Lyinding Values

Defining key public values for peri-urban inhabitants to inform the implementation of 15-minute City principles



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Defining key social values of peri-urban inhabitants to inform the implementation of the 15-minute City principles

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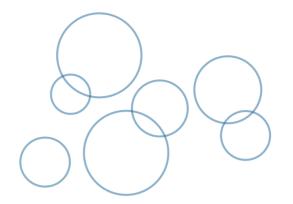
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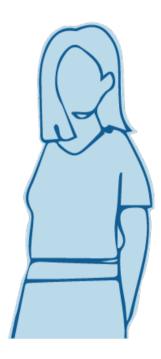


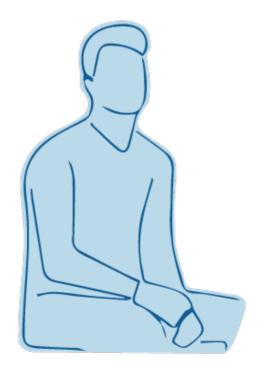


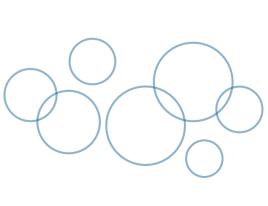




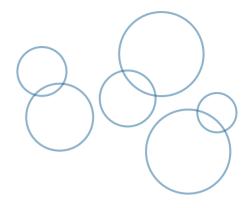












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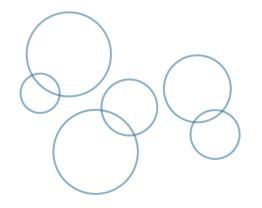




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This thesis marks the culmination of Master's Urbanism, completing a seven year long academic journey here at Delft University of Technology. A journey that has been both challenging and deeply rewarding. Working on this single topic for the past nine months have taught me many more things then I had expected. As I am about to finish this journey, I feel ready to take the next step of my life, wherever that may lead me.

I would like to thank my mentors, Rodrigo Cardoso and Dr. Reinout Kleinhans, for the support and knowledge they have provided me throughout the graduation. The weekly sessions with Rodrigo were the moment I could structure my work around. In the beginning he helped envision this clear plan and let me dream of the things I wanted to achieve, but helped me stay within the realistic boundaries of my available time. Rodrigo let me develop my work on my own, but whenever I needed a little push provided the necessary help.

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I am grateful for all the support I received along the way, and I hope the following

pages reflect both the effort and curiosity that went into it.

Delft. June 2025

Jelle Schotanus

In response to the growing challenges of sustainability, liveability, and accessibility in peri-urban regions, this thesis aims to understand how the principles of the 15-minute city model can be implemented to peri-urban contexts through the lens of public values. While the 15-minute city, originally conceptualised for urban areas, aims to localise all daily needs within a 15-minute walk or bike ride, translating it to car-dependent peri-urban areas is neither straightforward not possible within the current confinements of the concept. This research bridges that gap by exploring how a human-centric, value-based approach can inform the spatial adaptation of proximity-based planning principles in peri-urban regions, specifically focusing on the Dutch municipality of Ede.

Peri-urban areas have been overlooked in urban planning for a prolonged period of time. Characterised by highly dynamic spatial and social conditions, these areas suffer from relevant urban challenges such as car dependency, reduced access to amenities, population growth, and political distrust. All highlighting the urgent need for renewed attention towards this landscape.

To implement the relevant planning principles behind the 15-minute city in the peri-urban landscape through the lens of public values, two key frameworks are integrated together. The Public Value Sphere framework (Herzog, 2021) and the Human Needs framework (Cardoso et al., 2022) bridge the gap between the planning principles and public values, which have been specifically defined in this context. The former provides five public value sphere for the peri-urban context; economic opportunity.

ecological quality, social equity, liveability, and health/safety. Each sphere encapsulated spatial public values that relate to the built environment.

The latter, rooted in Max-Neef's theory of Human Scale Development, distinguishes between 'needs' and context-specific 'satisfiers'. Be identifying diversity, proximity and accessibility as the core 15-minute city principles their five 'needs' are distinguished as Inclusiveness, mixedland use, sustainability, walkability, and connectivity. By relating the concept of public values to the 'satisfiers, this thesis constructs a conceptual framework that allows public values to spatially translate 15-minute city principles.

Empirical data extracted from focus-groups, organised for the InPUT project, a co-creation workshop with a specially developed pattern language, and a final round of digital feedback from participants formed the participatory process that enabled the specification, operationalisation and translation of public values into a spatial strategy. This pattern language serves as a tool for the designer to communicate with citizens and let them articulate their desires.

By mapping the (mis)alignment between perceived values and desired spatial outcomes, this thesis offers insights into how humans act, think, and communicate desires. The result is a set of context-specific spatial interventions that guide the implementation of 15-minute city principles through five main identified public values. It demonstrates how spatial interventions based on public values can contribute to a just and sustainable transition of the peri-urban landscape.

Ultimately, this research calls for a shift in the urban planning from time-based planning to value-based planning approach that priorities the human perspective through meaningful participation. In this approach, it is the role of the designer to understand the meaning people associate with spatial interventions and thereby understand underlying public values of stakeholders through identifying the 'why' behind peoples choices.

In doing so, the role of the designer becomes one of a translator, capable of identifying, articulating, and translating the public values that often remain implicit in spatial discussions. It starts with a simple question: "Why?" A question that reframes the urban planning process not as a search for the most desired solutions, but as a practice of finding values.

Motivation



Figure 1: (Platteland En Stad Ervaren Amper Verschil in Bereikbaarheid, 2023)

Today's world is tumultuous. Our climate is changing, causing unprecedented effects, society feels like it is drifting further apart by the day, and a shift in politics can be noticed around Europe with a louder voice for right-wing parties in many elections over the last few years. Ever since the start of my academic journey, I have tried to understand the different discussions in society. Most notably, climate change is a topic that has been continuously discussed during my study of urbanism. It changes our However, people still want to live urban landscape and how we, as urban planners, can and should deal with it. While learning how we can deal with the Netherlands' population steadily climate change in our field and how that would affect society, the societal discussions around farmers' emissions and all the climate-related protests continued to interest me.

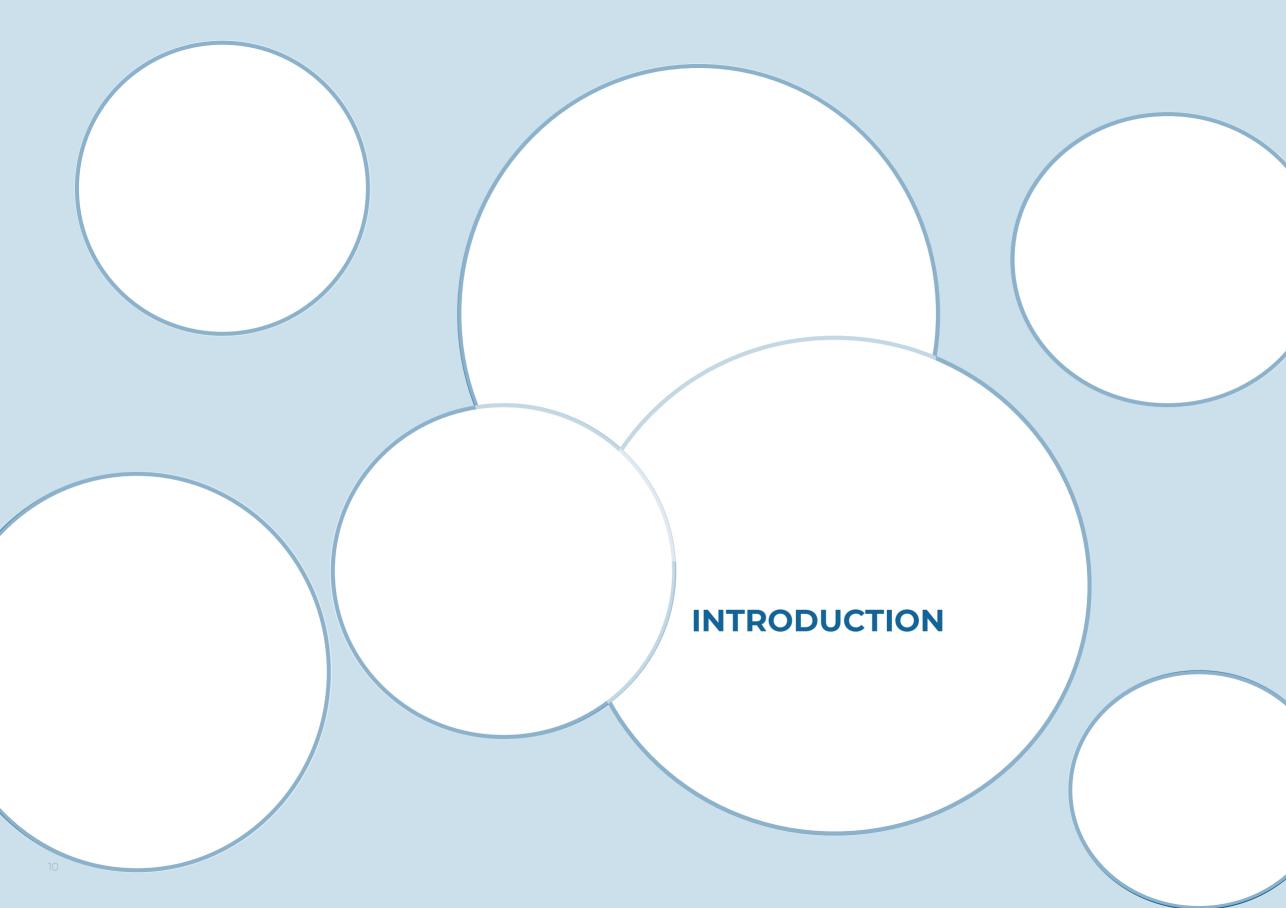
I have lived a privileged life in major Dutch cities my whole life, which gave me a particular worldview that was challenged while I was trying to understand these societal discussions. This fed my interest in understanding people outside of my comfort zone. How do peri-urban areas differ from cities, and can we not have a similar approach to transitioning to a more sustainable future? What are the different challenges we come across?

This interest, combined with having worked for a few months on the InPUT project, solidified my desired research direction: understanding the peri-urban context, how it influences planning decisions, and how we can approach this from a human perspective. This led me to the 15-minute city, an urban planning model made for larger urban areas. How could this model, or what we can learn from the model, help tackle the spatial challenges of the peri-urban

area? Moreover, these spatial challenges are not few. I cannot drive a car, which is not a problem living in the Randstad; however, this would be a problem in most peri-urban areas. The people there rely on the car for many activities, having no other functional alternatives. Activities that slowly go further and further away for them, with shops disappearing and the commercial pull of the larger cities still too strong.

in these peri-urban areas, and that number will only continue to rise with growing. With more studies and resources devoted to understanding how cities can be future proofed, periurban areas are neglected in being prepared for the future. At the same time, it clearly shows that these areas will need it just as hard. This, together, is why my thesis focuses on the peri-urban with a human perspective of values (Moreno et al., 2021; Papas et al., 2023; Pozoukidou & Chatziyiannaki, 2021; Teixeira et al., 2024).





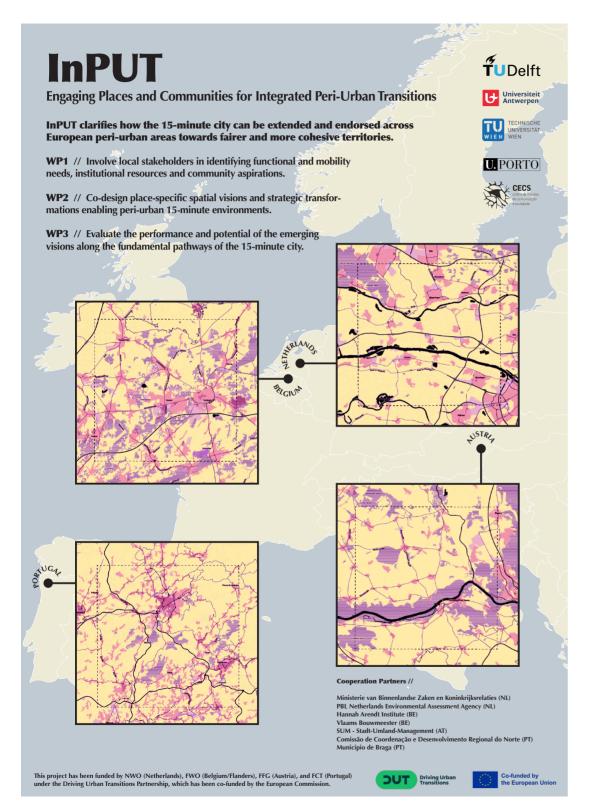


Figure 2: Project poster of InPUT (InPUT), n.d.)

The Driving Urban Transitions (DUT) Partnership is an intergovernmental research and innovation programme aimed at addressing key challenges of urban transitions. Their primary goal is to support cities in becoming more sustainable and improving liveability. This programme is jointly funded by 28 European nations and the European Commission through the Horizon Europe framework. Additionally, the DUT Partnership plays a substantial role in the European Union Mission: Climateneutral and Smart Cities, the European Green Deal, and the Urban Agenda for the EU (The DUT Partnership, n.d.). The 15-minute city concept is central to one of the three 'Transition Pathways' described by the partnership. Aligned with this pathway is the Engaging Places and Communities for Integrated Peri-Urban Transitions (InPUT), a threeyear research project led by the TU Delft. The project critiques the 15-minute city concept by arguing that its use becomes limited if it is only applied in the successful cities most suited to embrace the concept. Therefore, it is crucial to extend them to peri-urban areas where implementation might be more difficult, but interventions toward accessibility, proximity, and liveability are more urgent. In other words, the goal is to democratize the 15-minute city (Integrated Peri-Urban Transitions (InPUT), n.d.).

The project takes the perspective of the spatial characteristics of the periurban areas. This forms the driver for their implementation of the 15-minute city across four peri-urban case regions: Groenemetropool Arnhem-Nijmegen/Foodvalley (NL), Kempen Antwerp-Turnhout (BE), Braga-Guimarães-Famalicão (PT), Eastern Vienna

Römerland-Carnuntum (AT). These four case studies represent most European peri-urban areas, allowing results to inform peri-urban planning across the continent.

With this perspective, the aim is to create connections between mobility, logistics, public space, and planning measures to start the mobility transition in periurban areas. Striving for a just transition, steering toward liveable and climateneutral neighbourhoods.

This graduation research is aligned with the InPUT project. Both focus on how the 15-minute city can be implemented in the peri-urban landscape, but differ in their perspective. Instead of the urban-focused perspective of spatial characteristics of the peri-urban areas, a more human perspective is chosen by focusing on public values. Understanding the needs and desires of citizens through values, instead of making them part of the design process. Lastly, my graduation research will focus on one of the four case study regions: Groene Metropool Arnhem-Nijmegen/ Foodvalley (NL). The specific focus will be on Ede and its surroundings, the Southern region of the Foodvalley.

Peri-urban Areas



Figure 3: Unknown (2024) InPUT project TU Delft

Since the 1950s, urbanisation patterns have resulted in developments that cannot be classified with the classic urban or rural typologies but are best described as 'territories-in-between' or peri-urban areas (Alexander Wandl et al... 2014). These 'territories-in-between' have been described in many interchangeable terms like urban outgrowth, peri-urban, rurban, suburban, exurban, and the rural-urban edge (Mallick, 2024). This thesis will use the term peri-urban to describe these areas and focus on Wandl et al.'s (2014) classification of peri-urban areas since this classification is also used in the InPUT project.

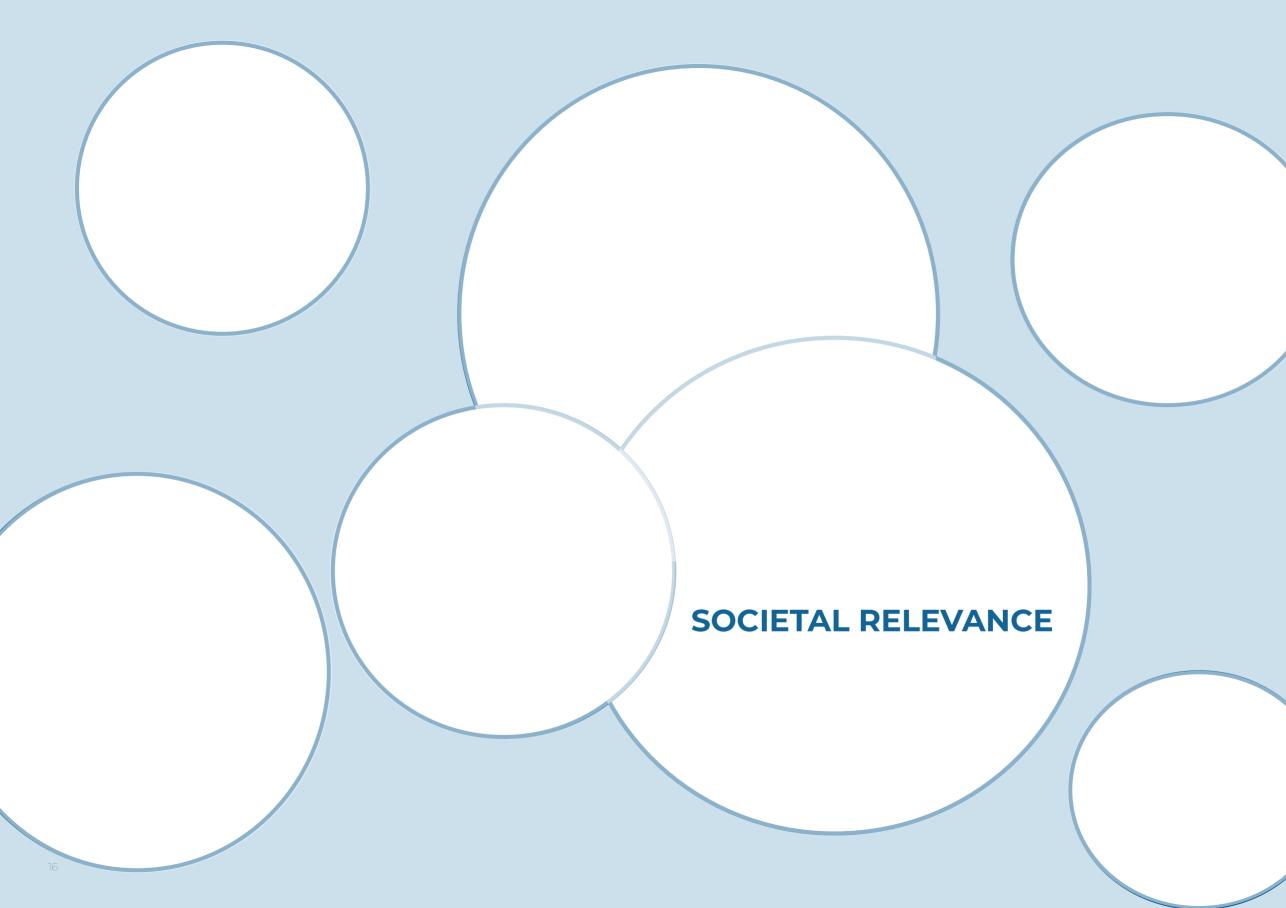
This classification combines population density and Corine land cover data in four distinct steps. The case study area is divided into a grid. Based on population density, a rural, peri-urban, and urban classification is made. Then, based on land use, two changes are made in this first classification: rural cells with peri-urban land use are changed to peri-urban, and peri-urban cells with urban land use are classified as urban. A broader, more specific explanation of Wandl et al.'s (2014) classification is shown in the Methodology chapter when the case study location of the thesis is discussed.

Peri-urban areas are characterised by their low-density, discontinuous development that is highly dynamic in nature, with a mixed character of rural and urban qualities. This combination causes specific challenges with regard to spatial planning and governance (Shaw et al., 2020). These challenges are indicated by Shaw et al. (2020) The results show that spatial planning only precedes half of the peri-urban change, and the other half precedes spatial

planning, which shows the volatile and fast-paced nature of peri-urban areas.

Worldwide, designers we. researchers, are continuously trying to address urban challenges created by climate change, population growth, and many other factors. To achieve sustainability and liveability of urban areas, we must address these issues. This 'wicked' issue becomes even more pronounced in peri-urban regions. where land use is changing at a more rapid pace (Malano et al., 2014). These fast-paced changes also cause these areas to be very different. One peri-urban area is not the same as another. There is a large potential for conflicts to arise, which need to be addressed by urban planners. The development of peri-urban areas is thus very dynamic and heavily context-dependent. Moreover, dealing with this 'wicked' problem is growing in importance, as reflected by its projected growth rate worldwide. These problems can clearly be seen in Europe and the Netherlands, and being aware of their specific local context and high fluidity when dealing with peri-urban areas is imperative (Malano et al., 2014; Mallick, 2024; Shaw et al., 2020).





Spatial Challenges Spatial Challenges

To understand the context, we first need to understand what specific societal problems manifest themselves in the Dutch peri-urban landscape. By taking a closer look at the development of the Dutch peri-urban areas and larger societal issues, we can identify five major trends that have all significantly influenced the Dutch peri-urban landscape. These trends highlight the need for urban planners to change their focus to peri-urban areas.

Car dependency

With the rise of the car, urban planning practices looked away from public transport, leading to a culture of car dependency. Overlooking more traditional urban planning culture, planning practices began to fuel this innocently. With the focus on improving travel speed, the dependence on motorised modes of transport, mainly car dependency, diminished access to other forms of transportation (Silva et al., 2023; Allam et al., 2022a).

Specific policy choices in the Netherlands caused a steady decline in the public transportation network outside the larger cities. The decline in viable alternatives to the car and the expansion of the road network led to a more specific car dependency in Dutch peri-urban areas to this day, as shown by Zijlstra et al. (2022) in a mobility research conducted for the Netherlands Environmental Assessment Agency (PBL).

Public transport is vital for liveability outside of urban areas. However, the continued erosion of this public service has caused a significant decline in bus lines and stops. The main users of the bus in these areas are young people and daily commuters. Cancelling bus lines is a difficult process with no clear general criteria. I out of 5 bus users in peri-urban areas state that they have no other option than the bus and are dependent on this disappearing service. And with the impact of the COVID pandemic on

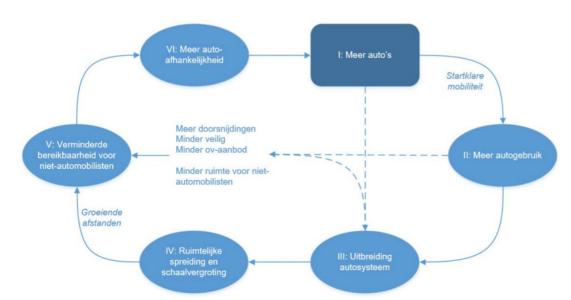


Figure 4: Societal effects of widespread carpossesion in the Netherlands (Zijlstra et al., 2022).

Dutch public transportation use and costs, the decline of alternatives to the car in peri-urban areas has not been stopped yet, fuelling the car dependency even further (During et al., 2023; Papas et al., 2023).

Further analysis of the Netherlands in mobility reveals that the travel times of citizens from cities compared to periurban areas are similar. However, the

mode of transport is vastly different, with peri-urban inhabitants mainly using the car. With all residents averaging a 25-minute trip, the larger distance covered by the peri-urban residents is compensated by the use of the car (Poorthuis & Zook, 2023). This problem enlarges the environmental strain of the peri-urban on the climate and diminishes the many efforts portrayed in urban areas.

Toegang tot winkelen

Vervoerwijze: totaal (auto, fiets en OV) Absolute waarden en binnen gewogen reistijd

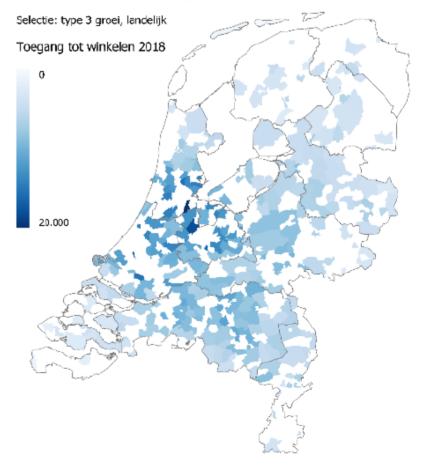


Figure 5: Acces to shops in 2018 outside urban areas (Jorritsma et al., 2023).

Societal Challenges Societal Challenges

Decreasing amenities

Not only have mobility services declined in peri-urban areas, but also commercial shops and services have seen a steady decline, as it was also reported by Büttner et al. (2022) for the PBL. They identified the shrinking accessibility of shops outside large urban areas, fuelled by the emergence of large commercial significant growth rate expected over areas. They mainly situate themselves in urban areas, which leads to town centres

suffering from the slow but steady decline of businesses. This decrease in amenities has a negative effect on the liveability of peri-urban areas.

Population growth

But, the aforementioned spatial problems of the peri-urban area don't stop them from growing, with a the next few decades (Shaw et al., 2020). Thus, the decline in accessibility for

Bevolkingsontwikkeling per gemeente

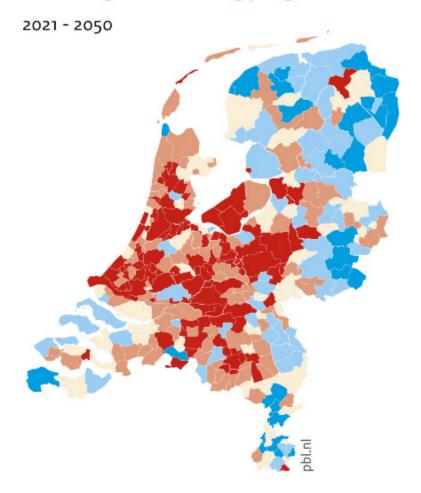


Figure 6: Population growth per municipality (PBL, 2022).

mobility and amenities doesn't mean that these areas are also losing people. Peri-urban areas in Europe will grow rapidly, and in the Netherlands, the majority of the country's population growth over the coming 25 years will be in peri-urban areas. (Poorthuis & Zook, 2023). This immense growth, in combination with declining facilities and mobility alternatives further puts a strain on the liveability and climate impact of these areas if nothing changes.

Public unrest

Tackling these issues without resistance will not be easy. Over the past years, we have seen a trend across Europe's societies of growing unrest with political decision-making. The disinvestment mentioned before parallels an increase in political discontent in peri-urban areas. This suggests a link to larger social issues beyond just mobility (Poorthuis & Zook, 2023). And these larger social issues have manifested themselves throughout the public with the increase of extremism and protests from both sides of the political spectrum, fuelling polarisation (Dobbinga, 2024).

And, with all these changes in society, other fields have acknowledged the growing need for public participation, but urban planning has remained essentially unchanged (Ostad-Ali-Askari et al., 2021). Citizens' participation is both necessary and inevitable in the sustainable development (Samadi & Rafatshahmari, 2017). The future of planning lies in a practice that openly welcomes the exploration and discussion of diverse social and political values (Ostad-Ali-Askari et al., 2021) Being aware of the challenges and values of inhabitants is vital for meaningful engagement and for addressing spatial challenges together.

Ongehoord en ongezien: de wantrouwende burger met vele gezichten





24 mei 2023 om 00:05

2.1K reacties



Figure 7: Various news articles about public unrest

Societal Challenges Societal Challenges

Unfair distribution of resources

Spatial planning concepts that tackle However, many of these planning concept and their related research mobility literature to focus on urban areas, with research on peripheries remaining a marginal topic. This imbalance in scientific focus is also shown in practice in the Netherlands with the policy choices decreasing mobility access in peripheral areas. This tendency further frustrates climate goals by neglecting progress made in urban areas by increasing emissions in peri-urban areas by a growing car-dependency (Geneletti et al., 2017; Poorthuis & Zook, 2023).

