4.4 Turning the lack of grip into operational matter, from regional to building scale

4.4.1 Framing instead of prescribing

Often municipalities face a governance challenge, finding themselves in a difficult position to steer developments: lack of certainties, lack of land position, little leverage to induce the market towards desired plan ambitions. As a backlash, such situations do not ease dialogues with entrepreneurs, developers, and all other stakeholders, making it difficult for them too.

From this perspective, the case of Achtersluispolder is quite exceptional and shows a different possible approach: learning by doing. The municipality has engaged in dialogue with local entrepreneurs, including

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the harbour on the other side of the IJ and the larger surroundings. Furthermore, in order to attract the market, the municipality has chosen for a less prescriptive line of action, setting wide frames determined by a series of qualitative ambitions and a set of minimum conditions to be fulfilled, as well as maximums not to be exceeded. Within the minimum and maximum there is room for entrepreneurs and developers to experiment and adjust strategy in agreement with the municipality. That means the municipality has loosened their grip, but keeps continuous control on the evolution of the plan and intended results, leaving the market lead within the given frame and learning what planning tools are the most adequate to apply. No FSIs are assigned yet. This will be done in due course when a critical mass of projects will reveal the test of the minimum and maximum. In this way the municipality keeps an active role engaging the market in a responsible way to comply with social, economical and spatial quality criteria envisioned for the area.

4.4.2 Spatial framework, fasing and temporary projects

"A good spatial framework is a basic condition for future resilience" (van Antwerpen, SADC, 2017)

According to several relevant interviewees and engaged stakeholders a gradual urban development based on a defined framework to be developed through fases in time - of which only the very first steps are set -, is a resilient approach, flexible and most appropriate to todays circumstances. It can be said that, with due adjustments, such "Learning Urban Developement" approach (Peek & Stam, 2019) is valid from regional to building scale. Hereby temporary projects and initiatives play a crucial role to ignate processes or test guidelines and further directions. If such projects are succesful and able to be stabilized or up-scalable, they can even become permanent. In order to allow this, special legal status and/or strategies have to be developed, as well as sustainable business models - all of which requires consistent dialogue of all involved stakeholders.

In the Sluisbuurt, the first buildings will arise in 2020. The starting phase in a tabula rasa development is extremely delicate. The plan framework has prepared a pioneering fase with two different strong inputs: one more permanent but dynamic, the other more temporary and flexible. The first input relates to the key role played by the school InHolland of Diemen that will trailblaze the area with about 6.000 students and teachers. They will establish a new seat and use the development of the area as main topic of their educational programme as a living lab; analysing, testing, monitoring and undoubtly contributing to its liveliness. The second input befits the plan spatial framework and its phasing: hosting temporary activities of creative entrepreneurs that are now being selected via open tendering. The municipality has long investigated with "typical" creative entrepreneurs, to understand their needs. The most relevant insights have been: affordable rent, plug and play condition to move along with the development, changing plot according to construction fases, though providing a longer investment and presence in the area; and eventually support for later on to achieve a permanent position. This open framework allows experimentation (and monitoring) at area level.

4.4.3 Experimenting and monitoring

Indeed, experimenting in urban development is of utmost importance, especially in the realm of working areas or mixed ones. It also is an important layer of the new Environmental and Planning Act (Omgevingswet) at national, province and municipal levels. In order to be consistent with the aims, experiments need to be stimulated, backed up and monitored. For this the example of the Maatwerkzone (Bespoken Work Zone) of the Port of Amsterdam is quite relevant. The Port has identified two areas within its borders that now fall under a special status: all companies within are allowed to experiment practices that enhance circular economy and innovation, especially for exchange of rest materials or other activities that are not allowed within not up-to-date legal schemes. The Port did not change anything in spatial terms (yet), but has set up a special "green lane" in agreement with the regional environmental service department and the municipality to smoothen the process for application of permission or other required authorizations to proceed. Meanwhile their knowledge on the topic is expanding, as well as that of the companies involved.

4.5 Formulating shared ambitions and responsibilities

4.5.1 <u>Open involvement</u>

In The Netherlands, the field of urban development is limited to government, developers, investors, housing corporations and few other big players. It is already complex enough to get all these parties together.

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However, when concerned to mixed use urban developments or working areas, breaking down this closed network is a challenge that needs to be dealt with at least two main issues: professional division of knowledge and experience, and taking on board the end user, the entrepreneurs.

On the one hand, parallel to legal and financial systems, also professional expertises are separated: developers, advisors, designers, real estate agents, are most often either specialised in housing or working. Especially at area level, a new sort of expertise has to be nurtured that can embrace programmes in a wider merge. On the other hand, entrepreneurs hold the practical knowledge, and most often cradle the needed innovation changes. They ought to be part of the planning decision makers from scratch. Saying that, it has to be taken in account that not all entrepreneurs have time and skills to join, therefore entrepreneurs unions can bridge the gap, and/or plans can start with a group of more willing entreprepeneurs that then will spark participation among a larger group. A careful begin of a planning process involving all stakeholders is elaborated and may take longer time than usual, yet it provides the base for agreements and is a benificial investment for faster implementation (ORAM, 2018). This entails, among others, a new breed of tenders and operating plans (Hoonstra, 2018).

The workshop in Ijmuiden is a tangible example of missing stakeholders. It was attended by municipal officers, directors of the local housing corporation as well as a representative of local entrepreneurs, but during the session it became clear more entrepreneurs should have taken part, as well as a financial advisor and a real estate expert that could straddle housing and healthcare/caregiving issues. Part of the questions were thus to be postponed, delaying the process.