This focus on urban areas is often accompanied by the conception that half of the world's population lives in urban areas. However, that means that half of the world's population also lives outside of it, and scholars point out that urbanisation in the twenty-first century is centred in peri-urban areas (Markuske, 2024). Poorthuis & Zook. (2023) also show this to be true for the Netherlands, with 51% of Dutch people living in urban cores and the other 49%, roughly 8.6 million people, living outside of the urban core, as shown by Figure 8. Thus, putting the focus back on peri-urban areas is a must. Steps need to be made, in careful consideration with the local people and context, to develop urban planning if we want to tackle these mobility and amenities issues sustainably. Existing planning concepts like the 15-minute city can help with this goal.

In short, reducing car-dependency, as envisioned by the 15-minute city concept, depends not only on the

accessibility of local amenities, services, and workplaces, but also on effective the aforementioned problems exist, public transport policies. All of which are under pressure in the Dutch periurban landscape. A significant factor focusses on the urban environment. in this stems from intentional political There is a tendency in accessibility and decisions leading to the disinvestment in public transportation in these regions. (Poorthuis & Zook, 2023). Working towards the aim of starting a just mobility transition for liveable and climate-neutral neighbourhoods we need to balance out the urban planning focus, researching the peri-urban.

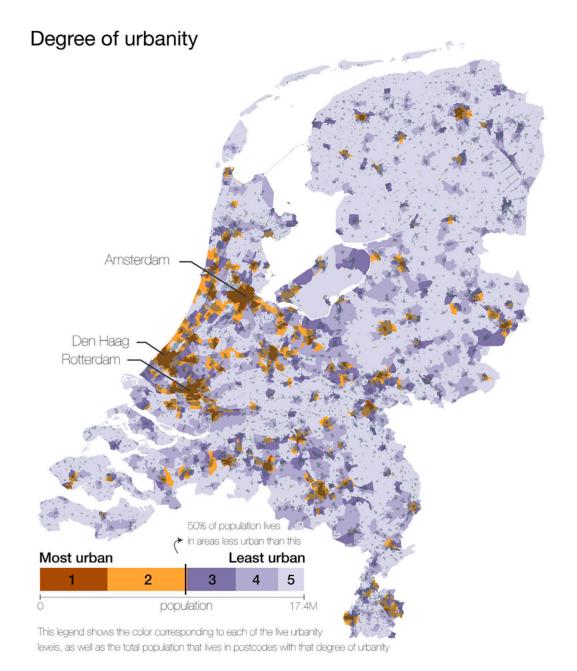


Figure 8: Degree of urbanity (Poorthuis & Zook, 2023)





The 15-minute City The 15-minute City

15-minute city

One spatial planning concept geared towards tackling the issues discussed in the previous chapter is the 15-minute city, a proximity-based planning model from Carlos Moreno. To understand the 15-minute city's applicability in the The concept promotes human-centric peri-urban landscape, we first need to understand the concept.

The aim

In 2015, the Paris Climate Change Conference had low-carbon cities as a point on the policy agenda for large cities. During this conference, Carlos Moreno introduced the 15-minute city concept as a framework for combating greenhouse gas emissions. The concept aims to (re)design cities to have all the daily needs of citizens within reach of a

15-minute walk or bike ride. Breaking the dysfunctional urban patterns of the last decades and the supremacy of the car (Moreno et al., 2021; Khavarian-Garmsir, Sharifi, & Sadeghi, 2023).

and sustainable urban planning with a mixed-use urban form, promoting active mobility, walking, and cycling. This improves the distribution of opportunities and provides proximitybased accessibility to basic amenities. The focus on slow-mobility in combination with a new spread of services could help long travel distances and offer sustainable and equitable alternatives to motorised transportation, tackling cardependency and available amenities (Mouratidis, 2024; Teixeira et al., 2024).

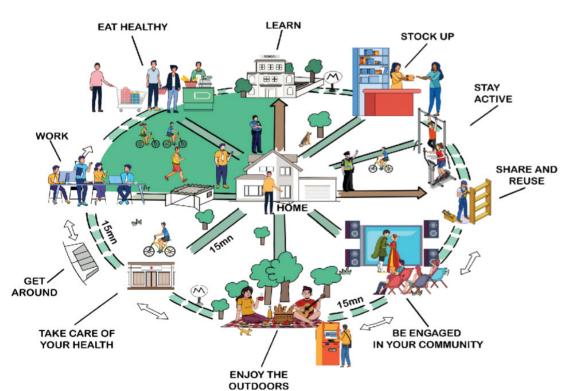


Figure 9: The 15-Minute City: a solution to saving our time and our planet. (Moreno, 2024)

By bringing amenities to the people, the 15-minute city aims to improve liveability in neighbourhoods. To achieve a desired quality of life, six essential human needs need to be met: living, working, commerce, healthcare, education, and entertainment. All within a 15-minute walk and/or bikeable distance of your own house (Moreno et al., 2021).

What if

However, the concept is not a fairytale solution to all the world's problems. no matter how desirable having every essential need within 15 minutes might sound. We see this when we ask the question, "What if?"

15-minute city everywhere?

What if we implement the 15-minute city outside the large urban cores?

Trying to answer these questions will make clear that what Carlos Moreno calls a concept that can be used as a framework is merely a model, lacking thorough scientific background. Moreno himself did realise that the model had its limitations and further research and practical implementations was needed. but the scrutinization by scholars likely went further then he anticipated.

The originality

An overview of 15-minute cities critiques will be provided in the theoretical What if we implement the chapter about the model. However, the main critique of scholars is the

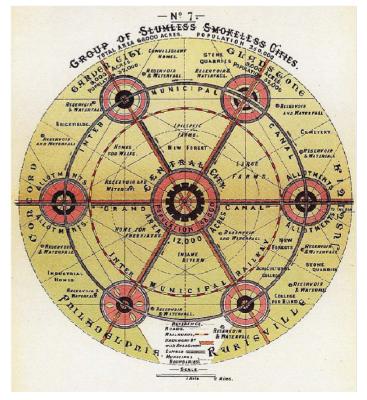


Figure 10: The Garden City, by Ebenezar Howard (Mouratidis, 2024)

The 15-minute City The 15-minute City

overstatement of the originality of the model (Mouratidis, 2024). This should not come as a surprise since Moreno et al. (2021) himself calls it a 'novel perspective' of chrono-urbanism.

broader evolution of similar planning concepts, an evolution that goes further than just chrono-urbanism (Caprotti et al., 2024). Different scholars who have done this name a variety of predecessors. with five of them commonly stated as having the most similarities. These are the Garden City, Neighbourhood Unit, Compact City, City within the City, and lastly, as mentioned by Carlos Moreno himself, Chrono-urbanism (Büttner et al., 2022; Caprotti et al., 2024; Pozoukidou & Chatziyiannaki, 2021; Khavarian-Garmsir et al., 2023; Khavarian-Garmsir, Sharifi, Hajian Hossein Abadi, et al., 2023; Mouratidis, 2024).

All these concepts place themselves in the evolution of proximity-based planning paradigm, an evolution that has been present for decades (Bruno et al., 2024). Some even arque it can be traced back to urban development from prehistoric times (Mouratidis, 2024). Around the turn of the 20th century, these ideas were prominent, but after World War II, urban development departed from the concept of proximity. This was mostly due to the widespread use of cars in the daily life of citizens and the aim of maximising their travel efficiency (Teixeira et al., 2024).

Later, urban planners started criticizing these modernist planning ideals and argued for a return to proximity-based planning for cities and neighbourhoods. The 15-minute city is the latest model to fall under this call of returning to proximity-based planning (Khavarian-Garmsir et al., 2023).

The five mentioned planning concepts and the 15-minute city model have nuanced differences. However, their Therefore, we need to place it within the main ideas are the same: an urban form focused on walkability, accessibility, density, mixed land use, and diversity. All of these attributes combine to the idea of responding to human needs and in an environmentally, socially, and economically sustainable way to improve quality of life. This goes back to the classical 'human measure'. We can see the 15-minute city as the latest label to use this set of principles in urban planning that have been used in different variations since the end of the 19th century (Abdelfattah et al., 2022; Allam, Nieuwenhuijsen, et al., 2022; Mouratidis, 2024; Poorthuis & Zook, 2023; Pozoukidou & Chatziyiannaki, 2021).

> The main difference that can be identified between the 15-minute city and its predecessors is that the older concepts try to solve specific needs, and the 15-minute city model tries to solve them all. It also has a unique approach to satisfying these needs. Instead of bringing people to activities, the 15-minute city tries to bring activities to the neighbourhood, truly restoring the urban planning concept of proximity (Allam, Nieuwenhuijsen, et al., 2022; Pozoukidou & Chatziyiannaki, 2021).

The discourse

However, the truly unique aspect of the 15-minute city is its branding capabilities, with the unfortunate benefit of a widespread discourse surrounding the model. The model brands itself as an attractive, easy-to-grasp, precise, and measurable result of an urban policy to

the public with just the model's name. No matter what your educational background might be, by reading or hearing 'the 15-minute city', you can understand what the goal and potential benefits are (Mouratidis, 2024). And it works well, as shown by the speed of urban planners trying to implement the model in their cities, convincing the public with this clarion call to reshape the urban form with improved liveability. community, and wellbeing (Caprotti et al., 2024).

However, as fast as the model has been adopted, discourses have risen as well in social media and politics. The media attention started in early 2023, mainly in the UK, where it was misinterpreted as a conspiracy to limit freedom of individuals by reducing car dependency (Guzman et al., 2024). And this media

attention was not without success, with the city council of Oxford banned the use of the model due to the noise and misunderstandings of the public (Boer,

The media attention led to a social media storm that questioned the authoritarian nature and controlling potential of the 15-minute city. It got so bad that during wildfires in Hawaii, a conspiracy theorist on X, formerly Twitter, claimed that the fire was purposely started with an energy weapon to make way for the creation of the 15-minute city (Gilbert, 2023). The social media storm got picked up by high-ranking politicians, who started discussing the totalitarian tendencies of the model (Caprotti et al., 2024).

Prominent right-wing politicians. conspiracy theorists and other public



Figure 11: A protester in Oxford, where councillors have received death threats over proposals for 15-minute neighbourhoods. (Pope, 2023)

The 15-minute City The 15-minute City

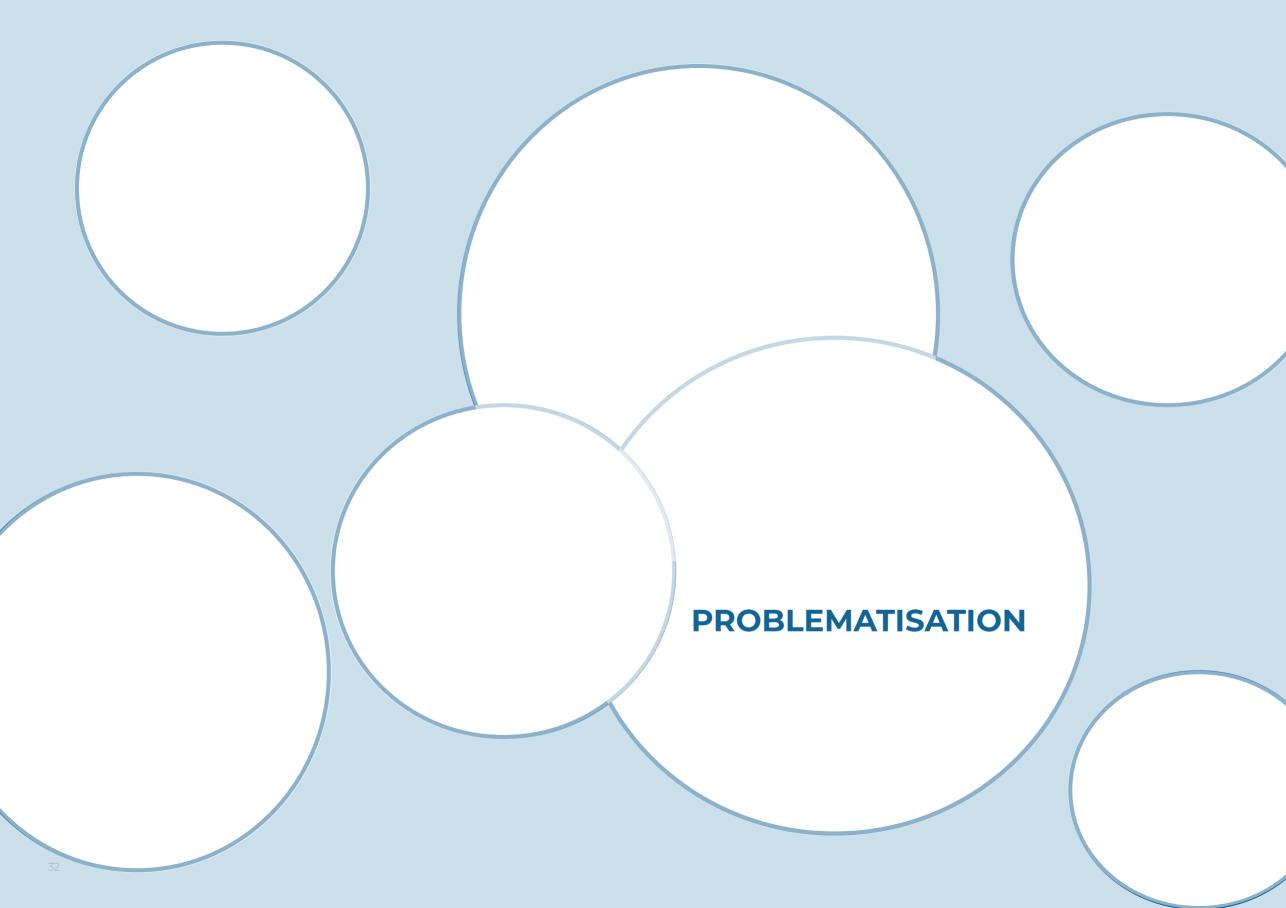
figures started to call the 15-minute city a 'global socialist ideology' with the issue of impeding individual people (Marquet, Anguelovski, et al., 2024). British Tory MP Mark Harper said: "Right across our country, there is a Labour-backed movement to make cars harder to use. to make driving more expensive, and to remove your freedom to get from A to B how you want" (Gilbert, 2023).

German MEP Christine Anderson said that if a particular shop is outside your 15-minute city area, you wouldn't be allowed to cross to another area. And that with identity checks, you would be allowed to cross that border a few times a year, with exceptions for the rich (Verheijen & Dijkstra, 2023). (Boer, 2024) states that the devotion of their car is the most important reason for these right-wing politicians to condemn the 15-minute city. And, all of these critiques that 15-minute cites are from the elite and parachuted onto the cities to trap their inhabitants, are often too easily recirculated (Caprotti et al., 2024).



Figure 12: Protesters marched across Oxford against '15-minute city' plans (Silva, 2023)





A New Perspective A New Perspective

Applying the model outside its scope

Another limitation of the 15-minute graduation project, is the application of the model outside of urban cores. This was one of the limitations Moreno (2021b) himself acknowledged. He stated that context-specific implementation was important, which could expand his concept to the concept of the 30-minute territory. Poorthuis & Zook (2023) arque, like Moreno, that in this instance. the exact number of minutes is less interesting, but the aim still is a decrease in car-dependency and shortening daily trips. Using the term 30-minute territory of 15-minute countryside would mainly just lean on the branding capabilities of

the model

city, directly related to the goal of this However, simply adding the context of the peri-urban landscape to the model does not solve all of its problems. Scholars are quickly poking holes in the existing framework of the 15-minute city making it clear that the model is illdefined. Especially in the public sphere, as shown by the discourse surrounding the model (Caprotti et al., 2024). And with urban planners not prepared to interact with these conspiracy theories with origins from climate change deniers, COVID-19 sceptics and other far-right conspiracy theorists (Marquet, Mojica, et al., 2024) a new way to deal with this is needed. However, this is not a notion of

The 15-minute City **Principles Urban** setting Peri-Urban setting

Figure 13: 15-minute city application in the peri-urban context - Author

not using the 15-minute city. The model addresses relevant societal and urban issues that we have to deal with, and proximity-based planning has been used throughout history. But, solving these challenges, with the 15-minute city as a banner, could cause friction depending on the context. Thus, to continue with the goals of the 15-minute city, we need a new perspective.

Need for a new perspective: values

This new perspective should be one of values, public values. The term value has many definitions, what I understand under public values in this research is further explained in the theoretical chapter. Using the perspective of public values aligns with the human-centric approach that the model aims for. Furthermore, the thesis aims for a just transition. Just transitions are a pillar of the European Green Deal, which, if we want this transition to succeed, we need to go towards a more democratic and collective process (Newton et al., 2023).

Including citizens through their public values in the process would work towards a more collective process. This is not common practice in the field of urban planning, with the exclusion of disadvantaged groups still a common occurrence in planning (Büttner et al., 2022). By people's values via better citizen engagement, support increases for policy and can help towards the distrust in society. (Newton et al., 2023).

Thus, using public values can help with inclusivity, already part of the 15-minute city model, which in turn can work towards a just transition. Understanding what people needs and desires are, can make context-dependent interventions possible, creating equitable solutions

that fit all present groups of society. The 15-minute city model already strives for equal access to services to seek social equity (Allam et al., 2024; Khavarian-Garmsir, Sharifi, & Sadeghi, 2023), however equal access isn't the right goal. Equality doesn't lead to equity. This is too narrow a focus on accessibility of amenities and resources, which doesn't lead to sustainable and equitable spatial planning (Poorthuis & Zook, 2023).

By moving away from time-based planning in favour of value-based planning, we can work towards that just transition. The perspective of public values better integrates human needs and thus widens the focus of the 15-minute city principles (Bruno et al.,

Problematisation

Peri-urban areas, the dynamic and volatile territories between urban and rural areas, face significant societal and spatial challenges. A rapidly growing fast-paced population. land-use changes, a rising car-dependency and diminishing local amenities are just a handful of issues faced by these areas in the Netherlands and globally. These challenges are further compounded by growing distrust, national political disinvestment, and a rise in societal unrest.

Disappearing mobility alternatives and amenities not only strain the liveability of peri-urban areas but also undermine the sustainability goals achieved in urban areas, especially in terms of reducing mobility-related emissions. With a rapidly increasing population, it is crucial that these spatial challenges are addressed through a more inclusive contextsensitive urban planning approach.

Problem Statement Research Aim

While the concept of the 15-minute city effectively addresses these issues within an urban context, its application in peri-urban areas falls short. To make this sustainable transition to liveable and climate-neutral neighbourhoods possible, the imbalance in the scientific field of urban planning needs to be addressed, with a focus on the periurban. A new understanding of the public values of peri-urban inhabitants will better inform urban planners on their needs and desires, which is essential for adapting applicable principles behind the 15-minute city into a spatial planning concept that can sustainably transition peri-urban environments.

Problem statement

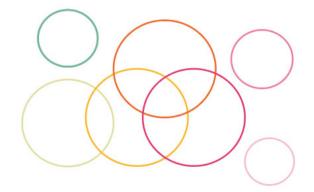
Peri-urban areas in the Netherlands face challenges such as rapid population growth, car-dependency, and declining amenities, which strain liveability and accessibility. These issues are compounded by political distrust and a lack of scientific research. While the 15-minute city model works in urban contexts, its application to peri-urban areas is underexplored. Adapting the 15-minute city principles to peri-urban environments, through the lens of public values, can guide a sustainable and just transition for peri-urban areas.

The thesis aims to assess the applicability Dutch peri-urban context. Applying the of its scope could help tackle pressing spatial issues in these regions regarding liveability and accessibility of mobility and amenities. The transferability of 15-minute city principles outside their deeper literature understanding of proximity-based planning principles public values. and their critiques.

Additionally, by applying a perspective of public values, this project aims to guide the implementation of these planning principles in a just and sustainable way, leading to a method for citizen engagement that can set a precedent for how this perspective can guide urban planning in the peri-urban.

To implement proximity-based planning of the 15-minute city model in the principles from the 15-minute city through the perspective of public values. principles of the 15-minute city outside I combine two existing frameworks. The first one, the Public Value Sphere framework, will help me frame the research, development and translation of public values. The second framework, the human needs framework, will help scope will be researched through a me bridge the gap between the core principles of the 15-minute city and the

Value spheres framework



Human needs framework

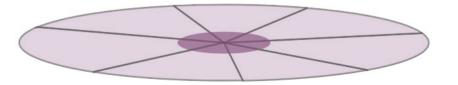


Figure 14: Framework representations - Author



Research Aim Conceptual Framework

To bring a model into a different context, the 15-minute city into the peri-urban, I combine two different frameworks, the Value Sphere framework and the human needs framework. The conceptual framework in this chapter provides a general overview of how the concept and frameworks come together. To create a contextually accurate framework for a deeper analysis of the 15-minute city principles and definition of public values is needed. This will be elaborated on in the theoretical chapter, where in the end the conceptual framework will be contextualised.

15-minute city

As previously discussed, the 15-minute city model is ill-defined and needs a context-specific implementation. This context-specific implementation requires, as mentioned above, a deeper

understanding of the applicable core principles of the 15-minute city in periurban areas. So, to create a conceptual framework here that incorporates principles of the 15-minute city, the combined set of goals will be used from different proximity-based planning models. The goals, as described in a previous chapter, focus on walkability, accessibility, density, mixed land use and diversity. These five will, for now, be seen as the general principles of proximity-based planning and used in the conceptual framework.

Public Value Sphere framework

The Public Value framework by Herzog et al. (2024) defines seven value spheres that help with the understanding of conflicts and relationships between values and value spheres that exist in the value-laden nature of urban space. This

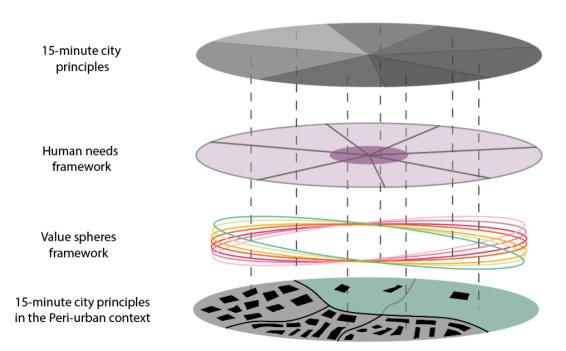


Figure 15: 15-minute city application in the peri-urban context through the two frameworks - Author

(a) Safety Livability Dangers of Nature Conflict Quietness + Aesthetics Growth Conservatism Management Sports Cleanliness Conflict Social Interaction **Green Cities Ecologic** Conflict Quality Economic Gentrification Opportunity Green space Externality Conflict Conflict Social Equity Property Conflict Industrity Develop Affordability Health (b) Conservatism Health Safety Social Equity Inclusivity Social Accessibility **Ecologic** Quality Affordability Cleanliness Diversity Livability Economic Opportunity

Figure 16: Different arrangements of public value spheres allow for a closer investigation in relational urban space. (a) Public value spheres outline different archetypal conflicts manifesting between values in urban space. (b) Public value spheres display the possible connections between instrumental and intrinsic values. (Herzog, 2024)

Conceptual Framework Conceptual Framework

framework was developed as a reaction to public administrators and urban planners aspiring to incorporate the pluralism of public values into decisionmaking to create more inclusive and sustainable cities. This directly relates to the 11th Sustainable Development Goal The public value of liveability reflected of the UN

The research used data from a case study in Hamburg. Here, they identified 30 different topics in urban development discussions. These were spread over five broad public values: economic opportunity, ecological quality, social equity, liveability, and safety/health. These were deemed to be the spheres. A sixth sphere was identified, conservatism; however, this was more of an addition than a true separate sphere.

The public value of economic opportunities in this research was related mainly to available space for roads, market areas and transit zones like parking spots (Herzog et al., 2024). The better the connection and access to the outside world with mobility, the more economic opportunities this would provide for the local citizens.

The public value of ecological quality is twofold, concerning the protection and the creation of green spaces (Herzog et al., 2024)The better green spaces are protected, the more worth they have for citizens, and the creation of more green spaces can also positively impact their quality in an area. This can concern many scales of green spaces, from the local level to better access to larger nature areas.

The public value of social equity in the satisfiers. research was strongly related to different forms of accessibility. In this regard, the

accessibility was mainly linked to cyclists (Herzog et al., 2024). However, in a larger perspective, it can also be related to equitable access to amenities, services, and resources.

the desires of the citizens for the tangible built environment (Herzog et al., 2024). Improving liveability is one of the main goals of the 15-minute city model. The context of the built environment strongly influences the values that exist within this sphere.

Lastly, the public value of health/safety had a main relation with mobility (Herzog et al., 2024)Making roads safer and creating a more liveable environment also help with liveability, and a strong relation between health and ecological quality can also be identified.

These spheres can be seen as theoretical 'universes' from within which different and incommensurable values exist. (McAuliffe & Rogers, 2019) This is supported by Von Der Dunk et al. (2011) who found similar results in a study done in peri-urban environments. Thus, the spheres are context-independent, with the public values residing in them being context-dependent. Using values will lead to context-specific implementation.

Human needs framework

The second framework is the human needs framework that can guide urban development, described by Cardoso et al. (2022). The framework uses Human Scale Development theory from Maxfred Max-Neef, a Chilean economist, which makes a distinction between needs and

Needs

Even though Cardoso et al. (2022) concludes that there is no agreement on the exact meaning of the term 'need', they provide a few pointers. First of all, needs are seen as constant and potentially universal; additionally, 'needs' are societal requirements to achieve a set of goals. Finally, 'needs' must be both place-specific, where they can be contextualised, and relate to broader agendas (Cardoso et al., 2022).

Summarising, needs are more abstract concepts that serve as a contextualised. common requirement to achieve objectives on local and broader scales. Needs serve the purpose of being useful to envisage urban futures (Cardoso et al., 2022).

Furthermore, Cardoso et al. (2022) provide a list of possible needs, such as protection, leisure, participation, creation, and identity. As needs have no exact agreed-upon meaning, it is still under debate what the main needs are and which would possibly be subsets.

With this definition, I can link the concept of 'needs' to the principles of the 15-minute city. The principles are a set of requirements that need to be met to achieve the goal of the 15-minute city, improving liveability and accessibility of amenities and mobility. The principles need to be context-specific, as mentioned earlier, and are abstract but comprehensible urban concepts. Thus. it fits the duality of needs that serve the local context but also a broader goal.

Satisfiers

'Satisfiers' are the aspects that can satisfy the 'need'. These satisfiers change according to time, place and context.

The availability of them depends on how a 'need' presents itself in the context (Cardoso et al., 2022). If protection is the need of building or neighbourhood, the available satisfiers would differ from the ones that would be needed to serve the need of protection for nature. Slowing down cars could serve the need for protection in a neighbourhood, but wouldn't do much to protect nature. This makes satisfiers context-dependent based on the requirements of the needs.

Moreover, satisfiers rarely have a singular need that they satisfy. They may act synergistically, addressing multiple needs simultaneously. Either being inhibiting, satisfying one need while restricting another, or pseudo-satisfiers, providing a false perception of needs satisfaction (Cardoso et al., 2022). The purpose of satisfiers is that they can drive life choices (Cardoso et al., 2022) Values also impact how people act in their lives. Life choices are based upon personal beliefs and values. Thus, values can be seen as the satisfaction that drives these choices and are thus regarded as satisfiers in this research.

We have also established in the Public Value Sphere framework that the public values are context-dependent, which aligns with the definition of satisfiers are changeable according to time, place and context.



Conceptual Framework Research Questions

The conceptual framework

The combination of these two frameworks allow me to not only contextualize the principles of the 15-minute city that are deemed relevant for the peri-urban context, but also apply a human perspective to this contextualization with the public values and link them to the principles. Creating a new conceptual framework, as seen in Figure 17, that show how the perspective of public values can relate to the principles of the 15-minute city model.

We have thus concluded that the planning principles are the 'needs' of an area and the public value spheres contain sets of public values, the 'satisfiers', that have a direct relation to one or multiple 'needs'. Thus, the five public value spheres have a direct relation with the different planning principles and are brought together by the contextualisation of the planning process through the contextually specified principles and the contextualisation of the public values.

My conceptual framework has two halves. The 15-minute city model, as the proximity-based planning concept. Being a planning concept from urban planners that work above the context, it takes its place in the top part of the model. This model has a set of principles, which for now are defined as walkability, accessibility, density, mixed land use and diversity.

On the other side are the value spheres from the Public Value Sphere framework, which are seen as the broad topics in urban planning discussions: economic opportunity, ecological quality, social equity, liveability, and safety/health. With values residing within society, it sits on the bottom, needing these values to be

promoted from the bottom up. These spheres have a direct relation to one or multiple of the principles of the top side. This relationship is defined and contextualised by the public values that reside in these spheres. The middle part of the conceptual framework represents this local context. Defining which public values are present in the context of the peri-urban will thus inform how specific principles are affected by these values.

A contextualisation of this conceptual

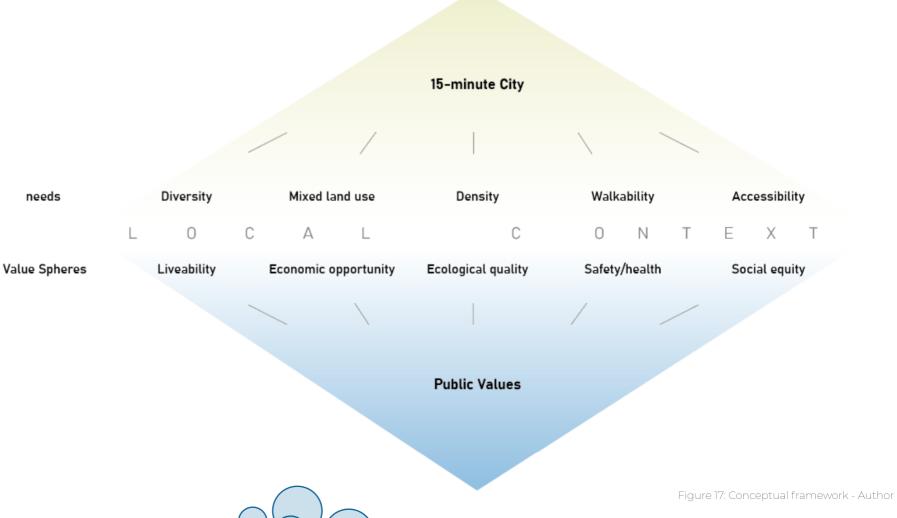
Research questions

This constitutes the following research question:

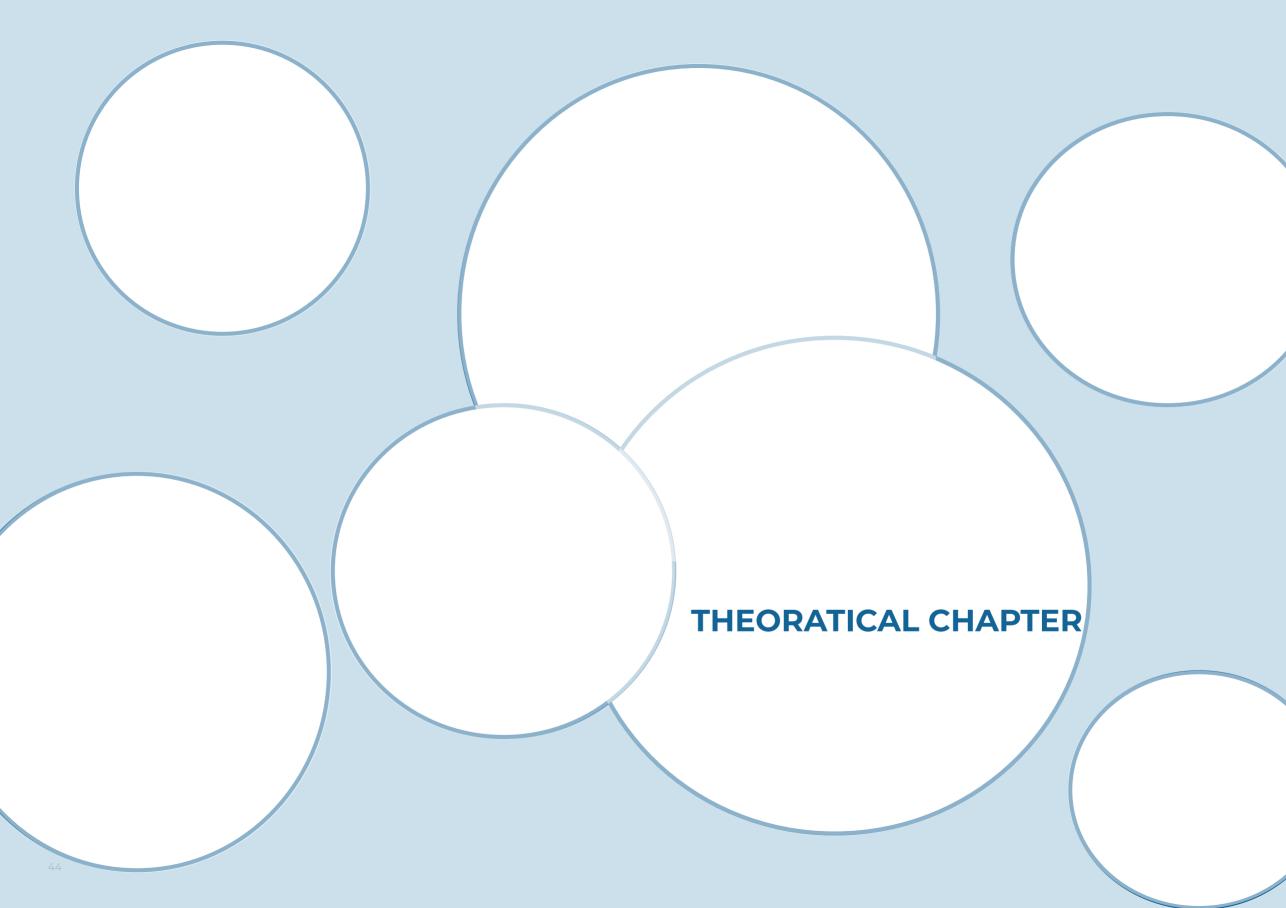
How can key public values of peri-urban inhabitants inform the implementation of the 15-minute City principles?

This question will be answered by answering the following subquestions:

- 1. Which main principles and features of the 15-minute city are applicable in peri-urban areas?
- 2. What are the key public values of Dutch peri-urban inhabitants?
- 3. What can spatial designers do to bridge the gap between spatial interventions and public values to reunderstand the 15-minute City?
- 4. To what extent can public values of peri-urban inhabitants spatially translate the applicable principles of the 15-minute City in peri-urban areas?







The following chapters further explore the theoretical background of the 15-minute City model, definitions of and the human needs framework to be able to start answering the research auestions.

15-minute city

As described before, the 15-minute city is a proximity-based urban planning model coined by Carlos Moreno in 2015. This chapter delves further into the aim of its conception, the momentum it gained after the COVID pandemic, the core principles behind the model and the other pitfalls besides the originality of the model and the discourse that surrounds it.

Conception

The 15-minute calls for a change in how we approach urban planning. The model is based on universal human needs (Moreno, 2021a). By decentralising the city, we can move away from the use of private vehicles, reducing transportrelated emissions and improving the quality of life. Moreno (2021a) speaks about four guiding principles of the 15-minute city to reach this goal: Ecology, Proximity, Solidarity and Participation. These principles would lead to four major benefits for the city: better health and quality of life; a more environmentally sustainable city; a more equitable and inclusive city; and finally, a boost to local economies. Later on, he named four other dimensions for an 'adjusted 15-minute city model', namely proximity, density, diversity and digitalisation, which were central for the model (Moreno et al., 2021).

The planning concept tackles a handful of the Sustainable Development Goals

(SDGs) set by the UN. This is needed, since the UN DESA (2024) report that with six years remaining, the current values, the Value Sphere framework progress falls short and more effective action is needed. The work mainly aims to achieve the targets of three SDGs: 3, 11 and 13.

> First, SDG 11, Sustainable Cities and Communities, aims for more inclusive, safe, resilient and sustainable cities and is the model's heart. Proximitybased access to amenities, fostering communities through focusing on the neighbourhood and slow-mobility all work towards this aim. Then SDG 3, Good Health and Well-Being, is met by seeking to ensure a healthy and active life, promoting well-being through slowmobility. This shift in focus could also be an answer to the car-dependency issue in peri-urban areas, providing sustainable alternatives. Finally, with the reduction of motorised transport and the original goal of the concept to battle greenhouse emissions, SDG 13, Climate Action, could almost be seen as the starting point of the concept (Rhoads et al., 2023).

Momentum

The model really gained momentum during the COVID pandemic. The pandemic exposed cities around the world to the fact that their current foundations were vulnerable. A growing need for a radical rethinking of urban planning was needed. New ways to create human-centred planning methods that could ensure basic activities inside neighbourhoods, safeguarding resilience and liveability of cities in the short and long term, have received increasing attention (Büttner et al., 2024; Moreno et al., 2021).

During the campaign for the mayorship of Paris in 2020, Anne Hidalgo used it in her winning campaign for re-election. After first meeting resistance to the ideas the model brought about, the results convinced people that it was the right direction. This inspired other cities to follow and quickly became one of the most widely debated topics in urban planning, across both professional practice and academic research (Büttner et al., 2024). This moment was significantly helped later that year when C40 Cities endorsed the 15-minute city as a model for urban recovery in the aftermath of COVID-19 (Moreno, 2021a).

The model then took the world by storm and got moulded into many different variations like Barcelona's Superblocks, Melbourne's 20-minute neighbourhood or Oslo's 10-minute City (Teixeira et al., 2024). And this should not come as a surprise, especially in Europe's case. European small to mid-sized cities, particularly those with historic town centres, often offer favourable conditions for implementing the 15-minute city concept. And recent studies in the Netherlands even showed that, thanks to the proactive Dutch planning models that existed for years, more than 80% of towns and cities would meet the criteria of the 15-minute city model (Büttner et al., 2022; Papas et al., 2023).

And the model is shown to work, with evidence from New Zealand, Doha, and Barcelona suggesting that a reduction in greenhouse gas emissions, motorised transport and energy usage can be reached with a focus on slow-mobility (Khavarian-Garmsir, Sharifi, & Sadeghi, 2023).

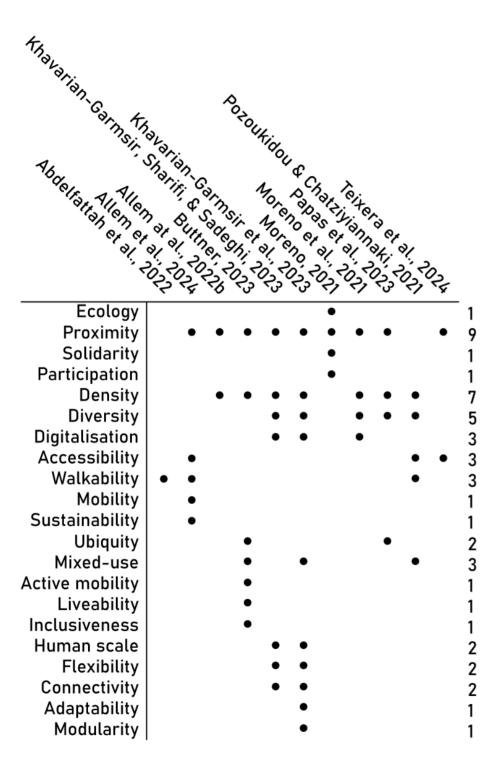
Principle analysis

As mentioned. Moreno has defined the guiding principles of the 15-minute city twice, the second time naming them for an 'adjusted 15-minute city model' (Moreno et al., 2021). The more scholars analysed the model, the more they discovered it was ill-defined. This led to them analysing what they would see as the underlying principles, features, functions or goals behind the model. An overview of different analytical research or other overviews is shown in Figure 18 on the next page (Abdelfattah et al., 2022; Allam et al., 2024; Allam, Chabaud, et al., 2022b; Büttner et al., 2022; Khavarian-Garmsir, Sharifi, & Sadeghi, 2023; Khavarian-Garmsir, Sharifi, Hajian Hossein Abadi, et al., 2023; Moreno, 2021a; Moreno et al., 2021).

From these, 21 different terms emerged that described the 15-minute city in terms of principles or features. To understand which of these are the actual core principles behind the model, we first look at the four dimensions defined by Moreno for his 'adjusted 15-minute city model' and then look at the remaining results.

Proximity

Proximity was the only principle that Moreno did not change between publications in 2021. He defines proximity as living with reduced distances to other activities (Moreno, 2021a). Elaborating further on this by stating that proximity has two dimensions, a temporal and spatial dimension, which emphasise reallocating urban resources and bringing services closer to residential areas. Proximity is thus focused on two different aspects: resources and amenities. With this principle, the 15-minute city would save travel time,



promote sustainable mobility and lessen the environmental and economic impact of commuting (Moreno et al., 2021).

Other scholars define proximity for the 15-minute city in a similar way. All different variations of the accessibility resources, amenities, services or core living functions within the neighbourhood or the defined notion of time of the specific X-minute city implementation (Büttner et al., 2022; Khavarian-Garmsir, Sharifi, Hajian Hossein Abadi, et al., 2023; Khavarian-Garmsir, Sharifi, & Sadeghi, 2023; Papas et al., 2023; Pozoukidou & Chatziyiannaki, 2021), summarised as geographical nearness by Allam, Chabaud, et al. (2022a). Other benefits described by these scholars include improving liveability, quality of life (Khavarian-Garmsir, Sharifi, Hajian Hossein Abadi, et al., 2023) and how liveability and accessibility in peri-urban areas can be improved through proximity-based planning principles implemented with public values.

Density

Density is seen as a crucial dimension of the urban environment, and the 15-Minute City strives for 'optimal density'. Where conventional urban planning understands density as high-density buildings, the 15-minute city model views density in terms of people per square kilometre (Moreno et al., 2021). The emphasis on optimal density considers an optimal number of people that an area can sustain in terms of resources and amenities.

And as the 15-minute city brings activities to people, if there is an imbalance with regards to the optimal density,

extra resources and amenities should be brought into the neighbourhood, allowing for equity in addressing the needs of urban areas (Moreno et al., 2021).

Thus, density here also has two levels: density of citizens and density of amenities. The density of citizens informs the density of amenities. A sufficient density of amenities that can be covered by walking or cycling prevents a cardependency for using daily services (Allam, Chabaud, et al., 2022b; Khavarian-Garmsir, Sharifi, Hajian Hossein Abadi, et al., 2023; Pozoukidou & Chatziyiannaki, 2021).

Other scholars have defined the density of the 15-minute city the other way around. The density of people should support the existing services and amenities (Papas et al., 2023). But, when describing density in regards to the 15-minute city it is always targeted to solve car-dependency and promote active mobility, decreasing emissions and promoting a healthy lifestyle.

Diversity

Like proximity and density, diversity is defined in the 15-minute city model in two ways. (Khavarian-Garmsir, Sharifi, & Sadeghi, 2023) describe them as two mechanisms of diversity: software and hardware. Software is people-centric, focusing on a diverse community regarding culture, ethnicity, economic and social class. The hardware diversity of the neighbourhood is focused on the mixed use of urban fabric, including residential, commercial, and recreational uses.

These two forms of diversity need to coexist. Both of them have an economic benefit to them, ensuring housing

Figure 18: Overview of principles from scholars - Author

The 15-minute City Principles

The 15-minute City Pitfalls

opportunities, promoting inclusivity and creating jobs (Moreno et al., 2021). By incorporating this cultural pluralism into urban planning models, inclusivity targets are more easily reached while adding social and spatial inequalities (Khavarian-Garmsir, Sharifi, Haiian Hossein Abadi, et al., 2023).

Not all scholars define diversity using these two mechanisms. Papas et al. (2023) focusses on the hardware where mixed land use provides a wide variety of amenities must be in within a neighbourhood. Pozoukidou & Chatziyiannaki (2021) expand on the concept of diversity by going into the specific amenities that should offer a diverse choice to people. like mobility. housing and shops

Digitalisation

Moreno (2021a) finds digitalisation a very important dimension, especially to realise the other three. Digital tools and solutions for Moreno are derived from the Smart City concept. This has specifically surged since the pandemic, with more people working from home and more virtual communications.

From here on out, it was seen as a good supplement to the other principles. Giving planners access to real-time data, enhancing active participation (Khavarian-Garmsir, Sharifi, & Sadeghi, 2023). However, other scholars barely mention digitalisation as a principle or as a key feature and Moreno specifically mentions it as a supporting factor to all see digitalisation as a main principle for the 15-minute city, but as a tool to reach the others. A possible satisfiers to the true needs of the model.

Other principles

This leaves us with proximity, density, and diversity as the three main principles of the 15-minute city, as defined by Moreno himself and supported by scholars. But what about all the other 17 terms mentioned by those scholars, and why are there so many? Since the model is ill-defined, urban planners have made many variations of it that would better fit their context. Moreno (2021b) acknowledged this need for context by expanding the 15-minute city to the 30-minute territory, but this was not the

A research (Teixeira et al., 2024) into 15-minute city variations concluded that the 15-minute city, 15-minute Neighbourhoods and 20-minute Neighbourhoods were the most prominent variations of the model, covering over half the Furthermore, nine more variations of the XX-minute city/neighbourhood/town/ region/community ranged from 1 to 45 minutes. Besides the literal variation of the name of the 15-minute city, other popular models were Superblocks and Complete Neighbourhoods, which have also been subject to local adaptations. These findings are supported by research from Allam et al. (2024) providing similar conclusions.

and a more effective use of utilities Many of these variations use more context-specific principles. which have led to a more precise definition of them. This is the cause behind the many different terms found by scholars. However, a deeper look at three other principles. Therefore, I don't these principles reveals that not all of them are so very context-specific. Across the different publications the terms accessibility, connectivity, inclusiveness, human scale, mixed land use, mobility,

sustainability and walkability are most In Allam et al. (2024) overview density often named

amenities, he wants them to be within a walkable distance. Abdelfattah et al. (2022) described walkability as the core of the model. The human scale of the urban fabric has an influence on the walkability of the neighbourhood. Thus, when a model is focused on proximity, it should be no surprise that these two terms come up. But, they should be seen as a clarification of the proximity principle and thus fall under this principle. This also aligns with Allam, Chabaud, et al. (2022a) stating that the notion of proximity is used to humanise the urban areas. And not only are they linked to proximity, but a clear link with density should also be made.

is placed in the cluster with 'walkability' as the main term. The different forms When Moreno talks about proximity of of density have a significant impact on walkability. And to reach an optimal density, the mixed use of land is vital. This is mentioned by Moreno himself, which clarifies why that term also shows up in the list multiple times. Furthermore, since the origins of the model lie in tackling climate problems, the fact that some scholars define sustainability as a main principle also makes sense.

> This leaves a handful of terms that are part of a similar group. The proximity of amenities and services, the diversity of them and a sufficient density all lead to an improvement of their accessibility. Walkability, connectivity, mobility and equity are all named in relation to

Pitfalls		Reflections		
Theoretical	Implementation	Analytical	nonosuono	
Originality	Lack of implementation	Lack of precision	Discourse	
Unrealistic expectations of decentralisation	Difference in spatial and cultural context		Young research body	
Omission of public transport	equality in amenities		adopting 'Smart City network technologies' as an expansion	
Weak presence of urban nature	Aggregation of amenities		Branding	
Environmental protection	Mobility based exclusion			
Energy-efficiency	Gentrification			
green and clean energy				
Northern Bias				

Figure 19: Overview of pitfalls from scholars - Author

accessibility. Allam et al. (2024) describe accessibility as playing a crucial role in the 15-minute city and put the term proximity in a cluster spearheaded by accessibility. With the broad influence and role of accessibility within the model and related goals, I find accessibility to be the fourth principle of the 15-minute city model, adding to proximity, density and diversity.

Proximity, density, diversity and accessibility are thus the four main principles that uphold the 15-minute city model in urban areas. Yet, this research focuses on peri-urban areas. As mentioned, before Moreno recognised the need for contextspecific implementations when using the 15-minute city outside its scope, the urban areas. Thus, implementing these four principles in the peri-urban landscape requires a context-specific perspective. A different lens that should be in line with the human-centric approach of the 15-minute city to fit the principles behind it.

Pitfalls

Before applying a different perspective to the model, we will go into the other pitfalls and reflections in the overview in Figure 15 (Bruno et al., 2024; Büttner et al., 2022; Caprotti et al., 2024; (Guzman et al., 2024); Khavarian-Garmsir, Sharifi, & Sadeghi, 2023; (Marquet, Anguelovski, et al., 2024); (Cambridge University Press & Assessment, n.d.); Mouratidis, 2024; Poorthuis & Zook, 2023; (Silva et al., 2023); Teixeira et al., 2024).

The pitfalls mentioned by scholars can be split up into three categories: Theoretical pitfalls, implementational pitfalls, and analytical pitfalls of the model. Furthermore, the reflections are

critiques that you should be aware of when dealing with the model, without critiquing a specific aspect of the model itself. Besides three different types of pitfalls, they can be divided into two viewpoints. General critiques that talk about the model as a whole, and specific critiques that delve into a specific aspect of the model.

General critiques

Firstly, it is important to highlight the Northern bias of the 15-minute city, as the conception is based on redesigning cities in the Global North (Caprotti et al., 2024). This is further highlighted by the first cities that adopted the 15-minute city, or variations of it, namely Paris, Milan, Barcelona, and Melbourne with Melbourne seen as a major city in a very westernized country, even though its geographical location is in the South. Implementing this in cities somewhere else might just raise questions that Moreno's model is not prepared to answer. Like, the reality of the highly unequal urban lives between the Global South and North. Ideals promised by the 15-minute city cannot always be afforded in every context (Caprotti et al., 2024).

Following this, are the unrealistic expectations of the 15-minute city. The strong decentralization proposed by the model is, in today's hyper-specialist world, unrealistic and unsustainable (Mouratidis, 2024). And the deliberate focus on the neighbourhood brings into question what the expectations of the 15-minute city are in other scales (Caprotti et al., 2024). The model should more clearly define what is truly and realistic expected to be within the 15-minute proximity of one's house.

This is linked to the problem of the lack

of implementation of the model. Using the 15-minute city as a metric brings also these unrealistic expectations (Poorthuis & Zook, 2023). Real world implementations should link the model more detailed to underlying urban policy creating achievable goals and steer clear of the abstractness of the model. This would ground the model, creating more spatialised projects, developing the implementation side of the model, instead of keeping it at this level of an idealistic notion (Caprotti et al., 2024).

And the lack of implementation is naturally also directly linked to the young body of research that supports the model. Even though we have concluded that it is mostly a new label for a variation of the paradigm of proximity-based planning concepts, specific research that supports this version is slim. Unpacking the model with a growing body of research will benefit the model, its implementation, and solve other pitfalls (Caprotti et al., 2024).

Like the one that Moreno et al. (2021) himself mentioned the need for context. The very definition of the 15-minute city makes its application everywhere impossible (Bruno et al., 2024). Not every place can sustain a model with every need within 15 minutes. This shows that context is overlooked. Due to the demographic, socio-economic, and morphological differences between areas, the implementation of the model is highly context-dependent (Teixeira et al., 2024) as shown by the many variations of the model.

The need for context can be divided into two categories: spatial and cultural. The spatial context of the model is urban areas. Neighbourhoods here are

close to conforming to the ideals of accessing daily needs with slow mobility (Poorthuis & Zook, 2023). However, periurban areas have a more limited access to services in the range of 15 minutes by slow mobility and rely more on private cars, the norm in these areas, to achieve a similar level of accessibility. This makes the implementations more difficult (Büttner et al., 2022; Poorthuis & Zook, 2023). Besides the spatial characteristics of a place, the cultural aspects also play a huge role. As the current model ignores culture, heritage, and identity (Khavarian-Garmsir, Sharifi, & Sadeghi, 2023).

And, depending on the place of implementation, the diversity in the cultural context could also lead to citizens having different needs. Thus, forcing a one-sided urban life on them, without accommodating their different preferences, limits the success of the model (Mouratidis, 2024). This thesis, first and foremost, address this issues by applying the model inside the different context of the peri-urban area.

Specific critiques

The specific critiques are mainly focused on the two aspects that the model tries to improve accessibility of, mobility and amenities.

The main critique regarding mobility is the often disregarded public transport in the model. While they are vital in bridging medium and long distances, or making traveling more inclusive for people who might struggle with walking or biking. To provide a holistic assessment of the accessibility in an area, the inclusion of public transportation is a must (Mouratidis, 2024). The 30-minute territory did extend on the original model

The 15-minute City Pitfalls Changing the Approach

with more emphasis on this (Poorthuis & Zook. 2023) and was identified in some case studies that implemented the model (Büttner et al., 2022).

mobility-based exclusion. which becomes a more pressing issue when public transportation is neglected. This exclusion is twofold: it affects those who depend on alternative modes of transport, such as cars, and those who are unable to engage in active mobility due to disabilities. Ignoring either will eventually lead to the mobility-based exclusion of certain parts of society, going against the goal of equitable access (Mouratidis, 2024; Poorthuis & Zook, 2023).

The current definition of accessibility of amenities is also scrutinized in twofold. First of all, the equality of amenities is questioned. The current model focuses on quantity (Mouratidis, 2024), however should look at quality. A perfectly designed 15-minute city could still face significant inequalities in the quality of services offered. While two areas of the same city might achieve the ideal of "15-minuteness," one could provide top-tier services while the other offers substandard ones, fostering inequality and segregation. (Bruno et al., 2024).

This could lead to a further social divide. An informal settlement with lowquality services at every corner could be considered a 15-minute city, but it is far from the ideal that is set by the model (Caprotti et al., 2024). This also relates back to the critique of expectations, with there being too much specialization in today's world (Mouratidis, 2024). Thus, quality over quantity, depending on the specific needs of neighbourhoods, to

avoid further imbalances (Büttner et al... 2022).

On the other hand, the aggregation of amenities is questioned, which is Another critique of mobility concerns strongly linked to the quantity side mentioned before and unrealistic expectations. There should be an awareness of the order of facilities, as cities cannot be organized by separating everything into rigid neighbourhoods (Mouratidis, 2024). Lower-order facilities are easier to disperse throughout the built environment, making it possible to adhere to the 15-minute proximity. However, higher-order facilities like hospitals should be aggregated on a larger scale than pharmacies. This would bring several benefits to the areas and work towards the goals set out by the model (Mouratidis, 2024).

> The other is a critique linked to one of the principles first defined by Moreno. ecology. The weak presence of urban nature, now mainly in the form of parks, in the 15-minute city literature (Khavarian-Garmsir et al., 2023; Moreno et al., 2021). Urban nature is about the sufficiency of parks within proximity. However, discussions about their quality, biodiversity, and other forms of nature are missing from the 15-minute city, as well as blue spaces (Khavarian-Garmsir, Sharifi, & Sadeghi, 2023; Mouratidis, 2024).

> Finally, this leaves as set of pitfalls and reflections that have been identified, but fall outside of the scope of the thesis. Scholars critique the lack of precision of the model, which is amusing with the model very specifically defining 15 minutes as a threshold. According to different researches discussed by Mouratidis (2024) the definition of

15 minutes doesn't say that much if there is no comfortable walking speed defined, which in itself is very context dependent and personal, as the range of 15 minutes of a younger person differs from an older person (Silva et al., 2023). Thus the distance or time, which is the isochrone of the model, needs to be outside of the scope, as Poorthuis & Zook (2023) also argues that the exact number of minutes is less relevant in larger scale areas.

Additionally, the focus on including a digital solution in the implementation of the model, one of the principles of Carlos Moreno that was left out, is not a part that is taken explicitly into account in this research. Furthermore, Khavarian-Garmsir, Sharifi, & Sadeghi (2023) discuss environmental protection, energyefficiency and clean energies as issues missing from the model, however being aware of their existence is important.

The approach to the concept needs to be changed

With all the different critiques of the illdefined model that is the 15-minute city, I propose a new perspective to change the approach to the model. Carlos Moreno's origins lie in mathematics and computer science, the fields that centre around efficiency, which the 15-minute city idea is founded upon (Kucharek, 2021). The origins of the model lie in efficiency, a mindset where we value speed over access (Zivarts, 2021). Even though it is argued that the model rose to focus on steering away from the notion of efficiency and speed to needs and preferences (Papas et al., 2023).