5 SUMMARY AND CONCLUSIONS: TOWARDS RESILIENT METROPOLITAN REGIONS

5.1 Scales

Aiming at providing room to the future of work, we need to re-understand how to operate on three scales.

5.1.1 <u>The Metropolitan Region</u>

Daily life, production and consumption chains, services, are greatly bound to regional scale. Whilst a metropolitan region is an offical system of urban cores and their hinterland, each realm of dialy life does not pertain to formal borders. Any of them concerns a bespoken regional scale that is not contained within administrative borders. It can only be partially contained if clear ambitions among stakeholders are set, e.g. embracing circular economy. Economical and social inclusiveness can be achieved primarily by looking for complementarities of functions and connections at regional scale. Hereby travel distance and integrated mobility are essential to ensure access to everyone and cohesion of offer (Quarles van Ufford, 2018).

5.1.2 The backbone

To support and maintain connections across the region, infrastructure and networks are basic conditions in the field of energy transition, logistics/mobility, and data (these three at least for the MRA). Smartly organised infrastructure systems are thorough investments for the future and offer open frameworks at regional scale, while enabling economical and deographic changes. This is the level where the highest potential for making a Metropolitan region inclusive lies.

5.1.3 Local area

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"The area is the classroom. That's where an even platform is created, by seeking solutions together. The scale of the area must be given more meaning for new regulations, in order to make area development as future-proof as possible and that stimulates area-oriented economic renewal. By understanding and initiating the process, by testing, you will gain insight into the opportunities, risks and coherence of new value development, as well as achieve reasonable shares of contributions and costs." (Ravenhorst and Spronk, 2017).

The succesfull accomplishement of an urban development or transformation at area level depends on areaspecific factors, in correlation to its surroundings. Ideally, thanks to involvement of all stakeholders, and "learning urbanism", developments could achieve a smoother way to absorb changes, in a resilient way. All in all, each area needs a tailormade approach.

5.2 Spatial planning implications

Central to the research is the insight that the future is complex and exact predictions are impossible. We must, so to speak, plan for the unknown without defining a programme or planning specific activities, but indicate and stimulate potential use. Needless to say, in doing so, we must of course take into account the knowledge and needs of today, but in full awareness that society is constantly changing. This calls for the following:

5.2.1 <u>Clear frameworks and simple rules</u>

Rules that are too convoluted or change during the process can be regarded as an overkill. Simple and clear rules, fixed for the duration of the process, build trust and provide clarity, transparency and continuity. This makes the process more accessible to different types of stakeholders (Moroni, 2018). Essential here is the balance between what needs to be laid down as minimum in order to guarantee a solid basis, and what can be left open to stimulate development and innovation. That translates in ambitions for the longer term, and frameworks, with financial and legal openness to experiment, defining only what exactly is required to achieve the next phase of the process.

5.2.2 <u>Open involvement</u>

It is important to include entrepreneurs from the beginning of planning process, and to train new professional expertise that can bridge and overlap knowledge about housing and working.

5.2.3 <u>"Activities" instead of "functions"</u>

Living, working and leisure increasingly converge; in city districts, neighbourhoods, streets and buildings. Spaces increasingly accommodate overlapping activities, including production. Therefore, we want to introduce the idea of 'activities' to suggests that 'functions' are more fluid. The space can be understood as the means in which activities flow, sometimes overlap and sometimes not, or even change significantly. Meanwhile the space is resilient and does not change, not substantially at least, being ready to accommodate next activity.

5.2.4 Space for experimentation and evaluation, blanks

The transition of work calls for new spatial practices. This requires pilots and tailor-made experiments, with a variety of deliberately chosen frameworks of experimentation. Regular joint monitoring and evaluation helps to spread lessons and successes as new standards or guidelines.

Eventually, planning for the unknown requires planning gaps: blanks in the process and in plans, to be filled in in time moving along with an uncanny future (Urhahn, 2010).

6 FURTHER RESEARCH: VALUE WORK AS COMMONS

With our research we have attemped emphasising how work is merely as essential as housing, and how urban development trends are making it harder and harder to accomplish balance. This is empirical daily evidence. At the same time, work has ceased to be as standard and predictable as in the past. The role, meaning and appreciation of work in the economy and society is changing, and that has direct spatial implications. Nonetheless, work is an intrinsic value for an attractive living environment. Being active and productive is a basic human need and is essential for our identity, independence and dignity (Sennet, 2008). At the same time, it is at the base of our social bounds (Arendt, 1958).

This is why we want to further investigate the concept of work as a Commons. As by history and academic literature the Commons are resources that are accessible to all members of a group or society for individual and collective benefit. These can be natural resources, such as clean water and clean air, but also sources of information, knowledge and culture, anything that is meaningful to the livelihood to its realted community (Lessig, 2001; Boyle, 2008). It is a given fact that we no longer directly depend on resources the same way as in the past, and at the same time new economy may threaten our productive capacities as human beings. In a Marxist reading we could say we are getting "alienated" even from our capacity to work. Therefore, work seen as a collective asset could be newly framed under the category of Commons. Consequently spaces that enable work should be also considered a Commons.



May this conclusions still be precarious and not enough supported, the research is now entering a next phase to further elaborate on the topic of work and urban planning for the future and collective values, at the Rotterdam University of Applied Sciences. The central question focuses on 'Work as a Commons. Planning instruments for urban ecosystems of work'.

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