Driven by rapid economic growth and technological advancements in cars, urban planning focused around the concept of speed (Papas et al., 2023); (Teixeira et al., 2024). The places in our urban environments are not meant as places to stay, but as places we move through with speed, going from A to B (Büttner et al., 2022).

claims to want to move away from this efficiency, gaining back all the time that is lost in commuting and improving the quality of life with this extra found time. However, I would argue that the 15-minute city concept still revolves around the notion of efficiency. Having everything you need within reach is the most efficient way to live, while being a very unrealistic. Materialising the principles behind proximity-based urban planning approaches doesn't constitute a tunnel vision on doing this in the most efficient way. By turning away from this efficiency perspective, we can open up the concept and deal with the many critiques. Research shows that the incorporation of perceptions will lead to more inclusive planning (Guzman et al.,

Thus, to move away from the timebased focus of the 15-minute city to value-based planning, we can achieve the goals set out by the model, while addressing many of the issues that is currently possesses. Integrating socioeconomic and cultural perspectives as the basis for this value-based approach.

Values Values

The new perspective: values

The call for the use of public values is not necessarily new. (Thabit et al., 2024) and (Herzog et al., 2024) already argue that in the time of planetary challenges such as climate change, economic and social inequalities require the inclusion of values into spatial planning. And the approach of values doesn't radically change the 15-minute city. As shown by the links in the conceptual framework. Furthermore, (Herzog et al., 2024) states that the understanding of public values is crucial to achieve SDG 11, the goal that the 15-minute city predominantly tries to achieve, with planners incorporating the pluralism of public values into decision making more.

"There are these two young fish swimming along and they happen to meet an older fish swimming the other way, who nods at them and says 'Morning, boys. How's the water?' And the two young fish swim on for a bit, and then eventually one of them looks over at the other and goes, 'What the hell is water?" - David Foster Wallace. (Foster Wallace, 2009)

In this quote, Chiaradia et al. (2017) argues that the clueless young fish represent all urban designers who deploy 'value'., vet do not fully understand what value means. To be able to use the perspective of public values, we first need to define what the term 'value' means in the context of this research and in its application in planning.

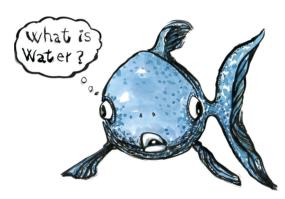


Figure 20: What is Water? (Ahlefeldt, 2019)

Defining the term 'value(s)'

The Cambridge dictionary has five different definitions for the term 'value' and another one for values (Cambridge University Press & Assessment, n.d.). This is because several scholar in various fields have developed distinct value theories for their specific purposes (Herzog et al., 2024). Since the 1870s, the term value has been monopolised by economics, More recently, McAuliffe & Rogers relating it to price and worth (Chiaradia et al., 2017; Kinder & Stenvall, 2024).

Other fields followed with different definitions of the term value. The plural form, values, also got a distinct definition, being social constructs as a result of cultural context (Zancheti & Jokilheto, 1997).

David Graeber (2001) concluded that there are three ways societies have tended to conceptualise the term value. Firstly, values as net benefit, derived from economic value theory. Secondly, value as a psychological construct giving something meaning, where value is defined as a meaningful difference. Thirdly, value as a moral principle. Where values refer to what is good in human life, based on the judgement of what is valuable or important in life, this comes from the value theory of sociology. An assessment of how something matters to us as a person (Chiaradia et al., 2017). Or as Nabatchi (2018) put it, "the social standards, principles, and ideals to be pursued and upheld by government agents and organizations".

Most often, these three definitions are planners, work to serve the interest of the split between defining either the term 'value', with the 1st and 2nd, and the term 'values', with the 3rd. With the first two being tangible and in relation to an object, and the latter seen as relative and

non-comparable (Herzog et al., 2024). Zancheti & Jokilheto (1997) described the latter as social relationships, as these values only exist in the context of interaction, which is necessary for any comparison between things that are constantly changing according to culture.

(2019) described them as the product of reasoning. Values, the plural term, are thus all a human construct of what we attribute to the quality of things in a cultural context. The rest of this chapter will go further into this definition of the plural term 'values'.

Attributing values can be done in two ways (Zancheti & Jokilheto, 1997). There is a personal basis, where an individual identifies a value in relation to the usefulness to them. Personal association of values to things and social is based on the interactions and cultural development. This is a personal process that has little impact on the other basis for value attribution. This is the social basis, as a result of long-term interaction between individuals or institutions, again in a specific context. Thus, these 'social values' developed on the social basis are a reflection of the cultural and socio-economic development of a specific context and present in the public sphere.

These 'social values' are present in societies. In public administration, government officials, including urban public and thus try to represent these social values. In public administration, this is then called 'public values (Herzog,

Public Values Public Values

Adding to this, Nabatchi (2012) describes public value as the appraisal of things the government creates on the public's behalf. She (Nabatchi, 2012) goes on to define public values at three levels. Firstly, the "normative consensus about the rights, benefits, and prerogatives to which citizens should (and should not) be entitled", secondly, "the obligations of citizens to society, the state, and one another", and thirdly, "the principles on which governments and policies should be based". This concept is foundational to public administration, and has increased in popularity within and beyond this field (Thabit et al., 2024).

There is one final important distinction to make with relation to values. The two different forms in which they present themselves. Values can be split in intrinsic and instrumental values (Bozeman, 2007). Intrinsic values are goals and do not serve any specific purpose. While instrumental values do have a purpose, specifically to an intrinsic values. Instrumental values are a sort 'satisfier' for the 'needs' which are intrinsic values. Bozeman (2007) further elaborates the fact that the definition of what an instrumental or intrinsic value is, is completely dependent on the person expressing them, making them incommensurable between individuals.

In planning

The term 'value' or 'values' does not have a clear, separate definition in urban planning. Chiaradia et al. (2017) finds those seeking to talk about urban design value to use the first definition of Graeber, the net benefit of a thing, from the field of economics. However, they continue to come to the conclusion that our understanding of value in urban design follows the final definition of

values on a social basis. But, Zancheti & Jokilheto (1997) concluded that values in relation to urban structure are social attributes of states and processes within the city. Their definition of values in relation to urban structures is thus also a form of social and, thus, public values.

Zancheti & Jokilheto (1997) further followed up with three different levels of urban values, giving them a spatial aspect. These are related to individual elements, clusters of elements, or the urban structure as a whole. A value in the context of an urban structure has a different meaning, depending on the proximity and scale of the element to which the value is attributed. These values can also not simply be summed up according to the scale, because the nature of said values are vastly different.

Besidestrying to formulate the term value in relation to urban structures, Zancheti & Jokilheto (1997) did state that there are values from other field that relate to urban space, with cultural and socioeconomic values, both social values, able to act as incentive to take care of the urban environment. Cultural values are described as identity or artistical values with socio-economic values described as economic, functional, educational or political values.

My definition

To conclude this value theory research I can define the term 'value(s)', as it will be used in this thesis, as public values, derived from philosophical value theory, that are instrumental moral principles held the public on a social basis that, constantly in flux, reflecting cultural and socio-economic context. These instrumental public values, are 'satisfier' that satisfy the 'need' of the

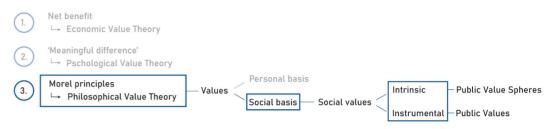


Figure 21: Public value definition tree- Author

intrinsic public value sphere in which they exist. Situating them in the field of urban planning can divide these public values into three levels of spatial, socioeconomic, and cultural public values.

Value pluralism

Public values do not exist as singular entities. Since public values satisfy different needs, one can imagine that competing values exist. Nabatchi (2012) describes this as public value pluralism, further stating that it is the notion that multiple values can coexist in society, all of which may be equally valid, correct, and fundamental. This means that no single value holds a stronger position over others, which leads to no normative consensus in society.

This value pluralism is expanded upon by McAuliffe & Rogers (2019) adding that values don't just simultaneously exist in society, but that the conceptualisations of the same public values can differentiate between individuals. This is inherently linked to the earlier statement of Bozeman (2007) that the expression of a value is completely dependent on the person expressing it, making them incommensurable between individuals. This would lead to the possibility of differences and discontinuity of narratives of applied values (McAuliffe & Rogers, 2019).

Value pluralism: conflicts and overlaps

With value pluralism comes relations between values. Values can relate to each other in two ways: conflicts or overlaps (Herzog et al., 2024). Both Von Der Dunk et al (2011) and Herzog et al. (2024) developed typologies in conflict and came to similar findings in similar Western European contexts. Von Der Dunk et al (2011) defined six conflicts. namely 'Noise pollution', 'Visual blight', 'Health hazards'. 'Nature conservation'. 'Preservation of the past', and 'Changes to the neighbourhood'. These last two conflicts show why Herzog et al. (2024) eventually described a sixth value sphere, conservatism.

And just like values, conflicts can coexist and develop into each other. Like conflicts of the type 'Noise pollution' may eventually turn into conflicts of the type 'Health hazards' (Von Der Dunk et al., 2011). This links to another finding of them that conflicts that are defined are not always the main conflict. So, there main issues might be related to 'health hazards', but they can only out them in the form of 'noise pollution'. Overlapping values, are public values that support multiple goals. For example a public value like green space protection, does not only benefit the ecological quality but can also have effects to liveability and health.

Understanding what these relations are and how they function could also help produce a better understanding of the power dynamics in play in the context of urban development (McAuliffe & Rogers, 2019). Solving these conflicts will also benefit the inclusivity within urban development (Herzog et al., 2024). Designing with the understanding of the struggle of legitimacy of values, defining what value is, and how they relate to one another comes together in a form of ethical urbanism (McAuliffe & Rogers, 2019).

The Public Value Sphere framework will help understand these relations. The developed value spheres offer insight into understanding the plurality of values attached to urban space, their interrelations, and their archetypal conflicts. In the case of urban planning, these spheres can be a model to map out values and conflicts in citizen participation (Herzogetal., 2024). Besides mapping out values, it is important to recognize the right to hold plural values, with individuals and groups (McAuliffe & Rogers, 2019).

Contextualizing the conceptual framework.

With the complete background of the 15-minute city literature and having defined the public values, we can contextualise the conceptual framework to the context of the peri-urban in Figure 22.

The main principles behind the 15-minute city are: proximity, density, diversity, and accessibility. But not all four of these are compliant with being the 'needs' in the peri-urban context. Throughout proximity-based planning models, density has been a form of a quantitative

measure (Büttner et al., 2022). Specific forms of density are required to satisfy a certain number of amenities or improve proximity (Khavarian-Garmsir, Sharifi, Hajian Hossein Abadi, et al., 2023). This leads me to leave out the principle of density for the context of the peri-urban. However, that does not mean it plays no role. Density will most definitely still play its role, but desired density will be related to defined public values and their spatial interventions, instead of a guiding principle.

This leaves proximity, diversity, and accessibility; the three core principles of the 15-minute city applicable to the 15-minute city. With other scholars having further specified these principles for other contexts, we can do the same here. In the case of proximity, we can more specifically look at the walkability of the urban form, which includes human-scale design. Proximity further has the dimensions of mixed land use and sustainability. A good aggregation of amenities through the scales will lead to a healthy mix of land uses that can sustain the population density of the area. Improving land use mix will conceptual reduce distances and thus also help with walkability. The sustainability side of proximity is related to these reduced distances in travel, but also to the care of aggregation and quality of amenities.

Diversity has two dimensions. One of them is shared with proximity; mixed land use, and is heavily linked to the quality and aggregation of amenities through the scales. The other dimension is inclusivity and is more directed towards the social and cultural aspects of society. Lastly, the principle of accessibility is twofold, with walkability and connectivity. The walkability of an

area is a direct consequence of how well the area is accessible by forms of slow mobility. The other point in this is connectivity, which is the mobility aspect of the model, including public transportation. The connectivity within and between neighbourhoods can improve the accessibility of a larger group of people on a larger scale, by extending their range of travel within a certain distance or time.

Thus, three principles; proximity, diversity and accessibility, with five dimensions, the 'needs' of the 15-minute city; walkability, mixed land use, sustainability, inclusivity and connectivity shapes the 15-minute city in the peri-urban context.

On the bottom side, the five value spheres remain the same. But, the public values,

the 'satisfiers' that reside in them, can be split into spatial, socio-economic, and cultural public values. This distinction can help with the identification of public values. With the knowledge of public value pluralism, we can now understand that these satisfiers will inform multiple needs of the 15-minute city, either benefitting each other or competing against one another.

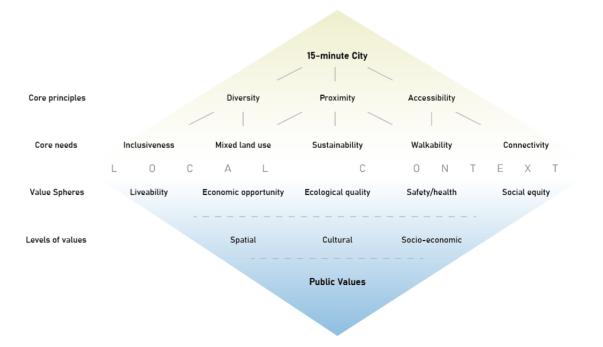
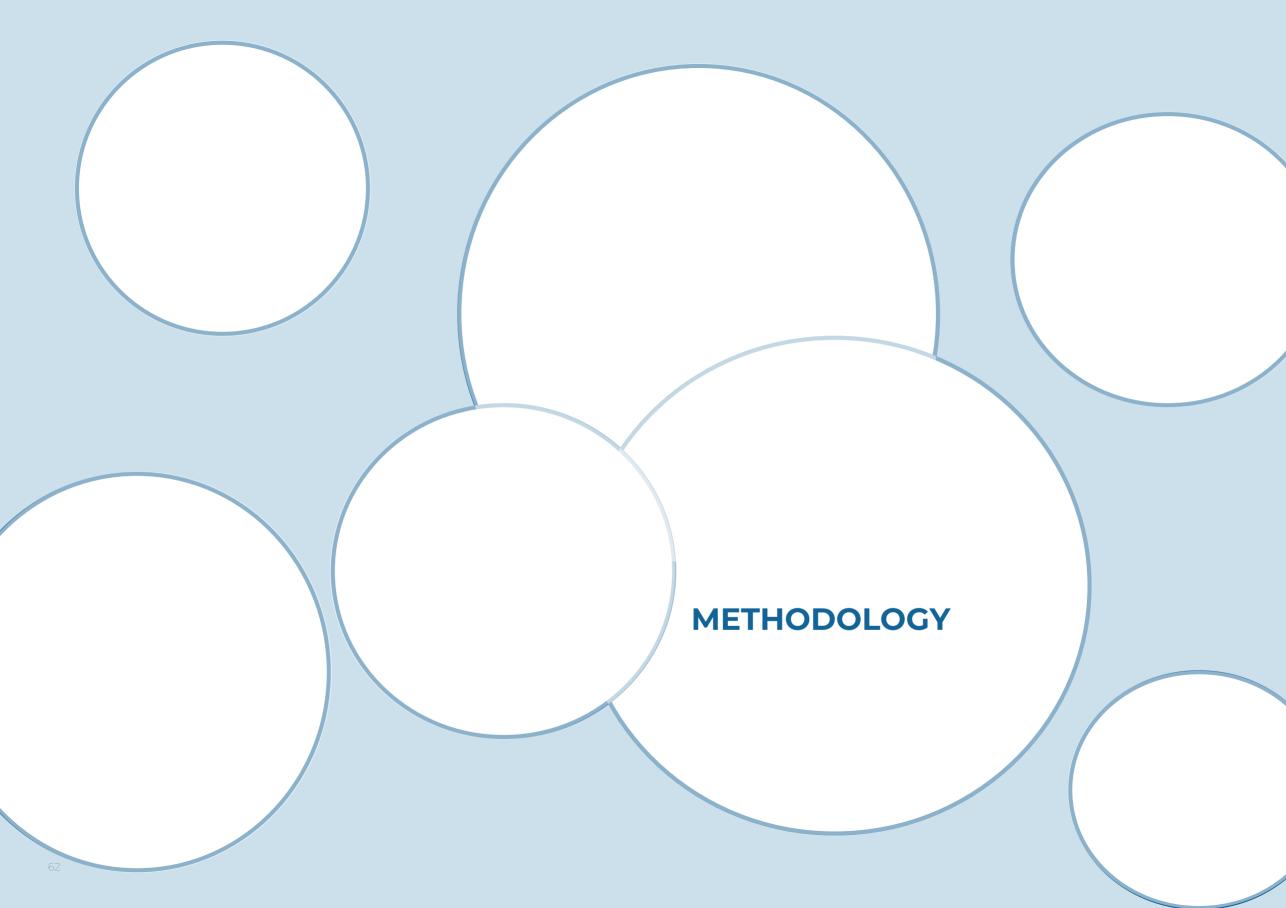


Figure 22: The contextualised conceptual framework - Author



Introduction Introduction

Scientific relevance

field of urban planning in multiple ways. First of all, this research will add to the 15-minute city literature by adding to the discourse and critiques of the model. Furthermore, by implementing the model outside of its scope, in the peri-urban context, the thesis adds to the knowledges of the application and limitations of the model.

new perspective in the implementation. The perspective of public values provides a fresh way to implement the 15-minute city outside its scope. As Herzog (2021) stated that public values and their conflicts are vet to be applied in a context of relational urban landscape. By developing the methodology of this thesis, an attempt is made to show how this new perspective can guide planners to an inclusive urban planning process that can guide the transition in the periurban context.

Finally, by using two existing frameworks, their literature body and applications are broadened. The Public Value Sphere framework has no spatial aspect to it currently, something this research will try to achieve. Thabit et al. (2024) states that it is difficult to develop an accepted framework for public value creation and by creating a planning process that includes the public in this creation process an attempt is made to develop an acceptable framework, building upon the Public Value Sphere framework.

What can be done by planning and design

forward, Going 15-minute city implementations need a contextspecific approach that accounts for

the relevant critiques of the model, as This thesis aims to add to the scientific no one-size-fits-all approach is realistic (Büttner et al., 2022). This approach also needs a human perspective, as top-down approaches often have little regard for needs other than their narrative of economic success (Cardoso et al., 2022). Value-based planning could be the guide for the urban planning process. To develop public values, as few ways have been suggested in literature; however, any approach to developing A second addition to the field is using a public values that excludes the public will only result in highlighting privileged values (Nabatchi, 2012).

> But, the process of citizens' engagement should be the origin point of public values, as a pre-specified list of values will lead to mapping solely of these values (Nabatchi, 2012). However, urban planners should avoid asking people directly to their underlying values, as they are often not capable of doing so (Visser et al., 2005). They continue to argue that participants need to be: "triggered, encouraged and motivated to think, reflect, wonder and explore aspects of their personal context" (Visser et al., 2005) to be able to come up with an answer which could help us, the urban planners, to develop public values.

> The idea for this approach is shared by Nabatchi (2012) to directly and actively involve citizens in the process of public value finding. She argues that people need to help identify what a public value is, what constitutes a value and decide on trade-offs between values. Letting people weigh in on what 'satisfiers' combine to the right trade-off to satisfy their 'needs'.

Finally, a design approach is developed by the Delft Design for Values Institute, aimed at integrating values into all stages of the design process and has a way to operationalise values. The approach works on two assumptions. Firstly, systems and spaces are valueneutral tools which hold different values. And, secondly, reflection is needed on these values during the whole process.

The following methodological chapter will explore how this thesis applies the previously mentioned tools in the urban development process. It will show the case study locations, followed by the data methods and tools used to establish this public value perspective and eventually move towards the expected outcomes of this project.



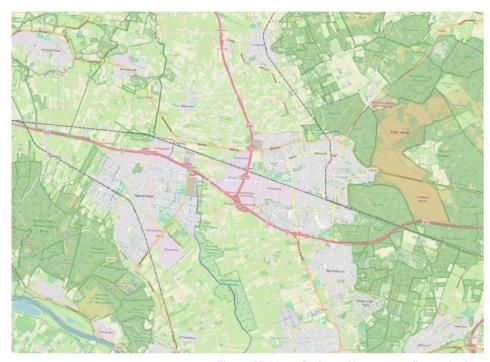


Figure 23: Map of ede and its surroundings - Author

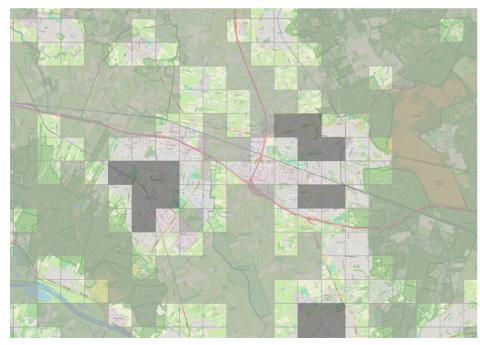


Figure 24: Map of ede and its surroundings with peri-urban classification - Author

This thesis will focus on the Southern 4. Netherlands. Here lies the city of Ede, which, together with its surrounding, will be the focus of this study. This location is part of one of the four InPUT case studies.

The focus will be specifically on the peri-urban areas within this area. To determine which areas that are, the classification of peri-urban areas of Alexander Wandl et al. (2014) is used. This classification is based in a grid and a combination of population density and land cover. For a grid size of 1 km x 1 km rural population density is classified as less than 152 people, peri-urban sits between 152 and 5000 people and urban cells have more than 5000 people. If the grid differs from 1 km x 1 km, the population density needs to be scaled accordingly.

The classification follows four steps:

- 1. Divide an area into a grid.
- Select the grid cells with a maximum population density that fits peri-urban areas.
- Add cells with a maximum population density that fits with rural characteristics that spatially overlap with typical infrastructures and services.

These are:

- Industrial or commercial units
- Road and rail networks and b. associated land
- Port areas
- d. Airports
- Mineral extraction sites
- Dump sites
- Sport and leisure facilities

Subtract grid cells peri-urban region of the Foodvalley in the population density cells that are not characterised by the intermingling of built and open landscape pattern.

These are:

Continuous urban fabric



Figure 25: The Foodvalley highlighted within the



Data Methods Data Methods

Methodological framework

The thesis is structured according to three phases and uses several different data methods: literature reviews, media analysis, data analysis from focus groups, case study analysis, fieldwork, pattern language, co-creation workshops, and synthesis mapping.

Phase 1: The research

A large literature and discourse study has been conducted to better understand the 15-minute city model and answer the first sub-research question. The other part of the literature study is to inform the development of public values. The results of this phase are combined in my conceptual framework.

Phase 2: Operationalising the conceptual framework

The second phase of my thesis is operationalising conceptual the framework, for which I will use the Delft Designfor Values approach. The approach follows the order of conceptualisation, specification and operationalisation. The conceptualisation stage is the phase where values are defined in their application. This has been done in the theoretical chapter, concluding with the following definition of public values: those are instrumental moral principles held by the public on a social basis that are constantly in flux, reflecting cultural and socio-economic context.

The specification step is what comes next. This phase makes values more specific so that they can guide actions and decisions in a specific context. These are the steps where the public values are developed through the focus groups. These focus groups were held for the InPUT project and during them questions were asked to participants

about their experiences, positive and negative, with their local liveability, accessibility for mobility and amenities. This step will result in the value matrix showing the present public values in this peri-urban context and their relations.

last step is the actual operationalisation. This is where the pattern language comes into play. This phase makes the values measurable and comparable. They will be developed into a pattern language to grasp this complex field of spatial interventions from the public values and their relations. The pattern language provides a method to clearly show the function of a spatial intervention, the relation to other interventions, and thus other public values. Furthermore, it can show which 'needs' a spatial intervention satisfies.

The other function of pattern language is its ability to be a communication tool. The patterns will be used in a co-creation workshop with local citizens. This workshop is again twofold in function. First, it will be the second feedback loop in understanding what public values citizens desire through their desired spatial interventions. The other function is, with the knowledge of desired spatial interventions, to inform the spatial strategy that will be developed in the final phase.

Phase 3: strategy development

Finally, developing a spatial strategy for the transition of the case study area will ultimately show that sustainable transformation can be achieved when using the perspective of public values from the start of the planning process.

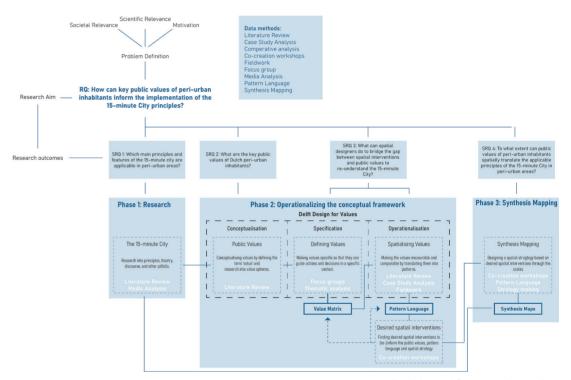
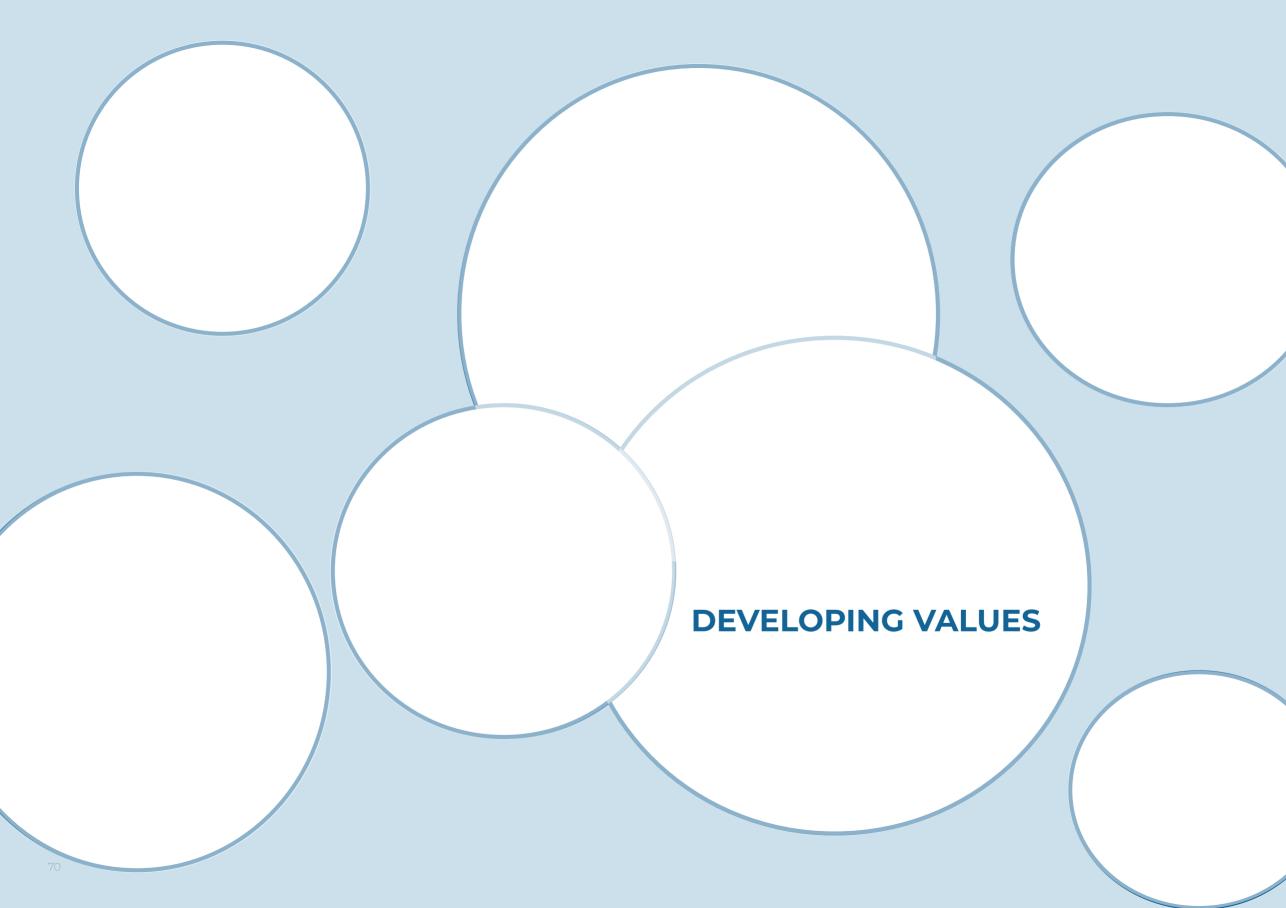


Figure 26: Methodological framework - Author





Conceptualising Values Conceptualising Values

can guide actions and decisions in a guestions were posed: specific context. This phase consists of developing values from citizens and 1. policymakers and looking critically at 2. between these values. Firstly, to start to develop these values, data needs to be 3. analysed from focus groups held by the you/community? InPUT project for these stakeholders. From this data, we can develop values and showcase them per value sphere in a value matrix, one for the citizens and one for the policymakers. This matrix then helps with identifying conflicts based on conflict typologies developed by Von Der Dunk et al (2011) and Herzog et al (2024) in similar contexts.

Developing values

The InPUT project organised focus groups for citizens to discuss their experiences and desires with regards to liveability, mobility and amenities in their daily lives.

Seven sessions were held in a local community centre with 29 participants. The sessions were divided based on the groups of society that the participants are part of. These were: workers (W), the elderly (E), newly moved (within 5 years)(J), caregivers (C) and the youth (Y). The total group of participants largely consisted of the youth and retired old white men. Furthermore, a bias towards the bike was present, with a lot of the participants being members of the Dutch bike association, de Fietsersbond.

The focus groups were group conversations structured in two phases. Phase one aimed at understanding the diversity of experiences and perceptions

The conceptualisation phase of the with regard to their movements and Delft Design for Values approach using different modes of transportation makes values more specific so that they in their daily life. The following three

- Imagine your 'average' day
- Problems with amenities/places these results by identifying conflicts you mentioned and/or how you get
 - What are important places for



Figure 27: Photo of an identified problem - Focus

The second phase aimed to understand 1. which needs might not be met. how need/like close by? experiences and needs translate into 2. different aspirations of communities mobility in the region? for the future, and how people relate to the places they inhabit. The following auestions were discussed:

- What other amenities would you
- What needs to improve for
- What would you change in your neighbourhood/community with 5000 euros.
- Perspective of 10.000 houses Ede/40.000 Food Valley
- Describe the area in one word



Figure 28: Photo of an identified problem - Focus group participant



Conceptualising Values Conceptualising Values

General impressions

During the 1st phase of the sessions, the bias towards the bike became clear, with participants mainly using their bike in their daily lives. Even biking long distances to work for pleasure. Even with their bias towards bikes, they were able to articulate that the spatial planning of Ede also really supports the use of the bike. But, even within this group, a lot of them still use the car to combine activities or visit people in the outer areas of the city. With participants stating that on the larger scale, a car is a must, with public transport being perceived as not practical and/or convenient.

When talking about issues in their experience, participants were mostly able to articulate very specific problems they encountered, especially with mobility. Problems mentioned ranged from safety issues to daily annoyances. Examples are long waiting times at certain stoplights, a new turbo roundabout that is experienced as dangerous or unintuitive bike routes with some missing links requiring cyclists to cross the road only to have to cross back 100 meters further, and a lot of people going against the flow of traffic for a short distance, creating unsafe situations.

The most identifiable aspect of the area was almost unanimously the closeness of the Veluwe and heathlands to Ede. Of the older participants, most stated to have moved to Ede for the nature, and people enjoyed the fact that they could be in nature within a very short amount of time, either by foot or bike, depending on where they lived in Ede.

When asked about amenities, participants were happy with the current

situation of the city. The issues that rose up were mainly specific to certain neighbourhoods, with there being no community centres in the East. Or the new neighbourhoods lacking amenities within them, but having a shopping centre within biking distance outside of the neighbourhood. To no real surprise, the only group that could be seen as an outlier in this regard was the youth. During those sessions, more amenities were mentioned as missing or not of a good enough quality to their liking. With some stating that the city of Ede would not necessarily be a place where they could see themselves living in future.

This was exemplary because each different group tended to have a specific issue, despite the quite similar views on the topics mentioned before. Besides the youth missing places to hang out,



Figure 29: Photo of an identified problem - Focus group participant

caregivers talked about issues regarding governance and feeling unheard, while the elderly and working groups could agree that for them, the city of Ede was starting to get too busy, losing the quality of tranquillity of the area.

Finally, when participants were asked to imagine a possible future and think of changes they would implement, they hit a roadblock. First responses tended to be: 'I do not know'. When asked further, participants' ideas can be grouped into two categories. Firstly, participants tended to quickly return to the problems

they mentioned beforehand and try to solve them. Secondly, participants would support existing programs or projects like community centres or Ede Doet. Ede Doet is a program of the municipality allowing citizens to choose between different programs and in this way divide a certain part of the municipal budget. Overall, thinking of new ways to tackle issues or larger changes that could solve the problems lies outside these participants' scope.



Figure 30: Photo of an identified problem - Focus group participant

Identifying Values Identifying Values

Identifying Values: Developing the Value Matrix

Public values can be developed by combining specific comments of participants and general impressions across the sessions into the topic. In this case, spatial public values are being developed, as they are the public values that have direct spatial interventions as 'satisfiers'. The public values needed to be specific enough to fall within a single value sphere, but be abstract enough to allow the next step to develop multiple satisfiers related to the values. This chapter provides a few examples of how comments and impressions led to specific values.

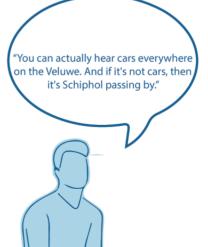
As mentioned before, a participant complained about the waiting time at a stoplight, from the perspective of a cyclist. Others mentioned the annoyance with the local public transport being that a journey requires too many transfers, or a bus stop being too far away from their home. This led them to choose the car, because it was the simple option. Another one used public transport because there was a bus stop in front of the door. Different modes of transport were chosen based on multiple factors, one of them being how simple this option was. This can be combined to create the value 'Travel Convenience', where people decide their travel options based on what they perceive as being easy or convenient. The other factors that people discussed regarding mobility had to do with practicality, efficiency or sustainability, all leading to their values.

Furthermore, one of the most discussed positive factors of the region was the nature surrounding the city. With the closeness to nature being one of the

'For example, I also go to Bennekom.' I also walk there, but there are just very few benches to just rest." "There are a lot of elderly people living in this neighbourhood and they always complained that they couldn't get on the bus" "I would like to take the train twice, but that is because of picking up the children, childcare is not possible."

Figure 31: Quotes from focus group participants. Genders are used randomly - Author main reason to live in Ede and that being in nature within walking distance was strongly appreciated and that the quality of the nature, it being a nature reserve compared to just a local park was a large added benefit. This combined into the value 'Locality of Nature'. When talking about nature people discussed that removing more and more nature wasn't an option for them and that we should be careful with how we treat various forms of nature, within and outside of the city, leading to other ecological based values.

As seen in the answers to the question about problems they experience in their daily lives, a lot of comments can be attributed to different forms of safety. With one specific turbo roundabout being mentioned in every single session, along with missing lighting at certain bike paths or blocked sightlines creating dangerous situations, the value 'Travel Safety' was formulated along with other safety values which focused more on space.







"I'm just glad you have the forest and heathland within walking distance."



Figure 32: Quotes from focus group participants. Genders are used randomly - Author

The Value Matrix The Value Matrix

The value matrix

Using this method, the data from the focus groups results in a value matrix of 31 public values, divided over the five public value spheres. Each value sphere has five to seven values, showcasing a good balance between them. The matrix also shows which groups of society mentioned things that helped formulate each value. With the exception of the Ecological Quality sphere, each sphere has at least one value that was mentioned over all five different groups within the focus groups, with the caregivers group not speaking about nature in general.

Assigning values to specific spheres was done based on the definition of them by Herzog et al (2024). The definitions of the sphere are extended to fit the findings of this thesis. Where Herzog et al (2024). Define the liveability sphere as values linked to the physical built environment; these results add the experience of the built environment to them. All the values in the economic opportunities sphere still fit the original definition of being mobility-related values. However, they do not just concern available space for roads and transit, but also the way mobility is used and perceived. The ecological quality sphere was about protecting and creating green spaces, with each of the five values fitting one of these two categories. Safety and Health had a main relation with mobility in the original definition, but in this instance is taken broader by adding the dimension of public spaces as well. Finally, the sphere of social equity relates to equitable access to amenities, services and resources in a larger perspective, which also happens here, but with a specific focus on social amenities and resources.

Liveability	Economic O	pportunities	Ecological Quality	Safety/ Health	Social	Equity
Understandable Urban Planning	Travel Practicality	Travel Convenience	Locality of Nature	Safe Neighbourhoods	Inclusive Access to Amenities	Diverse Housing Stock
J W C E Y	J W C E Y	J W C E Y	J W E Y	J W C E Y	J W C E Y	J W C E Y
Urban Liveability	Travel Efficiency	Sustainable Travel Options	Nature within the Urban Environment	Travel Safety	Equitable Neighbourhoods	Civic Solidarity
J W E Y	J W C E	J W C E Y	J W E Y	J W E Y	J W C Y	WCEY
Cleanliness	Large Scale Connectivity	Inclusive Access to Transport	Nature Preservation	Resilience	Community Oriented Action	Diversity of Amenities
J W E Y	W C E Y	J W C E	WEY	J W E Y	J W E Y	WCY
Tranquillity	Autonomy of the Car		Nature Conservation	Safe Spaces		Youth Centred Development
JWE	WEY		JW	WCY		JEY
Experiencing Public Space			Climate Oriented Decision Making	Health Care Access		
Aesthetics of the Urban Fabric			WE	J C E Active Mobility for Health		
JE				WE		

Figure 33: Value Matrix constructed from data of the focus groups - Author



A Critical look at the Value Matrix

This value matrix is derived from a small group of local citizens in Ede and its surroundings. To understand how these results can be used further in this thesis. this chapter looks critically at the value matrix to better understand the defined public values and how they relate to each other and other perspectives.

Firstly, values that are left out of the matrix are discussed. Followed by an overview of identifiable value conflicts that helps understand relations between values and their eventual spatial interventions. Furthermore, ending with a perspective of policymakers and their values to open up the public values to be developed further in tangible satisfiers with spatial interventions to be used in spatial translations of these public values.

Socio-economic and cultural values

The participants of the focus groups also put forward comments that could be translated into socio-economic and cultural public values. These public values do not have a direct translation into spatial interventions and thus fall outside this thesis's scope. However, it is important to be aware of them. So these comments can be generalised into one main topic: participatory decision making. Participants talked about the need to include the voice of silent or underrepresented stakeholders to ensure inclusive decision-making processes and the need to feel heard by governing officials. Even though these public values are not included in this thesis, the values approach that is used in this thesis tries to solve some of these issues by testing an approach that can include the voice of these different stakeholders.



Figure 34: Quotes from focus group participants. Genders are used randomly - Author

Value conflicts

As discussed in the theoretical chapter, public values are not singular entities. Since public values satisfy different needs, competing public values exist. With Herzog et al (2024). In the conceptualisation of the public spheres. the inherent conflicts between values can be shown with conflict typologies. Both Von Der Dunk et al (2011) and Herzog et al. (2024) developed these typologies in conflicting values in a similar context, so they will be used to start identifying these conflicts.

the development conflict. This conflict arises in the value matrix between the values of 'nature within the urban environment' and 'travel safety'. The current built environment only has a

limited space in its streetscapes, so adding more trees in a street might use the same space needed to widen the pavement or bike paths to create more safety during travel. This is a practical type of conflict where interventions linked to these values cannot coexist. There are also value conflicts that exist because the values or their interpretation in interventions directly work against each other. For example, the drawback of beauty conflict is that focusing on lively urban spaces within the value of urban liveability creates a more vibrant public space, which in turn creates more An example of one of the typologies is noise on the streets and goes against the value of tranquillity.

> Another relevant development conflict is between travel convenience and safe neighbourhoods, a conflict that

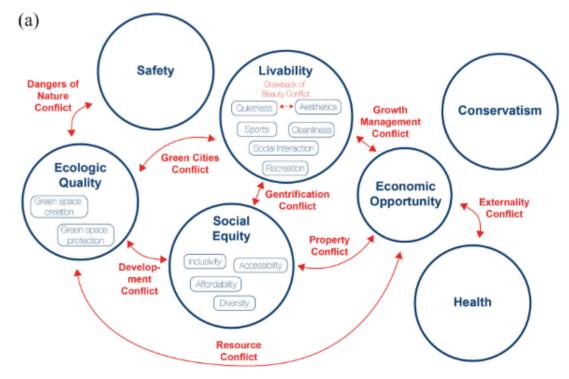


Figure 35: Visualisation of value conlifts between the public value spheres. (Herzog, 2024)

A Critical Perspective A Critical Perspective

participants themselves also realised during the focus groups. People tend to desire the most convenient form of travel, which means taking their car straight to their front door. However, a safer neighbourhood would be a neighbourhood where cars are limited, forcing the car away from their homes, making travel more inconvenient.

The gentrification conflict is also present between urban liveability, aesthetics of the urban environment, and a diverse housing stock. Strongly improving the look of a neighbourhood and its liveability increases land value, which could lead to an increase in housing prices and rent, forcing certain social groups out of the neighbourhood, leading to gentrification.

Furthermore, a conflict between nature preservation and other values arises. With green cities and resource conflicts, large-scale connectivity requires more space for nature, and similarly, travel efficiency does the same. Both possible scenarios require improving space that would now be nature areas.

These are a handful of conflicts identified based on the conflict typologies. They help us better understand why certain values are hard to combine or what elements require specific attention during a design with certain values.

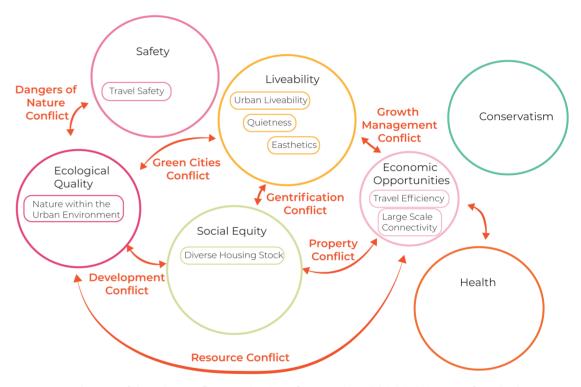


Figure 36: adaption of the value conflict visualisation of Herzog (2024), highlighting new found value conflicts. (Author)



A Critical Perspective A Critical Perspective

A policymakers perspective

Bylooking at the value matrix through the lens of policy makers, we can understand where these two stakeholders hold similar values and, more importantly, what values a policy maker might hold which is not present in the other stakeholder and vice versa.

A co-identification workshop was organized for the InPUT project with policymakers from different government. levels (ministry, province, municipality) and NGO's. During this workshop, the challenges and possibilities of applying the 15-minute city in the region of Ede and its surroundings and the larger region of the Food Valley were discussed. Again, the workshop was divided into two phases based on a type of SWOT analysis, with phase one focusing on challenges and opportunities of the region concerning mobility, amenities and liveability. The second phase centred around the most important

opportunities and threats and the possible interventions that could help tackle or solve them.

Generally speaking, all the policymakers were very aware that a mobility transition was on the horizon. The municipalities wanted to focus on using the bike within Ede entirely, to ensure safety for the cyclist and all the other added benefits promoting active mobility can have on liveability and health. To reach this goal, the car should face more constraints, high fees and other challenges to decrease the use and want of use of the car. The whole focus on the bike was also intentional, as they deemed walking and walkability to be secondary to accessibility by bike. And with the steady decrease of funding in public transport. this option was seen as viable as well, as shown by the lack of public transport integration in the proposed new neighbourhood of Doesburgerbuurt. An NGO representing the interests of

the public transport sector strongly disagreed with the municipality's stance. The one thing they agreed upon was the need for a modal shift to build all the new houses to support the growing population, keep up with the sustainable transition battling climate change, improve the living conditions of the city, and keep the identity of Ede as it is. However, the specific suggested implementations differed.

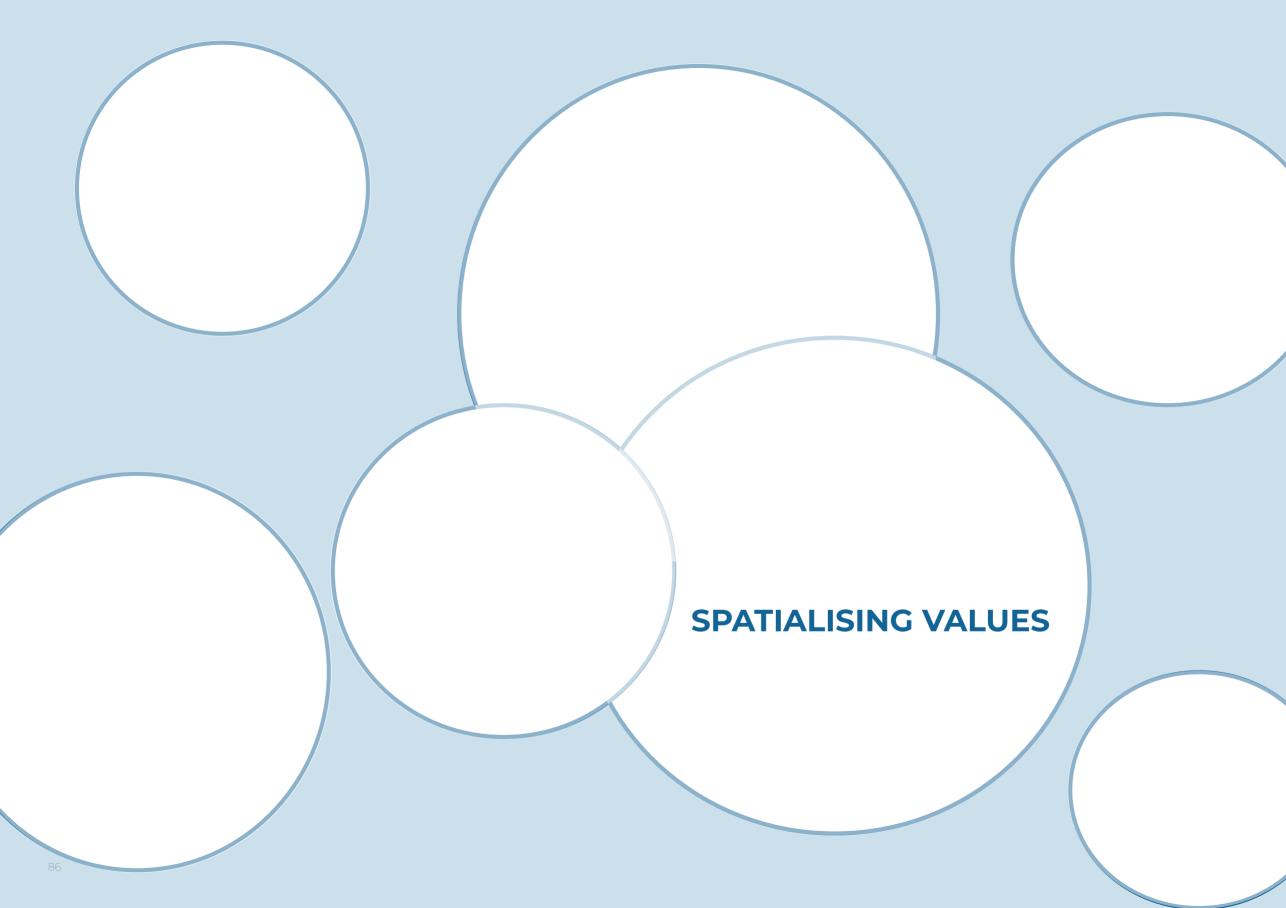
Figure 37 shows the values present during the policymaker workshop from the developed values of the value matrix. These 16 values cover most of the discussions, with the notable omission of two types of comments. These are the financial feasibility of suggested plans and the political and social buy-in of the plans. These are again socio-economic and cultural public values that do not have a place in the spatial value matrix. However, without either one of them, a proposed design or strategy is doomed

to fail. These omissions also make sense from a citizen's perspective, as it is not in their daily life or work to think about these types of issues, generally speaking.

From this perspective of policymakers, decisions made by citizens during the cocreation workshop can be compared to suggested approaches by policymakers. This allows for the identification of possible (mis)alignments between the two stakeholders, creating a better understanding of what the role of a designer and spatial planner in this value method is or should be.

Liveability	Economic Opportunities		Ecological Quality	Safety/ Health	Social Equity	
Urban Liveability	Travel Practicality	Travel Convenience	Locality of Nature	Travel Safety	Inclusive Access to Amenities	Equitable Neighbourhoods
Experiencing Public Space	Travel Efficiency	Sustainable Travel Options	Nature within the Urban Environment	Active Mobility for Health		
Aesthetics of the Urban Fabric	Large Scale Connectivity	Inclusive Access to Transport	Climate Oriented Decision Making		I	

Figure 37: The Value Matrix of policymakers



The Pattern Language The Pattern Language

The operationalisation phase is the last step of the Delft Design for Values approach. Here, the developed public values become measurable and comparable by developing a pattern language of their spatial interventions. The pattern language allows it to function as a communicator of spatial interventions back to citizens and understand the relationship between patterns.

The pattern language

Introduction to the pattern language Patterns exist everywhere, and relations and conflicts between patterns tend to result in new patterns. Thus, to create a comprehensible set of patterns, a ruleset needs to be developed to decide how to construct this set. The cards will be used during a co-creation workshop with local citizens. This means that the The each pattern has a drawing. This pattern needs to be understandable from a non-designer's perspective and be usable within a limited timeframe of the workshop.

pattern language of fifty patterns was developed based on previous results and analysis, suggestions made during the focus groups and the policymaker workshop and other pattern languages used by the City of Making or other master thesis works. These patterns are the tangible spatial interventions that link to different public values and satisfy the different needs of the 15-minute city. The patterns are a spatial intervention or a group of interventions that try to achieve the same goal.

Using these sources, a certain bias will slip into these patterns. As discussed, the people present at the focus groups and the policymakers all have a bias towards

bikes. To try and prevent this bias from taking over the full pattern set, patterns are introduced that specifically go against this bias and introduce conflicts within the pattern set.

Pattern explainer

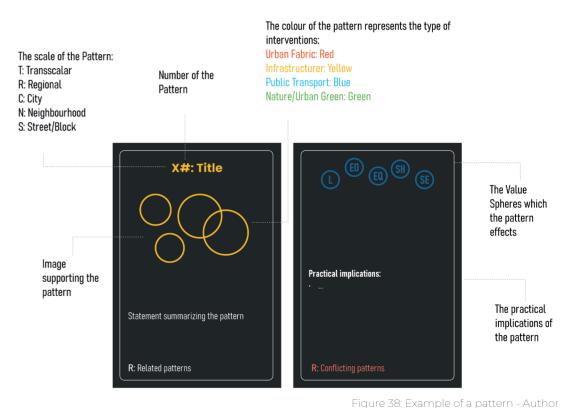
Each pattern has the form of a hand-held card. Each card has a set of attributes that help understand the pattern, as shown in Figure 38. First of all, each pattern has a title. This title consists of a letter, a number and the real title of the pattern. The letter is associated with the pattern's scale, and the pattern is number of the pattern within that scale. The pattern's title tries to encapsulate the pattern in a catchy title. These are short titles, possibly with alliteration to help with memorability.

drawing represents the pattern or shows the specific spatial intervention that encapsulates the pattern. The main colour in this drawing and the colour of the title corresponds to the So, with these restrictions in mind, a type of spatial intervention(s) of the pattern. This can help visualize groups of pattern that achieve a similar goal within infrastructure of interventions for nature.

> Under the image is a statement that summarises the pattern in a short sentence. Finally, on the front of the pattern, the codes of other related patterns can be found. These related patterns have a positive relation with each other, meaning that they either help each other achieve their goals, have similar interventions, and thus reach the same goals, or build upon each other to improve the patterns.

> On the back of the pattern is a list of

practical implications. These further specify the spatial interventions linked to the pattern and provide examples of what the pattern could mean. Furthermore, the relations to the five value spheres can be found at the top of the card and finally, at the bottom, the conflicting patterns. These could be conflicting because they either use up the same space in a street or directly work against each other. Thus, a conflict between patterns does not directly mean they cannot be present together in a spatial strategy.



The Pattern Language

The patterns

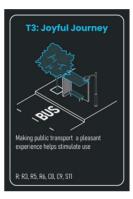
This first page shows all the patterns within the Transscaler scale. These patterns are applied throughout the scales and their related spatial interventions can thus differ in scale.

























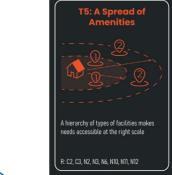












Figure 39: All patterns in the Transscalar scale - Author

systems.

This page shows all the region-scale patterns. Most of these patterns are related to public transport and infrastructure, as these two types of

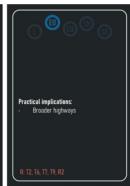
interventions are also part of large-scale

The Pattern Language































This page shows all the city-scale patterns. In this scale, the focus starts to return to interventions related to the urban fabric. This scale has no nature or urban green patterns. These interventions often are either small-scale interventions within a city and thus the neighbourhood scale or smaller or part of larger natural systems working on the regional scale.

Figure 41: All patterns in the City scale - Author

C1: Follow the Form Practical implications: Low rise housing, with low density Car-focused infrastructure Broad public spaces Expansion follows low-density character following the current situation

The Pattern Language













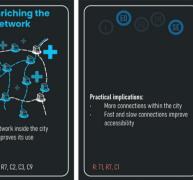














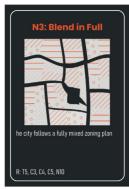






The Pattern Language

This page shows all the Neighbourhood scale patterns. On this scale, urban fabric interventions are dominant. Specific interventions that work on this scale for public transport are not present in this pattern set, as public transport works on a larger scale.





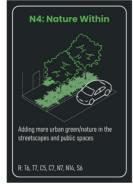
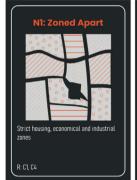




Figure 42: All patterns in the Neighbourhood



Urban density balances the use of mixed

zoning to create a vibrant, but viable

urhan snace

R: T5. T7. C2. C4. C5. N10



Practical implications:

Mixed zoning strategies











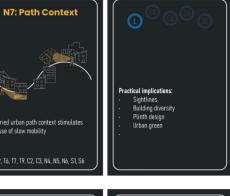




















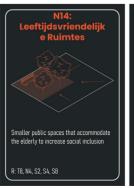














This page shows all the Street/Block scale patterns. These interventions are small tactical interventions that often help achieve or improve patterns from larger scales. This group could be seen as a more specific tool or version of the larger-scale patterns.





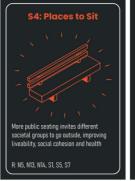




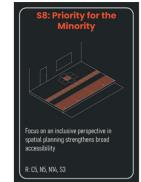


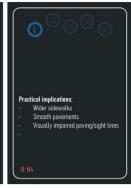


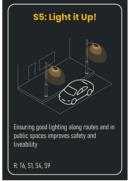
The Pattern Language













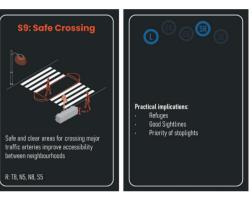


















Figure 43: All patterns in the Street scale - Author

SPATIALISING VALUES 99

Filling in the Matrix Filling in the Matrix

Pattern relations

Each pattern has a link to specific value spheres because it fits with one or more of the public values in the value matrix. This means that the patterns' codes can be added to the value matrix to show how many satisfiers each value has and can be used to see which values are present when using a specific pattern.

Liveability	Economic O	pportunities	Ecological Quality	Safety/ Health	Social	Equity
Understandable Urban Planning T2/T9/C7/N7	Travel Practicality	Travel Convenience T1/T3/R6/C6/C7/C9/N5/S9 S10/S11	Locality of Nature	Safe Neighbourhoods	Inclusive Access to Amenities T5/N2/N3/N5/N10/N11/S8 S10/S11	Diverse Housing Stock
J W C E Y Urban Liveability	J W C E Y Travel Efficiency	J W C E Y Sustainable Travel Options	J W E Y Nature within the Urban Environment	J W C E Y Travel Safety	J W C E Y Equitable Neighbourhoods	J W C E Y Civic Solidarity
T7/T8/C5/N2/N2/N3/N4/N5 N9/S1/S3/S4/S5	T1 / R1 / R3 / R4 / R5 / R6 / N10	T2/T4/T9/R3/R4/C8/N5/N9 SII	T7/N4/S6	T3/T8/C5/C6/C7/N8/S5/S8 S9	T5 / C8 / N2 / N3 / N10 / N11	S4/S8
J W E Y Cleanliness	J W C E Large Scale Connectivity	J VV C E Y Inclusive Access to Transport	J W E Y Nature Preservation	J W E Y Resilience	J W C Y Community Oriented Action	W C E Y Diversity of Amenities
т6/т8	R1 / R3 / R4 / R6 / R7 / C9	T4/R3/R7/C8/C9/S8/S11	T6 / R2 / C3	T2/T3/T9/C2/C3/N9	N12 / N13 / N14 / S1 / S4	T5 / N2 / N3 / N11
J W E Y	W C E Y	J W C E	WEY	JWEY	J W E Y	WCY
Tranquillity	Autonomy of the Car		Nature Conservation	Safe Spaces		Youth Centred Development
C1 / C5 / N1 / N9 / N14	TI/RI/CI		S5 / S6 / S7	T8/N8/S1/S3/S4/S5		N13 / S1 / S4
JWE	WEY		JW	WCY		JEY
Experiencing			Climate Oriented	Health Care Access		
Public Space T8/N4/N6/N7/S1/S2/S4/S6			Decision Making T2/T4/T6/R2/R3/N4/N9/S6 S7	T5 / N10 / N11		
JEY			W	J C E		
Aesthetics of the Urban Fabric				Active Mobility for Health		
C5 / N7 / N9 / S2 / S6 / S7				T2 / T7 / T9 / R4 / C7 / N5 / N6 / S4 S8		
JE				W		

Figure 44: The Value Matrix with associated patterns to the public values - Author



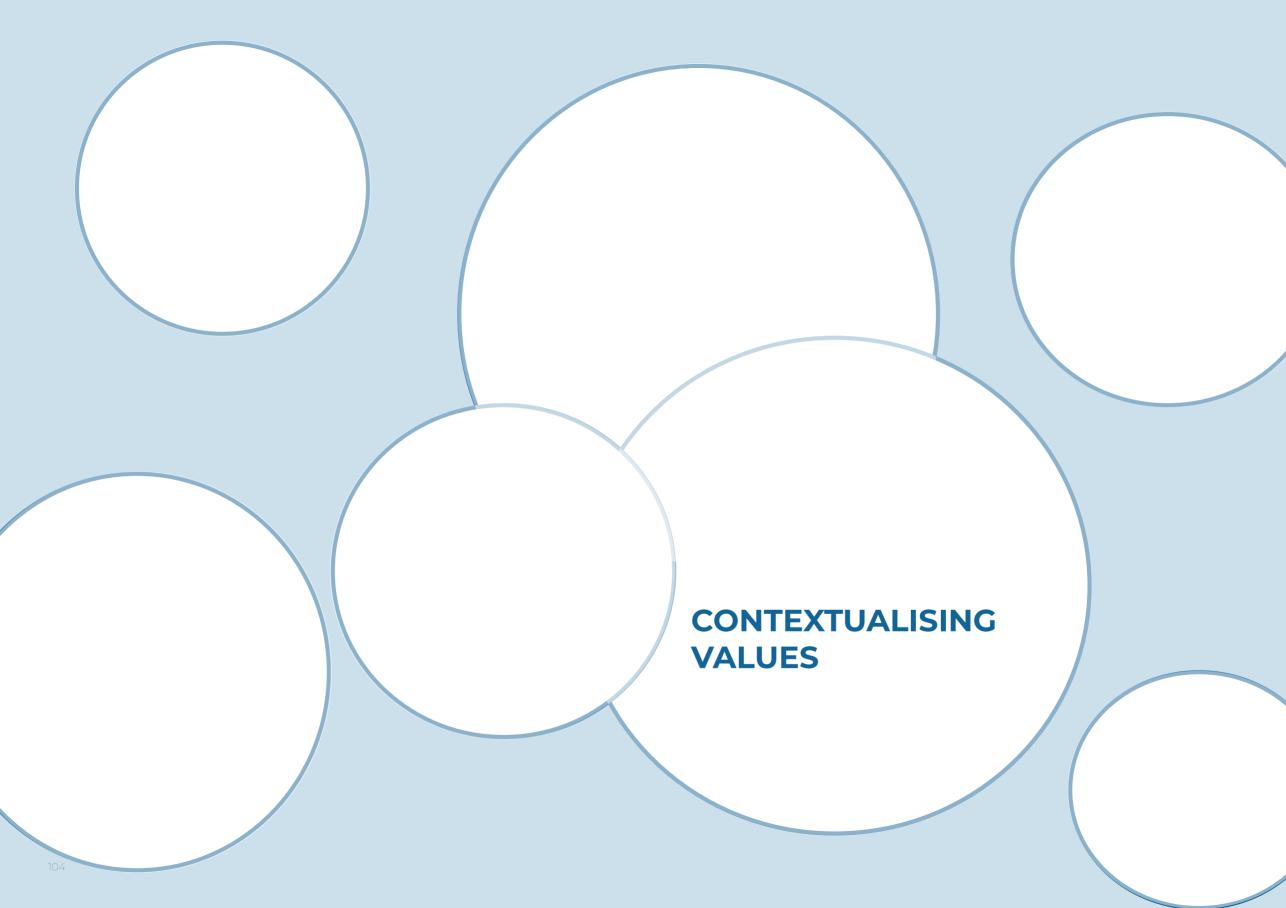
Filling in the Matrix Filling in the Matrix

Moreover, patterns have not only a positive relation with public values but can also conflict with them. Thus, a second variant of the value matrix can be made to show which patterns have a conflicting relation to public values.

Both of these types of relations will be used to see which public values are behind the chosen pattern during the co-creation workshop. This will help us understand whether people can actually choose spatial interventions that represent the values they identify themselves or if there is a form of misalignment between these.

Liveability	Economic O	pportunities	Ecological Quality	Safety/ Health	Social	Equity
Understandable Urban Planning	Travel Practicality	Travel Convenience	Locality of Nature	Safe Neighbourhoods	Inclusive Access to Amenities	Diverse Housing Stock
J W C E Y	J W C E Y	J W C E Y	J W E Y	J W C E Y	J W C E Y	J W C E Y
Urban Liveability	Travel Efficiency	Sustainable Travel Options	Nature within the Urban Environment	Travel Safety	Equitable Neighbourhoods	Civic Solidarity
TI/NI	C1 / C8 / N5 / N9	п/сі	С3	п	C1 / N1 / S2	
J W E Y	J W C E	J W C E Y	J W E Y	J W E Y	J W C Y	W C E Y
Cleanliness	Large Scale Connectivity	Inclusive Access to Transport	Nature Preservation	Resilience	Community Oriented Action	Diversity of Amenities
T4	С1	С1	T7 / R1			
JWEY	WCEY	J W C E	WEY	J W E Y	J W E Y	WCY
Tranquillity	Autonomy of the Car		Nature Conservation	Safe Spaces		Youth Centred Development
R1 / C3 / C9 / N8 / N13	T2/T11/C3/N5/N8/N9			N4		
JWE	WEY		JWY	WCY		JEY
Experiencing Public Space			Climate Oriented Decision Making	Health Care Access		
J E Y			W	J C E		
Aesthetics of the Urban Fabric				Active Mobility for Health		
J E				W		

Figure 45: The Value Matrix with associated conflicting patterns to the public values - Author



The Co-Creation Workshop The Co-Creation Workshop

A co-creation workshop was organised back in Ede to reevaluate the earlier results of the value matrix and gain an understanding of the present (mis) alignment between a person/group's public values and desired spatial interventions.

Re-evaluating the value matrix will further confirm the answer to my second sub-research question of what the key public values of peri-urban inhabitants are. Attending inhabitants will be asked to work with the value matrix and add to the matrix if they deem something to be missing. If nothing is added during the workshop, the conclusion can be drawn that for the part of society these people represent, the possible key public values are represented in the value matrix.

Furthermore, the understanding of the relationship between chosen spatial interventions and public values will answer the third sub-research question of what spatial designers can do to bridge the gap between spatial interventions and public values to re-understand the 15-minute city.

co-creation workshop organised in a local community centre, De Meerpaal, in Ede. People were invited through the network of the InPUT project, through residents' associations of the different districts of Ede, physical flyers and posters at the community centre and my personal network. The invitation that was shared is shown in Figure 46.

Finally, the co-creation workshop didn't just have a goal for my research but also functioned as a possible learning platform for the citizens who took part. After the workshop, the participants could have gained a better understanding of relations between spatial interventions, what their impact can be and what considerations or reasons could be behind certain spatial interventions. The way the patterns are developed and the extra context that will be provided during the workshop should allow people to gain (partly) these understandings. Furthermore, by helping with my research, they would be part of a contribution to a new approach in urban planning for citizen participation.

Geïnteresseerd in mogelijke ontwikkelingen van je buurt? En woon je in Ede of omgeving*?

*biiv. Veenendaal, Bennekom, Lunteren.



Wat

Anderhalf uur groepsdiscussie over wenseliike stedelijke ontwikkelingen met betrekking tot mobiliteit en voorzieningen in Ede en omgeving

Wannneer

dinsdag, 15 april 2025 19.30 - 21.30

Waar

Buurthuis de Meerpaal, Industrielaan 1, 6717 EL

Inschrijving

Via QR code of email naar (Jelle Schotanus) J.C.Schotanus@student.tudelft.nl Inschrijving nodig!



Doe mee aan een TU Delft Master afstudeeronderzoek! Je krijgt een VVV - bon bij deelname ter waarde van EUR 25,-







Figure 46: Flyer used to promote the co-creation workshop - Author

The Co-Creation Workshop

The Co-Creation Workshop

The set-up

The co-creation workshop's setup was structured around three main steps, as shown in Figure 47. The workshop was recorded to properly analyse this data. Therefore, the participants had to sign a consent form, which can be seen in the appendix. At the end of the workshop, they were compensated for their time with a VVV youcher of 25 euros.

Before diving into the topic of values and spatial interventions, I introduced myself as the researcher, my research project, the goal, and what they could take away from the evening. After this, each participant was handed a value matrix without the related patterns and given the task of choosing their five of six most important public values and ordering them based on priority.

These steps would later allow me to link the chosen patterns to what the participants articulate as their most important public values. If they deemed a value missing from the matrix, they could write it down themselves.

The next step would introduce the pattern language. First, I would explain how the pattern works. Here, I would mention the title, drawing and implications on the back. The relations and public values were not mentioned here on purpose. After this, they would choose eight or nine patterns that they desired most. Following this, I would introduce the relations and conflicts. After this explanation, participants would be allowed to check their patterns and see if they wanted to make any changes and conclude the individual part of the workshop.

Choose 5-6 values and prioritise them



2. Choose 8-9 patterns



3. Choose 13-14 patterns



Liveability	Economic Opportunities		Ecological Quality	Safety/ Health	Social Equity	
Understandable Urban Planning	Travel Practicality	Travel Convenience	Locality of Nature	Safe Neighbourhoods	Inclusive Access to Amenities	Diverse Housing Stock
Urban Liveability 4	Travel Efficiency	Sustainable Travel Options	Nature within the Urban Environment	Travel Safety	Equitable Neighbourhoods	Civic Solidarity 5
Cleanliness	Large Scale Connectivity	Inclusive Access to Transport	Nature Preservation	Resilience	Community Oriented Action	Diversity of Amenities
Quietness	Autonomy of the Car		Locality of Nature	Safe Spaces		Youth Centred Development
Experiencing Public Space		J	Climate Oriented Decision Making	Health Care Access		
Aesthetics of the Urban Fabric				Active Mobility for Health		





Figure 47: The three main steps of the co-creation workshop- Author



The Co-Creation Workshop

The Co-Creation Workshop

The third step would be to let the personal reasoning for choosing certain participants discuss in groups their chosen patterns and come to a decision on 13 or 14 patterns. In this stage, the participants were also provided with maps of the region and the city of Ede as seen in Figures 44 to 46. If they wanted to attribute specific patterns to a certain area, they could. Afterwards, the groups could share their final discussions and Thismeansthatasimilar bias was present chosen patterns to allow other groups to react and raise questions. To conclude the session, I asked the participants to look at their value matrices again and ask if they wanted to change anything compared to what they filled in at the start of the workshop.

During the whole workshop, I would be able to answers questions of participants, and mainly ask them questions of their

patterns, or why the group choose or left out certain patterns.

The workshop

The group of fifteen participants consisted mainly of people who were also present during the focus groups that were used to develop the value matrix. on the evening. The main difference was that the overrepresentation of the youth was gone, leaving behind mainly retired old white men and a strong preference for using the bike. When groups needed to be made for the workshop, different groups of people were equally divided over the three groups, eventually resulting in groups of four, five and six.



Figure 48: Map of the region used during the co-creation workshop - Author



Figure 49: Map of Ede used during the co-creation workshop - Author



Figure 50: Map of Ede of with reference pictures used during the co-creation workshop - Author



Results: Process vs content

The results of the co-creation workshop will be discussed in two separate chapters, split between the workshop process itself, the process of the content of the workshop, and the content of the workshop itself. The workshop process will be discussed first to give an insight into the workshop and the participants' thought processes. These findings will then be supported by a chapter showcasing the actual content created during the workshop and the analysis that comes with it.

The process

To discuss the process, this chapter first explores how citizens responded during the co-creation workshop, approached tasks, and made sense of the material. It then reflects on how urban planners can understand and translate their interpretations. Their results will then be compared to the perspective of policymakers. Finally, the chapter reflects on the main lessons of uncovering and translating public values in a participatory process.

The need for translation

Urban planning is a complex field that brings together many competing During the workshop, participants interpreted the patterns in their own ways, using them to articulate the 'why' behind the spatial outcomes they desired. Sinek's (2009) Golden Circle offers insight into the importance of the 'why', and the Sensemaking theory (Weick, 1995) and the Ladder of Inference (Senge et al., 1994) help explain the thought processes and actions of citizens and policymakers, as well as how they articulate their 'why'. By understanding the 'why' as a kind of language unique to each stakeholder, the urban planner

must become a translator of these diverse interpretations of the pattern language in order to build coherent and value-driven spatial strategies.

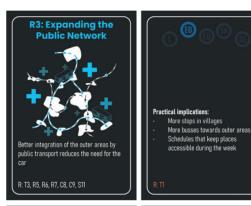
Making Sense of People's Approaches
The first steps of the workshop were
supposed to be individual, but people
looked at each other for inspiration.
Participants who knew each other or
arrived at the same time sat next to each
other. Their results contained similarities
that originated from their conversing
with one another.

An evident example is the pattern 'Car Accessibility' (T1), which was specifically introduced to create conflict, with the expected bias of the participants going towards the bike. In total, it was chosen twice, and the participants who chose it sat next to each other. In the workshop's setup, people talked to each other and could look at each other's materials, creating a tendency to share results and make similar decisions.

We can ground this behaviour in literature by looking at Karl Weick's (1995) Sensemaking theory, which tries to understand how people act in unknown and complex situations. He states that people construct meaning through an ongoing process of interpreting cues in their environment, forming the building blocks for constructing meaning. In this process, people put these cues in a framework, enabling them "to comprehend, understand, explain, attribute, extrapolate, and predict" (Weick, 1995). This process has seven characteristics that set it apart from other theories.

One of which explains the first identified phenomenon of people looking for

interaction. Weick (1995) states that meaning is created through interaction, social norms and group context, which were their neighbouring participants in this case. So, just like the public values, which reflect the cultural and socioeconomic context, trying to make







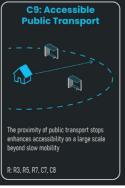




Figure 51: Similar patterns that were used interchangeably by participants - Author

sense of something new or complex is influenced by a similar sphere. People create meaning based on the direct interaction with their surroundings, and their public values result from this interaction over a long period, as explained in the theoretical chapter.

Another characteristic of Sensemaking is retrospect, in which people make sense of things by looking back and using their past experiences. Weick (1995) does make an important note that the meaning of an event is formed afterwards and not during. Through their past experiences, they form narratives that justify their preferences for urban planning. This was also shown by participants, who chose patterns based on personal experiences. experiences that often were of a small scale. They then used these experiences to justify why they wanted specific changes to happen, often on a much larger scale than the initial problem they encountered. For example, the experience of trouble with parking resulted in the desire to focus on these issues throughout most of the city.

These types of discussions, where arguments are based on their lived experiences, can turn problematic if left unchallenged, since unchallenged arguments might hide their temporal bias. A participant was against expanding public transportation, as they believed it to be inferior to other modes of transportation. In this argument, they presented decades-old experiences as present-day facts. In this specific instance, the argument was challenged, and others helped paint the presentday picture to revise the individual's stance, resolving the temporal bias. A good example of a hurdle planners can face while engaging with citizens is a

good example of how the hurdle can be jumped by asking the right questions.

Seeking Simplicity in Complexity

The most evident way the participants tried to make sense of the material was in their search for simplicity. They showed varying approaches to dealing with what they understood and what they did not. Weick (1995) calls it the characteristic of focusing on extracted cues. Further explaining that people zero in on particular cues, which simplify the complex environment, to construct meaning.

This characteristic was evident in the people's approach to three different public transport patterns. The patterns 'Expanding the Public Network' (R3), 'Enriching the Network' (C8) and 'Accessible Public Transport' (C9) were perceived as functionally the same thing, while being nuanced in scale or specificity of the approach. In one instance, a participant argued for the specific interventions tied to R3 while having the C9 card in their hand instead. Through this specific focus on cues related to bus stops, all three became interchangeable symbols for the same goal: improving the public transport network by adding more bus stops.

For them, this became the most coherent explanation of their argument, lacking accuracy in the use of the patterns. People being driven by plausibility rather than accuracy is another one of Weick's (1995) characteristics. This was not necessarily a bad occurrence in the context of this workshop. Their understanding of the patterns still enabled them to articulate their reasons for choosing what they wanted.

Another example of people driven by plausibility rather than accuracy has to do with 'Lively Urban Spaces' (S1), 'Walkable distances' (N5) and 'Through the Neighbourhood' (N6). Their intentions were to increase the number of people on the streets, aiming for greater













Figure 52: Patterns used with a different intention then their main goals - Author

social control, ultimately, to improve neighbourhood safety. However, on first glance, what they choose, you might think that the participants wanted to improve liveability through vibrant urban spaces. After all, it is their reasoning which allows the planner to understand the relation between what they want and why they want it. A reasoning only found by asking the question of "Why?" Sensemaking theory also shows that this relation exists by arguing that the process of sensemaking is grounded in a person's identity, with people interpreting experiences based on their values and beliefs (Weick, 1995).

The golden question: "Why?"

This notion of beginning with the question "Why?" is not a novel one. Simon Sinek (2009) wrote about this idea through his concept of the Golden Circle. It reframes the concept of purpose, the why, driving human behaviour, also described by earlier scholars (Frankl, 1946; Maslow, 1943; Collins, 1994; Drucker, 1954; Covey, 1989), in the context of leadership and organisational behaviour.



Figure 53: The Golden Circle (Sinek, 2009)

At the core of the Golden Circle, as shown in Figure 53, lies the Why, an articulation of purpose or belief. According to Sinek (2009), people have a habit of explaining 'what' they do, sometimes elaborate on 'how' they do it, but rarely communicate 'why' they do it. He describes the 'how' as the actions we take when we try to live out our 'why', and 'what' as simply the products or services we provide.

In an interview, Sinek further elaborates the 'why' by stating that they represent our values and beliefs, and should drive the choices we make (Halpern, 2015). While his theory is embedded in the context of people in organisational leadership, his findings can be extended into the normal life of people. Were people also act and make life choices based on their own purpose and beliefs. This resonates with the conceptualisation of public values in the theoretical chapter and with Weick's (1995) Sensemaking theory.

The conceptualisation of public values follows, on the one hand, Graeber (2001). who describes values as things we judge to be important in life, which we can identify as our beliefs. On the other hand, Nabatchi (2018) described public values as the ideals pursued by organisations. ideals which are rooted in our beliefs and on what we can base decision-making. All thus describe our 'why' as the public values which drive our life choices. In the conceptual framework, public values were also seen as satisfiers, as described by Cardoso et al. (2022). Satisfiers have the purpose of driving life choices, which also fits with this description of the 'why' of people.

Understanding this is critical in participatory urban planning. In practice,

ONTEXTUALISING VALUES — CONTEXTUALISING VALUES

citizens often express what they want in a space, and sometimes how they envision it happening. But without delving into their 'why', designers risk overlooking the underlying values and beliefs that give meaning to those preferences. Looking at the results of what people want and maybe even how they would want it to be implemented can lead to a misinterpretation of it.

Interpretations of 'why'

We have already discussed Sensemaking as a theory of how people interpret their environment, the Ladder of Inference from Chris Argyris, and later popularised by Senge et al. (1994) shows a common mental pathway of thinking with increasing abstraction. This pathway often leads to misguided beliefs and also shows us how people deal with interpreting their environment.

The ladder shows that we observe data, from which we select data to add meaning, make assumptions and draw conclusions before we adopt a belief about the work we deem the truth. Moreover, the next time our beliefs about that data influence how we select data the next time, known as the "reflexive loop" (Senge et al., 1994).

The ladder of inference explains why most people do not usually remember where their deepest attitudes came from. The data is long since lost to memory, after years of loops filled with unchecked assumptions. So our decisions are made based on all these layers of unchecked assumptions, and every time we climb the ladder again.

Furthermore, planners and citizens are climbing their own ladders, most likely unaware of the assumptions they are

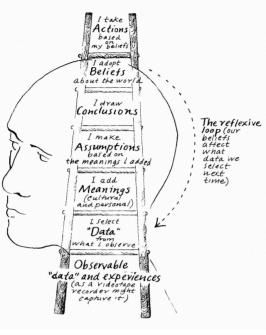


Figure 54: The Ladder of Inference - (Senge et al., 1994)

making. Let us go back to the example of S1, N5 and N6, a planner sees "participants want patterns to create vibrant spaces and more walkable routes". Their ladder might go: "They mentioned vibrancy and walkability.", adding the meaning of: "They are frustrated about the lack of places for social interaction." Then assuming: "They want more green spaces, mixed use, and street furniture." Reaching the conclusion of: "Let us prioritise human scale zones focused on social interaction." Building the belief that: "Urban Liveability is their top value." Finally building a mixed use, walkable area that stimulates social interaction.

But if you had asked "Why?", you will find: "We want more people on the street, because the social control creates a safer feeling." The core 'why' is different; the values of Urban Liveability, as assumed by the planner, compared to the value

that underlies the desires of the citizens, Safe Neighbourhoods. Even though the end results might match the people's desires, it does not mean that the outcomes truly serve the people. Sinek (2009) also writes about this, stating that the correct answer will eventually always steer us wrong if we do not understand the cause. So, as the ladder shows, planners might misinterpret citizen input, especially if only the "what" or "how" is voiced without exploring the "why".

Articulating the 'why'

Since we are dealing with the complex context of urban planning, we must enable citizens to articulate their 'why' to a sufficient level that can transcend their simplicity of understanding the patterns. As Sinek (2009) also describes, symbols can help people express their meaning through the 'why' that are represented by these symbols. The pattern language can become these symbols, as shown by the earlier example of the three public transport patterns. The patterns then help participants articulate their thoughts, organising and communicating them in a structured yet personal way. The conversations allow the planner to understand through reflective inquiry the 'why'. the underlying public values, behind the 'what' and 'how' of the chosen patterns.

Translating the 'why'

The patterns themselves are a language interpreted and 'spoken' by each participant in their own way. After all, everyday citizens do not speak the language of a designer. It is in these moments that the role of the designer shifts: from creator to translator, translator of intentions, of meanings, and answers to the question of 'Why?'

This translation involves uncovering the public values that underlie citizens' desired patterns. We do this by revealing the deepest public values that underlie citizens' choices through that golden question. To do this, we use pattern language as a bridge between values and spatial interventions. It provides a structure through which participants can articulate their public values and the designer can spatially translate them.

In this way, the designer must become fluent in both the language of meaning and the language of form. Patterns function symbolically, revealing more about the person choosing them than about the pattern itself. By understanding how stakeholders arrive at their interpretations, the spatial designer can translate these meanings into coherent, value-driven strategies.

This offers a compelling example of Sinek's (2009) argument that by first asking the simple question: "Why?" we can reach more meaningful and effective outcomes compared to just using the "What?" or "How?"

Lost in translation

An important final observation in the process of people choosing patterns to represent their own public values is the difficulty in fully capturing their desires through the values alone. Across all groups, three patterns appeared consistently in the group selections of 13–14 patterns. Two relate directly to two of the main values; the other, 'Housing Hustle' (C4), relates to a value halfway down the list. In conversations with the groups, it became apparent that this pattern represented a fair chance at a house for everyone for them. Which they deemed to be an important basic need

in life for everyone. However, just three people mentioned the value of a diverse housing stock to represent this desire. This highlights an important nuance: the presence or absence of specific public values does not necessarily reflect pointless without an understanding all of their main desires.

Adding a perspective to translate Comparing the results and conversations to the policymakers workshop also gives two important insights for the next phase. Firstly, citizens and policymakers think on two different scales. Sensemaking theory explains this through the characteristic of enactive of sensible environments. Weick (1995) explains that we interpret our environment through how we use and interact with it. As mentioned before, people use their lived experience as a base for creating meaning. This experience relates to the small scale

patterns is confined to this small scale. Policymakers interact with the urban environment on a much larger scale due to the nature of their work. Furthermore. their interactions allow them to create meaning on a much more complex level. Where citizens do not go further than the three mentioned patterns (R3, C8, C9) about public transport, policymakers are able to take it a step further and manage to speak about the patterns 'Modular Mobility' (R5) and 'Adaptive Systems' (R7) which specific implementation for a public transport system.

This, however, is not an argument to choose the perspective of policymakers above that of citizens. As Sinek (2009) highlights: "A company does not need to have the best products, they just need to be good or very good. Better or best

is a relative comparison. Without first understanding WHY, the comparison itself is of no value to the decision maker." The different stakeholders might have differing 'what', comparing them is of 'why'. These insights underline the importance of bridging the gap between these perspectives as an urban planner.

The grey area between norms and values The previous part of the chapter delineates the workshop process and what urban planners can learn from it. However, one truly final observation from the workshop remains to be discussed, which begins to blur the lines of how we have understood public values throughout this thesis.

Some participants also explained their 'why' for values and patterns they specifically did not choose. All of these arguments revolved around the same Thus, their understanding of the point; they were perceived as too selfevident. For instance, the public values of 'Safe Spaces' and related patterns like 'Safe Crossings' (S9) were seen as so fundamental that participants assumed their inclusion was automatic and did not require active selection. So, some values and patterns were deemed to hold more weight, or even as prerequisites. This would mean that the interpretation of their 'why' becomes more layered and complicated to translate into a design.

> But this same phenomenon can also be identified among policymakers. Two values emerged as highly important: political and social buy-in and financial feasibility, yet they were missing from the citizens. These are two values that are probably better identified as something other than public values.

This could indicate that a possible hierarchy exists between public values in this context. This idea parallels Maslow's (1943) Hierarchy of Needs, where human motivations are layered, with different levels of needs. Higher-level needs take precedence once lower-level needs are sufficiently met, so once a need is taken for granted, it becomes backgrounded. A possible explanation is that some participants did not feel the need to explicitly select certain values or patterns.

It is here that the sole focus on values opens up towards norms, and the distinction becomes very blurry. Chris Wright (2020) concludes that norms and values are closely related. Frese (2015) differentiates between them by stating that values are held inside a person, are abstract and can be distinct from behaviour. On the other hand, norms are outside the person, relatively specific and more prescriptive of concrete behaviours. Wright (2020) continues to describe the dynamic relationship between the two. If we must follow a rule, a norm, then the idea behind the rule, the value, must already exist. However, norms can also shape values over time through social reinforcement. Thus, neither can function in isolation from the other.

This moment, when the door opens towards a distinction between norms and values, a set of questions emerges that reach beyond the current scope of this thesis, which has thus far focused on values. These are explored further in the reflection chapter.

Processing the process

Translating public values has emerged as a layered and complex process. It is not simply about combining stakeholder

input but about interpreting it and understanding how different actors make sense of the same material. The workshop has shown that citizens can articulate public values and translate them into spatial interventions; their scope is limited by their daily lives. In contrast, policymakers focus on the larger scale, opting for interventions that also have a social impact to quide them. but they tend to miss out on connecting to citizens' lived experiences.

Translating the 'why' of stakeholders requires a deep understanding of public values and the pattern language. The golden guestion of "Why?" becomes a secondary tool to the pattern language to uncover these underlying public values. Recognising that this 'why' is shaped by values and norms and thus influenced by society means that a valuedriven approach to urban planning does not seek a fixed answer to a question. but rather a pathway that can adapt to shifting priorities in public values.

To truly serve the public, the urban planner must not only speak many languages fluently, but also learn to listen to the 'why', a crucial part of the process of finding values.

Content of the Workshop

The content

content during the workshop, offering steps will be shown through pictures of chosen patterns per group will follow, capped off by an overall analysis of the workshop material, linking the chosen patterns back to the chosen values in the first step.

The value matrices

This chapter will show the created Each participant received a value matrix and filled in five or six public values that insights into the conversation held with are the most important for them. They participants to explain further or back also could write down a public value up their rationale behind their choices. themselves if it was not in the matrix. First, the content of the first step will Because of more participants joining be shown through pictures. Afterwards than anticipated, some people had to will follow a first analysis of the chosen use the same sheet of paper. As you values. Then, the content of the last two can see in two of the matrices on this page, not everybody added a priority to the workshop. Then an analysis of the their values, believing that they were all equally important.

Figure 55: Value matrixes of participant number 1 to 4

Leefbaarheid	Economische Kansen		Ecologische Kwaliteit	Veiligheid/ Gezondheid	Sociale Gelijkheid		
Logische Stedelijke ingrepen	Praktisch Reizen	Gemakkelijk en Fijn Reizen	De Nabijheid van Natuur	Veilige Buurten	Inclusive toegang tot Voorzieningen	Diverse Woningmark	
Stedelijke Leefbaarheid	Efficient Reizen	Duurzame Reismogelijkheden	Natuur in de Stad	Veilig Reizen	Gelijke Buurten	Solidariteit	
Netheid van de Openbare Ruimte	Buiten Stedelijke Bereikbaarheid	Inclusieve Toegang tot Transport	Natuurbescherming ¹	Aanpasbaarheid van de Inwoner	Gemeenschapsgerichte Ontwikkeling	Diversiteit in Voorzieningen	
Omgevings Rust	De Vrijheid van de Auto		Natuurbehoud	Veilige Plekken	,	Ontwikkeling gericht op de Jeugd	
Ervaring van Publieke Ruimte			Klimaatgerichte Beslissingen	Toegang tot Zorg			
Uiterlijk van Stedelijke Ingrepen				Lopen en Fietsen voor de Gezondheid			
				7			

Leefbaarheid	Economische Kansen		Ecologische Kwaliteit	Veiligheid/ Gezondheid	Sociale Gelijkheid		
Logische Stedelijke ingrepen	Praktisch Reizen	Gemakkelijk en Fijn Reizen	De Nabijheid van Natuur	Veilige Buurten	Inclusive toegang tot Voorzieningen	Diverse Woningmarkt	
Stedelijke Leefbaarheid	Efficient Reizen	Duurzame Reismogelijkheden	Natuur in de Stad	Veilig Reizen	Gelijke Buurten	Solidariteit	
Netheid van de Openbare Ruimte	Buiten Stedelijke Bereikbaarheid	Inclusieve Toegang tot Transport	Natuurbescherming	Aanpasbaarheid van de Inwoner	Gemeenschapsgerichte Ontwikkeling	Diversiteit in Voorzieningen	
Omgevings Rust	De Vrijheid van de Auto		Natuurbehoud	Veilige Plekken		Ontwikkeling gericht op de Jeugd	
Ervaring van Publieke Ruimte			Klimaatgerichte Beslissingen	Toegang tot Zorg			
				47			
Uiterlijk van Stedelijke Ingrepen				Lopen en Fietsen voor de Gezondheid			

Leefbaarheid	Economische Kansen		Ecologische Kwaliteit	Veiligheid/ Gezondheid	Sociale Gelijkheid		
Logische Stedelijke ingrepen	Praktisch Reizen	Gemakkelijk en Fijn Reizen	De Nabijheid van Natuur	Veilige Buurten	Inclusive toegang tot Voorzieningen	Diverse Woningmark	
Stedelijke Leefbaarheid	Efficient Reizen	Duurzame Reismogelijkheden	Natuur in de Stad	Veilig Reizen	Gelijke Buurten	Solidariteit	
Netheid van de Openbare Ruimte	Buiten Stedelijke Bereikbaarheid	Inclusieve Toegang tot Transport	Natuurbescherming	Aanpasbaarheid van de Inwoner	Gemeenschapsgerichte Ontwikkeling	Diversiteit in Voorzieningen	
Omgevings Rust	De Vrijheid van de Auto		Natuurbehoud	<u>V</u> eilige Plekken		Ontwikkeling gericht op de Jeugd	
Ervaring van Publieke Ruimte			Klimaatgerichte Beslissingen	Toegang tot Zorg	-		
Uiterlijk van Stedelijke Ingrepen				Lopen en Fietsen voor de Gezondheid	_		

Content of the Workshop

One participant did use the option to add a value, mentioning the value 'Space-Conscious Planning'. At the end of this chapter, an updated value matrix will be presented that gathers all these extra findings into one definitive value matrix.

Others felt the need to explain their choices further. One participant elaborated on their choice for 'Active Health of Amenities' with 'Preferable in healthy air, so preferably between clean e-scooters instead of petrol scooters'.

Figure 56: Value matrixes of participant number 5 to 7

Leefbaarheid	Economische Kansen		Ecologische Kwaliteit	Veiligheid/ Gezondheid	Sociale Gelijkheid		
Logische Stedelijke ingrepen	Praktisch Reizen	Gemakkelijk en Fijn Reizen	De Nabijheid van Natuur	Veilige Buurten	Inclusive toegang tot Voorzieningen	Diverse Woningmarkt	
Stedelijke Leefbaarheid	Efficient Reizen	Duurzame Reismogelijkheden	Natuur in de Stad	Veilig Reizen	Gelijke Buurten	Solidariteit	
Netheid van de Openbare Ruimte	Buiten Stedelijke Bereikbaarheid	Inclusieve Toegang tot Transport	Natuurbescherming 2	Aanpasbaarheid van de Inwoner	Gemeenschapsgerichte Ontwikkeling	Diversiteit in Voorzieningen	
Omgevings Rust	De Vrijheid van de Auto		Natuurbehoud) Veilige Plekken		Ontwikkeling gericht op de Jeugd	
Ervaring van Publieke Ruimte			Klimaatgerichte Beslissingen	Toegang tot Zorg		No see a lucht,	
Uiterlijk van Stedelijke Ingrepen				Lopen en Fietsen voor de Gezondheid	ilefst in gezonde dus tuss het liefst	lucht,	

Leefbaarheid	Economische Kansen		Ecologische Kwaliteit	Veiligheid/ Gezondheid	Sociale Gelijkheid		
Logische Stedelijke ingrepen	Praktisch Reizen	Gemakkelijk en Fijn Reizen	De Nabijheid van Natuur	Veilige Buurten Verkeer × 1	Inclusive toegang tot Voorzieningen	Diverse Woningmarkt	
Stedelijke Leefbaarheid	Efficient Reizen	Duurzame Reismogelijkheden	Natuur in de Stad	Veilig Reizen	Gelijke Buurten	Solidariteit × 5	
Netheid van de Openbare Ruimte	Buiten Stedelijke Bereikbaarheid	Inclusieve Toegang tot Transport	Natuurbescherming	Aanpasbaarheid van de Inwoner	Gemeenschapsgerichte Ontwikkeling	Diversiteit in Voorzieningen	
Omgevings Rust	De Vrijheid van de Auto		Natuurbehoud	Veilige Plekken		Ontwikkeling gericht op de Jeugd	
Ervaring van Publieke Ruimte			Klimaatgerichte Beslissingen	Toegang tot Zorg			
Uiterlijk van Stedelijke Ingrepen				Lopen en Fietsen voor de Gezondheid			

Leefbaarheid	Economische Kansen		Ecologische Kwaliteit	Veiligheid/ Gezondheid	Sociale Gelijkheid		
Logische Stedelijke ingrepen	Praktisch Reizen	Gemakkelijk en Fijn Reizen	De Nabijheid van Natuur	Veilige Buurten	Inclusive toegang tot Voorzieningen	Diverse Woningmarkt	
Stedelijke Leefbaarheid	Efficient Reizen	Duurzame Reismogelijkheden	Natuur in de Stad	Veilig Reizen	Gelijke Buurten	Solidariteit	
Netheid van de Openbare Ruimte	Buiten Stedelijke Bereikbaarheid	Inclusieve Toegang tot Transport	Natuurbescherming	Aanpasbaarheid van de Inwoner	Gemeenschapsgerichte Ontwikkeling	Diversiteit in Voorzieningen	
Omgevings Rust	De Vrijheid van de Auto	Repealet ruinte- beslop (1)	Natuurbehoud	Veilige Plekken		Ontwikkeling gericht op de Jeugd	
Ervaring van Publieke Ruimte		J	Klimaatgerichte Beslissingen	Toegang tot Zorg			
Uiterlijk van Stedelijke Ingrepen				Lopen en Fietsen voor de Gezondheid	-		

Some participants added something they deemed new values, but it

they deemed new values, but it was already present in the value matrix. This was due to participants' misunderstanding or misreading the value matrix. Where a participant mentioned community centres and loneliness as an important value, this falls under the value of 'Community Oriented Action', but was not clear enough.

Another wanted to write 'Autonomy of the bike' as a reaction to 'Autonomy of the car', but missed the 'Active Mobility for Health', which encapsulates this approach as well.

Figure 57: Value matrixes of participant number 8 to 11

Leefbaarheid	Economische Kansen		Ecologische Kwaliteit	Veiligheid/ Gezondheid	Sociale Gelijkheid		
Logische Stedelijke ingrepen	Praktisch Reizen	Gemakkelijk en Fijn Reizen	De Nabijheid van Natuur	Veilige Buurten	Inclusive toegang tot Voorzieningen	Diverse Woningmarkt	
Stedelijke Leefbaarheid	Efficient Reizen	Duurzame Reismogelijkheden	Natuur in de Stad	Veilig Reizen	Gelijke Buurten	Solidariteit	
Netheid van de Openbare Ruimte	Buiten Stedelijke Bereikbaarheid	Inclusieve Toegang tot Transport	Natuurbescherming	Aanpasbaarheid van de Inwoner	Gemeenschapsgerichte Ontwikkeling	Diversiteit in Voorzieningen	
Omgevings Rust	De Vrijheid van de Auto		Natuurbehoud	Veilige Plekken		Ontwikkeling gericht op de Jeugd	
Ervaring van Publieke Ruimte			Klimaatgerichte Beslissingen	Toegang tot Zorg			
Uiterlijk van Stedelijke Ingrepen				Lopen en Fietsen voor de Gezondheid			

Leefbaarheid	Economis	che Kansen	Ecologische Kwaliteit	Veiligheid/ Gezondheid	Sociale G	elijkheid
Logische Stedelijke ingrepen	Praktisch Reizen	Gemakkelijk en Fijn Reizen	De Nabijheid van Natuur	Veilige Buurten	Inclusive toegang tot Voorzieningen	Diverse Woningmarkt
Stedelijke Leefbaarheid X 5	Efficient Reizen	Duurzame Reismogelijkheden X 4	Natuur in de Stad	Veilig Reizen	Gelijke Buurten	Solidariteit
Netheid van de Openbare Ruimte	Buiten Stedelijke Bereikbaarheid	Inclusieve Toegang tot Transport	Natuurbescherming	Aanpasbaarheid van de Inwoner	Gemeenschapsgerichte Ontwikkeling	Diversiteit in Voorzieningen
Omgevings Rust	De Vrijheid van de Auto		Natuurbehoud	Veilige Plekken	Sunot huiza X 2 ecnzaamheia	Ontwikkeling gericht op de Jeugd
Ervaring van Publieke Ruimte		_	Klimaatgerichte Beslissingen X	Toegang tot Zorg		
Uiterlijk van Stedelijke Ingrepen				Lopen en Fietsen voor de Gezondheid		

Leefbaarheid	Economis	che Kansen	Ecologische Kwaliteit	Veiligheid/ Gezondheid	Seciale Gelijkheid		
Logische Stedelijke ingrepen	Praktisch Reizen	Gemakkelijk en Fijn Reizen	De Nabijheid van Natuur	Veilige Buurten	Inclusive toegang tot Voorzieningen	Diverse Woningmarkt	
	1		握 6	4 年			
Stedelijke Leefbaarheid	Efficient Reizen	Duurzame Reismogelijkheden	Natuur in de Stad	Veilig Reizen	Gelijke Buurten	Solidariteit	
Netheid van de Openbare Ruimte	Buiten Stedelijke Bereikbaarheid	Inclusieve Toegang tot Transport	Natuurbescherming	Aanpasbaarheid van de Inwoner	Gemeenschapsgerichte Ontwikkeling	Diversiteit in Voorzieningen	
Omgevings Rust	De Vrijheid van de Auto		Natuurbehoud	Veilige Plekken Soverdeute hang tkuken	A A A	Ontwikkeling gericht op de Jeugd	
Ervaring van Publieke Ruimte			3 🔼 66 Klimaatgerichte Beslissingen	Toegang tot Zorg	* &	25 ****	
Uiterlijk van Stedelijke Ingrepen	I may d	p ov		Lopen en Fietsen voor de Gezondheid	* **	_ *	



Not everybody kept themselves to the limit of five or six values. Participants that went over the limit were forced to make a decision. The participant at the bottom made this decision with a prioritisation, leaving of the other two values.

Figure 58: Value matrixes of participant number 12 to 15

Leefbaarheid	Economische Kansen		Ecologische Kwaliteit	Veiligheid/ Gezondheid	Sociale Gelijkheid		
Logische Stedelijke ingrepen	Praktisch Reizen	Gemakkelijk en Fijn Reizen	De Nabijheid van Natuur	Veilige Buurten	Inclusive toegang tot Voorzieningen	Diverse Woningmarkt	
*			\times	×		*	
Stedelijke Leefbaarheid	Efficient Reizen	Duurzame Reismogelijkheden	Natuur in de Stad	Veilig Reizen	Gelijke Buurten	Solidariteit	
		2					
Netheid van de Openbare Ruimte	Buiten Stedelijke Bereikbaarheid	Inclusieve Toegang tot Transport	Natuurbescherming	Aanpasbaarheid van de Inwoner	Gemeenschapsgerichte Ontwikkeling	Diversiteit in Voorzieningen	
1×							
Omgevings Rust	De Vrijheid van de Auto		Natuurbehoud	Veilige Plekken		Ontwikkeling gericht op de Jeugd	
	X						
	L						
Ervaring van Publieke Ruimte			Klimaatgerichte Beslissingen	Toegang tot Zorg			
Uiterlijk van Stedelijke Ingrepen				Lopen en Fietsen voor de Gezondheid			
				×			

Content of the Workshop

Economise	che Kansen	Ecologische Kwaliteit	Veiligheid/ Gezondheid	Sociale (Gelijkheid
Praktisch Reizen	Gemakkelijk en Fijn Reizen	De Nabijheid van Natuur	Veilige Buurten	Inclusive toegang tot Voorzieningen	Diverse Woningmark
Efficient Reizen	Duurzame Reismogelijkheden	Natuur in de Stad	Veilig Reizen	Gelijke Buurten	Solidariteit
Buiten Stedelijke Bereikbaarheid	Inclusieve Toegang tot Transport	Natuurbescherming	Aanpasbaarheid van de Inwoner	Gemeenschapsgerichte Ontwikkeling	Diversiteit in Voorzieningen
De Vrijheid van de Auto		Natuurbehoud	Veilige Plekken		Ontwikkeling gericht op de Jeugd
		Klimaatgerichte Beslissingen	Toegang tot Zorg		
		_	Lopen en Fietsen voor de Gezondheid		
	Praktisch Reizen Efficient Reizen Buiten Stedelijke Bereikbaarheid	Efficient Reizen Efficient Reizen Duurzame Reismogelijkheden S Buiten Stedelijke Bereikbaarheid De Vrijheid	Praktisch Reizen Gemakkelijk en Fijn Reizen De Nabijheid van Natuur Efficient Reizen Duurzame Reismogelijkheden Symbolische Fijn Reizen De Nabijheid van Natuur in de Stad Hiller Fijn Reizen Natuur in de Stad Natuur in de Stad Symbolische Fijn Reizen De Natuur in de Stad Natuur in de St	Praktisch Reizen Gemakkelijk en Fijn Reizen De Nabijheid van Natuur Efficient Reizen Duurzame Reismogelijkheden Swaliteit De Nabijheid van Natuur Weilige Buurten Weilige Reizen Natuur in de Stad Weilig Reizen Weilige Plekken Natuurbescherming De Vrijheid van de Auto Natuurbehoud Weilige Plekken Weilige Plekken Toegang tot Zorg	Praktisch Reizen Gemakkelijk en Fijn Reizen De Nabijheid van Natuur Efficient Reizen Duurzame Reismogelijkheden Sociale Company (Company) Duurzame Reismogelijkheden Matuur in de Stad Veilige Buurten Celijke Buurten Gelijke Buurten Gelijke Buurten Matuur in de Stad Veilig Reizen Gelijke Buurten Gemeenschapsgerichte Ontwikkeling De Vrijheid van de Auto Natuurbehoud Veilige Plekken Klimaatgerichte Beslissingen Lopen en Fietsen voor

Leefbaarheid	Economis	che Kansen	Ecologische Kwaliteit	Veiligheid/ Gezondheid	Sociale C	Gelijkheid
Logische Stedelijke ingrepen	Praktisch Reizen	Gemakkelijk en Fijn Reizen	De Nabijheid van Natuur	Veilige Buurten	Inclusive toegang tot Voorzieningen	Diverse Woningmarkt
Stedelijke Leefbaarheid	Efficient Reizen	Duurzame Reismogelijkheden	Natuur in de Stad	Veilig Reizen	Gelijke Buurten	Solidariteit
Netheid van de Openbare Ruimte	Buiten Stedelijke Bereikbaarheid	Inclusieve Toegang tot Transport	Natuurbescherming	Aanpasbaarheid van de Inwoner	Gemeenschapsgerichte Ontwikkeling	Diversiteit in Voorzieningen
Omgevings Rust	De Vrijheid van de Auto		Natuurbehoud	Veilige Plekken		Ontwikkeling gericht op de Jeugd
Ervaring van Publieke Ruimte			Klimaatgerichte Beslissingen	Toegang tot Zorg		
Uiterlijk van Stedelijke Ingrepen				Lopen en Fietsen voor de Gezondheid	-	

CONTEXTUALISING VALUES — CONTEXTUALISING VALUE

When participants had the opportunity at the end of the workshop to adjust their value matrix based on their experience during the workshop, one person adjusted their values, and two other participants felt the need to further explain some of their choices.

A participant who was part of a group where a lot of people held the value of 'Health Care Access' also added this one to their list, leaving 'Sustainable Travel Options'. Another was so convinced of their group's approach to promote the use of active mobility and restrict the use of the car that they added a negative annotation to the value of 'Autonomy of the Car'. Lastly, a main concern for one of the participants was written down next to the value that this concern related to, with too many buses of companies in the neighbourhoods straining urban liveability.

Figure 59: Value matrixes of participant 6, 7 and 9

Leefbaarheid	Economi	sche Kansen	Ecologische Kwaliteit	Veiligheid/ Gezondheid	Sociale	Gelijkheid
Logische Stedelijke ingrepen	Praktisch Reizen	Gemakkelijk en Fijn Reizen	De Nabijheid van Natuur	Veilige Buurten	Inclusive toegang tot Voorzieningen	Diverse Woningmark
Stedelijke Leefbaarheid	Efficient Reizen	Duurzame Reismogelijkheden	Natuur in de Stad	Veilig Reizen	Gelijke Buurten	Solidariteit
Netheid van de Openbare Ruimte	Buiten Stedelijke Bereikbaarheid	Inclusieve Toegang tot Transport	Natuurbescherming	Aanpasbaarheid van de Inwoner	Gemeenschapsgerichte Ontwikkeling	Diversiteit in Voorzieningen
Omgevings Rust	De Vrijheid van de Auto	Reperlet ruinte- beslog (1)	Natuurbehoud	Veilige Plekken		Ontwikkeling gericht op de Jeugd
Publieke Ruimte Uiterlijk van edelijke Ingrepen			Klimaatgerichte Beslissingen	Toegang tot Zorg Lopen en Fietsen voor		

Leefbaarheid	Economische Kansen		Ecologische Kwaliteit	Veiligheid/ Gezondheid	Sociale Gelijkheid		
Logische Stedelijke ingrepen	Praktisch Reizen	Gemakkelijk en Fijn Reizen	De Nabijheid van Natuur	Veilige Buurten Verkeer × 1	Inclusive toegang tot Voorzieningen	Diverse Woningmarkt	
edelijke Leefbaarheid ¥	Efficient Reizen	Duurzame Reismogelijkheden	Natuur in de Stad	Veilig Reizen	Gelijke Buurten	Solidariteit ×	
Netheid van de penbare Ruimte	Buiten Stedelijke Bereikbaarheid	Inclusieve Toegang tot Transport	Natuurbescherming	Aanpasbaarheid van de Inwoner	Gemeenschapsgerichte Ontwikkeling	Diversitait in Voorzieningen	
mgevings Rust	De Vrijheid van de Auto		Natuurbehoud	Veilige Plekken		Ontwikkeling gericht op de Jeugd	
rvaring van olieke Ruimte			Klimaatgerichte Beslissingen	Toegang tot Zorg			
terlijk van ijke Ingrepen				Lopen en Fietsen voor de Gezondheid			

Leefbaarheid	Economis	che Kansen	Ecologische Kwaliteit	Veiligheid/ Gezondheid	Sociale G	elijkheid
Logische Stedelijke ingrepen	Praktisch Reizen	Gemakkelijk en Fijn Reizen	De Nabijheid van Natuur	Veilige Buurten	Inclusive toegang tot Voorzieningen	Diverse Woningmarkt
Stedelijke Leefbaarheid X 5 Scale in Sandos CC Uy h/s diaa	Efficient Reizen	Duurzame Reismogelijkheden X 4	Natuur in de Stad	Veilig Reizen	Gelijke Buurten	Solidariteit
Netheid van de Openbare Ruimte	Buiten Stedelijke Bereikbaarheid	Inclusieve Toegang tot Transport	Natuurbescherming	Aanpasbaarheid van de Inwoner	Cemeenschapsgerichte Ontwikkeling	Diversiteit in Voorzieningen
Omgevings Rust	De Vrijheid van de Auto		Natuurbehoud	Veilige Plekken	Jungthuis X 1 ecrzaamhe	Ontwikkeling gericht op de Jeugd
Ervaring van Publieke Ruimte		ı	Klimaatgerichte Beslissingen X	Toegang tot Zorg X		
Uiterlijk van Stedelijke Ingrepen				Lopen en Fietsen voor de Gezondheid		

Overview of chosen public values Figure 60 presents an overview of the chosen values and how often they were chosen. Based on this normative count, we can see that the value of 'Locality of Nature' was chosen most often, followed by 'Health Care Access'. There were three values which nobody chose. These were 'Understandable Urban Planning', 'Aesthetics of the Urban Fabric' and Equitable Neighbourhoods'. While people mentioned the first two values to be confusing, not a single participant asked a question regarding equitable neighbourhoods. Participants likely slightly misunderstood the values; however, during the workshop conversation, nobody mentioned anything related to the value. One group eventually talked about the need for amenities to be accessible everywhere. which could be interpreted as this value. However, here the value was possibly too similar to inclusive access to amenities.

Figure 61 takes into account the prioritisation that people gave to the values showing how the values can be grouped, creating a clear top three of 'Safe Neighbourhoods', 'Health Care Access' and 'Locality of Nature'. These groups are colour-coded for clarity.

1		
	Values	Chosen
1	Safe Neighbourhoods	5
2	Health Care Access	6
3	Locality of Nature	7
4	Cleanliness	4
5	Inclusive Access to Amenities	3
6	Active Mobility for Health	3 5
7	Sustainable Travel Options	5
8	Safe Spaces	4
9	Nature Conservation	4
10	Urban Liveability	4
11	Youth Centred Development	4
12	Climate Oriented Decision Making	2
13	Diverse Housing Stock	2 3 2 3 3 2 2
14	Inclusive Access to Transport	2
15	Nature within the Urban Environment	3
	Tranquility	3
17	Solidaritity	2
18	Nature Preservation	2
19	Community Oriented Action	1
20	Travel Practicality	1
21	Space-Conscious Planning	1
	Large Scale Connectivity	1
23	Experiencing Public Space	2
	Travel Convenience	1
	Travel Safety	1
	Diveristy of Amentities	1
	Travel Efficiency	1
	Adaptability	1
	Autonomy of the Car	1
	Understandable Urban Planning	0
	Aesthetics of the Urban Fabric	0
32	Equitable Neighbourhoods	0

Figure 60: Table of chosen public values - Author

	Values	Chosen	Weighted Choice
1	Safe Neighbourhoods	5	19,79
2	Health Care Access	6 7	18,93
3 4	Locality of Nature Cleanliness	4	18,85 15
5	Inclusive Access to Amenities		11,57
6	Active Mobility for Health	3 5	11,56
7	Sustainable Travel Options	5	10,5
8	Safe Spaces	4	10,43
9	Nature Conservation	4	10,07
10	Urban Liveability	4	9
]]	Youth Centred Development	4	9
12	Climate Oriented Decision Making	2	8
13	Diverse Housing Stock	3	8
14 15	Inclusive Access to Transport Nature within the Urban Environment	Z 7	5,72 5,71
16	Tranquillity	3 2 3 3	5,71 5,5
17	Solidaritity	2	5,43
18	Nature Preservation	2	5
19	Community Oriented Action	1	5
20	Travel Practicality	1	4,29
21	Space-Conscious Planning	1	4,29
22	Large Scale Connectivity	1	4
23	Experiencing Public Space	2	3
24	Travel Convenience	1	3
25	Travel Safety]	3
26	Diveristy of Amentities]	3
2728	Travel Efficiency	1	2,86
29	Adaptability Autonomy of the Car	1	2,5 2
	Understandable Urban Planning	0	0
31	Aesthetics of the Urban Fabric	0	0
	Equitable Neighbourhoods	0	0

Figure 61: Table of normative and weighted chosen public values - Author



Overview of individual chosen values workshop, where the pattern language was introduced. Each participant was given a pattern language set with the fifty patterns and had to choose eight or nine patterns which they would like to see in their neighbourhood of the future.

Each page will show an overview of the This overview will show the next step of the chosen patterns by the individuals who eventually formed a group together in the next part of the co-creation workshop. This is followed by the chosen patterns per group and the maps they used during the workshop. After each group, there follows a short analysis of the chosen patterns of the group and the main values that were present in the group.











Figure 62: Chosen pattern from participants 1-5 - Author















Figure 63: Chosen pattern from participants 6-11 - Author











Figure 64: Chosen pattern from participants 12-15 - Author



Analysing the Content Analysing the Content

Results of group 1



Figure 65: Chosen pattern from group 1 - Author



Figure 66: Chosen pattern from group 1 on the regional map - Author





Figure 67: Chosen pattern from group 1 on the maps of Ede- Author



Analysis of the 1st group

participants and had 'Active Mobility for Health' (4 times chosen) and 'Locality of public values. This is well represented in their patterns, with the focus on

transitioning away from the car. A The first group consisted of five member of this group mentioned that their collective choice, 'Housing Hustle' (C4), was meant to enable people to live Nature' (3 times chosen) as their main in their own neighbourhood in different housing types throughout their lives. 'Clear Routing' (C7) was on one hand

to help promote the bike, but also to give clear access to the local nature. In general, they argued with their reasoning for the card 'Promoting Change' (T9), but nobody chose this one, even on an individual level. On the other hand, they chose 'Sustainable Parking', without it

being in their own individual sets. They further mentioned that N9 was deemed unrealistic in existing neighbourhoods and could only be implemented in new neighbourhoods.





Figure 68: Amount of times chosen patterns from group I were chosen on an individual level - Author

Figure 69: Amount of times left out patterns from group I were chosen on an individual level- Author

Results of group 2



Figure 70: Chosen pattern from group 1 - Author



Figure 71: Chosen pattern from group 1 on the regional map - Author





Figure 72: Chosen pattern from group 1 on the maps of Ede- Author



Analysis of the 2nd group

participants and had 'Access to Health Care' (five times chosen) and 'Urban Liveability' (three times chosen) as their main public values. The group's patterns and rationale expanded on the defined

value of access to health care and The second group consist of six spoke a lot about amenities in general. 'Activating the Youth' (N13) also had a broader purpose then just facilitating the younger generation. Furthermore, access to these amenities was important, stating that a hospital needed good

public transport. But, on the further implementation of public transport, the group disagreed. Younger people at the table spoke for a better system inside the city, while older participants argued that Ede is too small for a good bus system and the focus should be on

the outer areas. Lastly, to block the car they combined 'Edge Routing' (C5) and 'Safely Separated' (C6). On combined roads, the car shouldn't exceed 30 km/h. without the presence of bikes it could go faster and inside neighbourhoods, the car should disappear.





Figure 73: Amount of times chosen patterns from group 2 were chosen on an individual level - Author

Figure 74: Amount of times left out patterns from group 2 were chosen on an individual level- Author

Results of group 3



Figure 75: Chosen pattern from group 1 - Author



Figure 76: Chosen pattern from group 1 on the maps of Ede- Author



2 times

1 times

Analysis of the 3rd group

participants and had 'Cleanliness' (three main public values. They argued for these values by choosing patterns to

get people on the streets to create The third group consisted of four social control. Concerning mobility, they saw more potential in promoting the times chosen) and 'Neighbourhood bike and even put the car above public Safety' (three times chosen) as their transport. They expanded on this, that any form of change should be promoted and talked about in a positive sense,

talking about T9, without choosing it. This also happens for 'Priority for the Minority' (S8), linking this to safety issues. Finally, they spoke about not choosing specific patterns because of bad experiences. A failed shared mobility project and the unsafe roundabout of the new Pico Bello

pad caused the exclusion of T4 and R4.



0 times



Figure 78: Amount of times left out patterns from group 3 were chosen on an individual level- Author

T1: Car Accessibility

T2: Shifting Modal Priorities

Analysis of total co-creation workshop results

all fifty patterns and how often they were Around' (T7) and 'Housing Hustle' (C4) chosen on an individual level and group level. Eventually, 35 out of fifty patterns were at least chosen once during the

made it to the group stage. And the three patterns that made it to each group, In Figure 80, we can see an overview of 'Shifting Modal Priorities' (T2), 'Nature All give a good impression of the consensus of the workshop. Participants wanted less focus on the car, while being able individual stage. Twenty-three patterns to live very close to nature. T2 could be



total workshop were chosen on group level - Author

F	igure	80: T	able				terns on a	
				2	and ir	ndivid	ual level -	Author

Group 1 Group 2 Group 3 Personal

T2: Shifting Modal Priorities	3		3	ı	4		3	<u> </u>
T3: Joyful Journey			1		1		1	3
T4: Shared Mobility	1	1	2					2
T5: A Healthy Spread of Amenities	1		2		1	1	1	4
T6: Protecting Nature	2	1	1	1	2		1	4
T7: Nature All Around	3	1	3	1	5	1	1	9
T8: Keeping it Clean	1		1			1	1	2
T9: Promoting Change							2	2
				1				
R1: Highway Expension								
R2: Building around Nature	2		1	1	2	1	1	4
R3: Expanding the Public Network	2		i	i	3	i	i	5
R4: Continuous Cycling			2	-	1	'	1	4
R5: Modular Mobility					<u>'</u>		1	
3								
R6: Transition Zones								1
R7: Adaptive Systems								I
C1. Fallow the a Farma								
C1: Follow the Form			_		-		-	
C2: Layered Growth			2		1		1	3
C3: Growth Within		_	1		1			2
C4: Housing Hustle	3	1	2	1	4	1		6
C5: Edge Routing	2	1	2	1	2			4
C6: Safely Separated	2	1	2	1	1			3
C7: Clear Routing	1	1	1		1		2	4
C8: Enriching the Network			1					2
C9: Accessible Public Transport	2	1	3		2	1	1	5
N1: Zoned Apart								
N2: Balanced Blend								
N3: Blend in Full								
N4: Nature Within	2	1	1		2	1	1	1
N5: Walkable Neighbourhoods	1		1		1	2	2	1
N6: Through the Neighbourhood	•		i				2	i
N7: Path Context			<u> </u>					<u> </u>
N8: Slowing Down the Car	1			1	1		1	1
N9: Sustainable Parking	i	1			<u>'</u>		'	'
N10: Proximity of Amenities	2	'	1	1	3	1		1
N11: Quality of Amenities			'	- 1		-		I
N12: Social Amenities	2	1	2	1	7			1
	2	I	1	1	3	1	3	<u> </u>
N13: Activating the Youth			I	ı	3	I	3	l
N14: Enabling Elderly								
Cla Livah dhekan Cerriri	7		7			٦	7	
S1: Lively Urban Spaces	1		1		2	1	1	4
S2: Placemaking				_	-		-	
S3: Reclaiming the Streets				1	1		1	2
S4: Places to Sit	1				1		2	4
S5: Light it Up!	1						1	11
S6: Blooming Neighbourhoods	1		1		1			2
S7: A Natural Appearance								
S8: Priority for the Minority								
S9: Safe Crossing	1	1	1		1			3
JJ. Sale Clossing				-				
S10: Belonging Bikes	1]	1	1 1			1

Figure 79: Amount of times chosen patterns from

1 times

3 times

2 times

Analysing the Content

Analysing the Content

mentions in the table are that some patterns made it to group decisions while not being chosen by the individuals, and individuals in each group chose three patterns, but never made it to group 82.

If we then go back to the value table, the value itself. results of the first step of the workshop.

split into three thoughts: improving bike we can highlight the most present infrastructure, reducing the use of the values per group. This shows that even car and strengthening public transport. though the group was randomly split And T7 represent all the other nature- into three groups, the most identified related patterns. The patterns that are public values in the total group also left over can be categorised into access primarily held up in the separate groups. to amenities and safety. Other notable When we compare the total chosen patterns and try to link them to the most present public values in all three groups, only C4, R3 and C9 are left over. The public transport patterns are a result of infrastructure being a tool that is decisions. These are visualised in Figure the basis behind all values. Changes in infrastructure can help reach all of these values, and are not often chosen as a

	Values	Chosen	Weighted Choice
1	Safe Neighbourhoods	5	19,79
2	Health Care Access	6	18,93
3	Locality of Nature	7	18,85
4	Cleanliness	4	15
5	Inclusive Access to Amenities	3	11,57
6	Active Mobility for Health	5	11,56
7	Sustainable Travel Options	5	10,5
8	Safe Spaces	4	10,43
9	Nature Conservation	4	10,07
10	Urban Liveability	4	9
11	Youth Centred Development	4	9
12	Climate Oriented Decision Making	2	8
13	Diverse Housing Stock	3	8
14	Inclusive Access to Transport	2	5,72
15	Nature within the Urban Environment	2 3 3	5,71
16	Tranquillity		5,5
17	Solidaritity	2	5,43
18	Nature Preservation	2	5
19	Community Oriented Action	1	5
20	Travel Practicality	1	4,29
21	Space-Conscious Planning	1	4,29
22	Large Scale Connectivity	1	4
23	Experiencing Public Space	2	3
24	Travel Convenience	1	3
25	Travel Safety]	3
26	Diveristy of Amentities]	3
27	Travel Efficiency]	2,86
28	Adaptability]	2,5
29	Autonomy of the Car	1	2
30	Understandable Urban Planning	0	0
31	Aesthetics of the Urban Fabric	0	0
32	Equitable Neighbourhoods	0	0

public values in the overall chosen tabel - Author

T1: Car Accessibility T2: Shifting Modal Priorities T3: Joyful Journey T4: Shared Mobility T5: A Healthy Spread of Amenities T6: Protecting Nature T7: Nature All Around T8: Keeping it Clean T9: Promoting Change R1: Highway Expension R2: Building around Nature R3: Expanding the Public Network	3 1 1 2 3 1	1 1 1 1	1 3 1 2 2 1 3	1	1	1	2 3 1	2 11 3 2
T3: Joyful Journey T4: Shared Mobility T5: A Healthy Spread of Amenities T6: Protecting Nature T7: Nature All Around T8: Keeping it Clean T9: Promoting Change R1: Highway Expension R2: Building around Nature	1 1 2 3	1	1 2 2 1		1		1	3 2
T4: Shared Mobility T5: A Healthy Spread of Amenities T6: Protecting Nature T7: Nature All Around T8: Keeping it Clean T9: Promoting Change R1: Highway Expension R2: Building around Nature	1 2 3	1	2 2	1	1	1		2
T5: A Healthy Spread of Amenities T6: Protecting Nature T7: Nature All Around T8: Keeping it Clean T9: Promoting Change R1: Highway Expension R2: Building around Nature	1 2 3	1	2	1		1		
T6: Protecting Nature T7: Nature All Around T8: Keeping it Clean T9: Promoting Change R1: Highway Expension R2: Building around Nature	2		1	1		1		
T7: Nature All Around T8: Keeping it Clean T9: Promoting Change R1: Highway Expension R2: Building around Nature	3			1	_		1	4
T8: Keeping it Clean T9: Promoting Change R1: Highway Expension R2: Building around Nature		1	3		2		1	4
T9: Promoting Change R1: Highway Expension R2: Building around Nature	1			1	5	1	1	9
T9: Promoting Change R1: Highway Expension R2: Building around Nature			1			1	1	2
R1: Highway Expension R2: Building around Nature							2	2
R2: Building around Nature								
R2: Building around Nature								
	2		1	1	2	1	1	4
	2		i	i	3	i	i	5
R4: Continuous Cycling			2	•	1		i	4
R5: Modular Mobility							1	4
R6: Transition Zones								1
R7: Adaptive Systems								1
Cl. Follow the Form								
C1: Follow the Form			2		1		1	3
C2: Layered Growth C3: Growth Within			1		1		-1	2
	7	1		٦.		٦		
C4: Housing Hustle	3	1	2]	4	1		6
C5: Edge Routing	2	1	2	1	2			4
C6: Safely Separated	2	1	2	1	1		_	3
C7: Clear Routing	1	1	1		1		2	4
C8: Enriching the Network			1					2
C9: Accessible Public Transport	2	1	3		2	1	1	5
N1: Zoned Apart								
N2: Balanced Blend								
N3: Blend in Full								
N4: Nature Within	2	1	1		2	1	1	1
N5: Walkable Neighbourhoods	1	'	i		1	2	2	i
N6: Through the Neighbourhood			i		'		2	<u>i</u>
N7: Path Context	1			7	7		7	7
N8: Slowing Down the Car		-		1	1		1	1
N9: Sustainable Parking	1	1		-		-		
N10: Proximity of Amenities	2		1	1	3	1		1
NII: Quality of Amenities								
N12: Social Amenities	2	1	2	1	2			1
N13: Activating the Youth	2		1	1	3	1	3]
N14: Enabling Elderly								
S1: Lively Urban Spaces	1		1		2	1	1	4
S2: Placemaking						1	,	
S3: Reclaiming the Streets	1			1	1		1	2
S4: Places to Sit	1			- 1	1		2	4
	· ·				- 1			
S5: Light it Up!			7		7		1	
S6: Blooming Neighbourhoods	1		1		1			2
S7: A Natural Appearance								
S8: Priority for the Minority								
S9: Safe Crossing	1	1	1		1			3
S10: Belonging Bikes	1		1	1	1			11
S11: Inclusive Accessibility								



The Policymakers

The Policymakers

Comparing perspectives

To compare this citizen's perspective, a set of patterns needed to be chosen from the policymaker's perspective. Even though the policymakers didn't work with the patterns and chose them themselves, based on the other data from the policymaker workshop, a set of fourteen patterns could be chosen for them. These are patterns that are specifically discussed during that workshop, or arguments were given that fit and align with these patterns.



Figure 83: Policymaker patterns - Author



Completing the Matrix Completing the Matrix

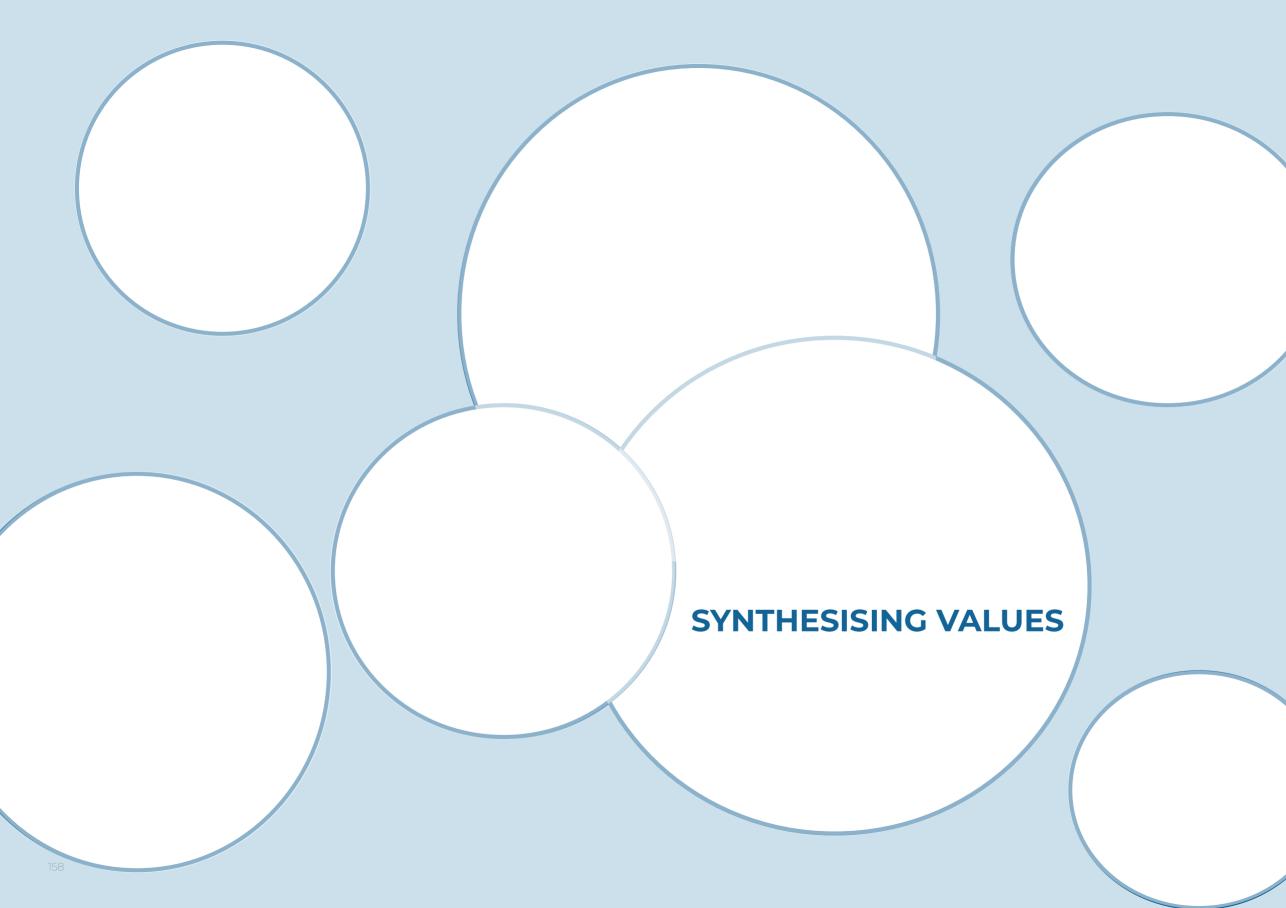
Re-evaluating the value matrix

Finally, with these results we can reevaluate the value matrix. By adding the new value 'Space-Conscious Planning' and updating the links of patterns to values that people perceive them to link to we get the final version of the value matrix, which includes the perspective of the policymakers and their public values.

Liveability	Economic O	pportunities	Ecological Quality	Safety/ Health	Social Equity		
Understandable Urban Planning	Travel Practicality Travel Convenienc		Locality of Nature	Safe Neighbourhoods	Inclusive Access to Amenities	Diverse Housing Stock	
T2/T9/C7/N7	T2 / T4 / R5 / C7 / C8 / C9 / N6 / S10	T1 / T3 / R6 / C6 / C7 / C9 / N5 / S9 S10 / S11	T7 / R2 / N4 / S6	T2 / C5 / N8 / N9 / S3 / S5	T5 / N2 / N3 / N5 / N10 / N11 / S8 S10 / S11	C2/C3/C4/N2/N3	
J W C E Y	J W C E Y	J W C E Y	J W E Y	J W C E Y	J W C E Y	J W C E Y	
Urban Liveability	Travel Efficiency	Sustainable Travel Options	Nature within the Urban Environment	Travel Safety	Equitable Neighbourhoods	Civic Solidarity	
T7 / T8 / C5 / N2 / N2 / N3 / N4 / N5 N9 / S1 / S3 / S4 / S5	T1 / R1 / R3 / R4 / R5 / R6 / N10	T2 / T4 / T9 / R3 / R4 / C8 / N5 /N9 S11	T7/N4/S6	T3 / T8 / C5 / C6 / C7 / N8 / S5 / S8 S9	T5 / C8 / N2 / N3 / N10 / N11	S4/S8	
J W E Y	J W C E	J W C E Y	J W E Y	J W E Y	J W C Y	WCEY	
Cleanliness	Large Scale Connectivity	Inclusive Access to Transport	Nature Preservation	Resilience	Community Oriented Action	Diversity of Amenities	
T6 / T8	R1 / R3 / R4 / R6 / R7 / C9	T4 / R3 / R7 / C8 / C9 / S8 / S11	T6 / R2 / C3	T2 / T3 / T9 / C2 / C3 / N9	N12 / N13 / N14 / S1 / S4	T5 / N2 / N3 / N11	
J W E Y	W C E Y	J W C E	WEY	J W E Y	J W E Y	WCY	
Tranquillity	Autonomy of the Car	Space Conscious Planning	Nature Conservation	Safe Spaces		Youth Centred Development	
C1/C5/N1/N9/N14	TI/RI/CI	R2 / C2 / C3 / N2 / N3 / N9	S5 / S6 / S7	T8 / N8 / S1 / S3 / S4 / S5		N13 / S1 / S4	
JWE	WEY	J W E Y	JWY	WCY		JEY	
Experiencing			Climate Oriented Decision Making	Health Care Access			
Public Space T8/N4/N6/N7/S1/S2/S4/S6			T2/T4/T6/R2/R3/N4/N9/S6 S7	T5 / N10 / N11			
J E Y			WE	J C E			
Aesthetics of the Urban Fabric				Active Mobility for Health			
C5 / N7 / N9 / S2 / S6 / S7				T2/T7/T9/R4/C7/N5/N6/S4 S8			
J E	l			WE			

Figure 84: Final version of the value matrix- Author





Fieldwork

To be able to spatially translate the principles through values, we first need to understand what the 15-minute city needs are in Ede and its surroundings. When we understand how the needs of the 15-minute city act in the local context and what they require, we can link them to the main public values. This way, the right satisfiers can be chosen to satisfy these needs and spatially translate the main public values.

Through fieldwork in the area, I tried to gain an understanding of the spatial challenges of the area, understand the contextual feasibility of the developed pattern language and land on a neighbourhood to focus on the translation of values. Figure 85 shows how I travelled through Ede and Lunturen on foot, by bike, and by train.

This fieldwork led me to identify the neighbourhood Rietkampen in the South of Ede. This neighbourhood is between an industrial area and the main shopping centre of the South of Ede. The neighbourhood already has a good bike infrastructure and consists mainly



Figure 85: Photos of Rietkampen made during fieldwork- Author











Figure 85: Map showing route taken during fieldwork - Author



Figure 86: Photo of Rietkampen made during fieldwork- Author

Fieldwork

of woonerfs. However, these qualities are not utilised. The car and stone streets dominate the neighbourhood. While some green arteries exist, they are monotone and underdeveloped. The pictures are taken through the neighbourhood and give a good impression of the area.

Manifesting values in space

During the fieldwork the 5 needs of the 15-minute city were identified in the area and can be related to the main public values of the three groups during the workshop. The five needs of the 15-minute city are inclusiveness, mixed land use, sustainability, walkability and connectivity.











Inclusiveness can be linked to the public value of Access to Health Care and expanded to the public value of Inclusive Access to Amenities. Even though the second group had Access to Health Care as their main value. their group discussions and rationale spoke a lot about other amenities as well. In Rietkampen only the shopping centre to the East provides amenities to the neighbourhood besides schools, a church and a sports facility, which are mainly situated in the centre of the neighbourhood. The other aspect of inclusiveness is related to mobility, and while there is a bus line that goes through the neighbourhood, the distance to the bus stops from the edges of the neighbourhood exceeds walking distance.









Figure 87: Photos of Rietkampen made during fieldwork- Author

Mixed land use can also be linked to Inclusive Access to Amenities, but also coincide with their desire of available housing. A desire not translated through their chosen public values. Rietkampen is a neighbourhood consisting of almost only housing, and the houses are mainly family houses with gardens. This monotone structure of the neighbourhood needs to change through mixing land use, to be able to satisfy the other needs.

Sustainability can be linked with the value of 'Locality of Nature'. The neighbourhood is partly surrounded by an urban park with natural qualities and provides access to a natural area down South. Furthermore, on the mobility side of the sustainability, the car-centric focus of the neighbourhood strains this need.

Walkability can be linked to Safe Neighbourhoods, Urban Liveability and Active Mobility for Health. While many roads are woonerfen, the dominance of the car don't allow for pleasant walks. Furthermore, without many desirable destinations within the neighbourhood to stay, walkability is not promoted.

Finally connectivity can also be linked to the Active Mobility for Health, with a greater focus on connecting the neighbourhood through sustainable transport modes.









Figure 88: Photos of Rietkampen made during fieldwork- Author



Connecting Perspectives Connecting Perspectives

Icons with patterns

To synthesise chosen patterns from citizens and policymakers understand, from a spatial designer's perspective, which patterns need to be introduced to translate the correlating values spatially, I first represent these patterns with an icon. Each value applies the patterns in the neighbourhood of Rietkampen, showing how the perspective of citizens and policymakers combined through introduced by the spatial designer. Each pattern card has a corresponding

icon, which will be placed in the maps, representing the spatial interventions of that pattern. Figure 89 shows each selected pattern by one of the three perspectives and its icons.













































N13



































Connecting Perspectives Connecting Perspectives

Main values and their chosen patterns Figure 90 shows an overview of the five main public values held in the cocreation workshop groups, followed by the chosen patterns from the three perspectives of citizens, policymakers, and the spatial designer. Each value will be developed into its own synthesis map, further explaining why certain patterns are introduced by the spatial designer to bridge the gap between citizens' desires and policymakers' wishes.

The designers additions

As mentioned before, citizens focus more on the smaller scale and policymakers on the larger scale. To work with both scales, the spatial designer has to introduce patterns that can function as networks, connecting desires on multiple fronts. Creating a single strategic plan embedded in an urban framework, instead of a spread of loose interventions, solves only local or large-scale problems.

	Citizens	Policymakers	Spatial Designer
Active Mobility for Health	T2 T4 C7	T2 T4 T9 R4 N6 N9	N4 N5 S4
Locality of Nature	T7 R2 N4	R2 C3 S7	N7 S6
Inclusive Acces to Amenities	N10 N12 N13 S10	T5 C3 N12	N2 N11 S8 S11
Safe Neighbourhoods	T2 N5 S1	T2 S1	C6 N8 30
Urban Liveability	T7 C5 S3	N9 S1	N4 N5 N7



Figure 90 table of main values and chosen patterns per perspective - Author

Safe Neighbourhoods

Citizens and policymakers represented neighbourhood safety, shifting the focus away from the car and getting people on the streets to enhance social control. The third group of the workshop and the policymakers lacked the inclusion of specific patterns to help that first shift of focus. By introducing the pattern 'Safely Separated' (C6) and 'Slowing Down the Car' (N8), why continue building on the qualities of the neighbourhood of Rietkampen as shown in the synthesis map? With these patterns, the car is further strained, and the cyclist is protected everywhere. With car movements more constrained, and one-way traffic making navigating the neighbourhood on foot more predictable, the pedestrian is freed up. With the interventions of 'Walkable Distances' N5, the neighbourhood can connect the lively spaces created by 'Lively Urban Spaces' S1 with less worry about the car. Eventually, this will result in more people on the street checking both boxes of Neighbourhood Safety.

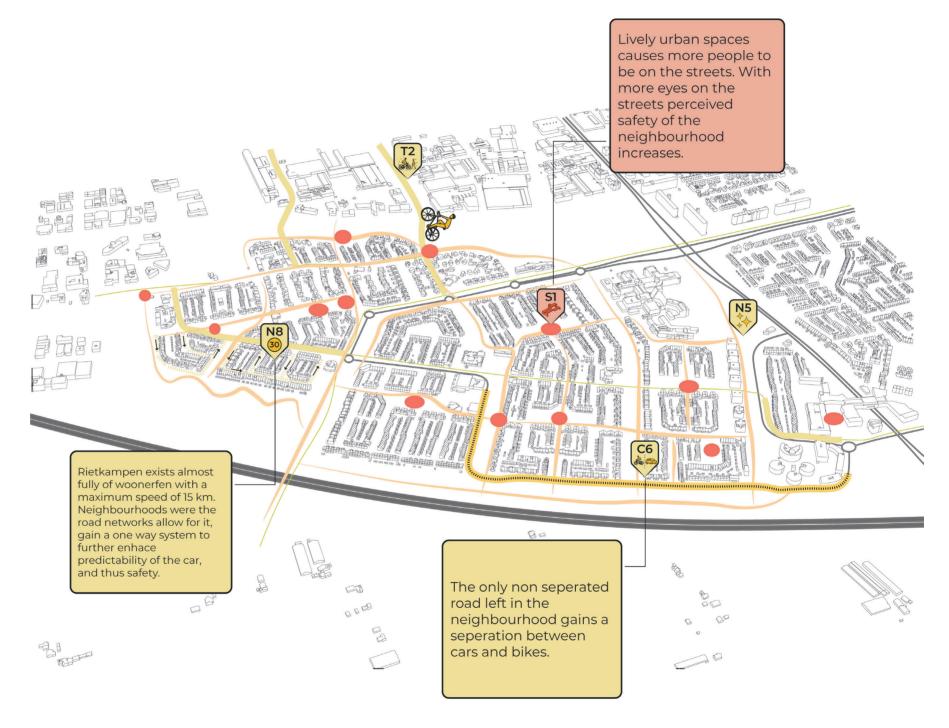




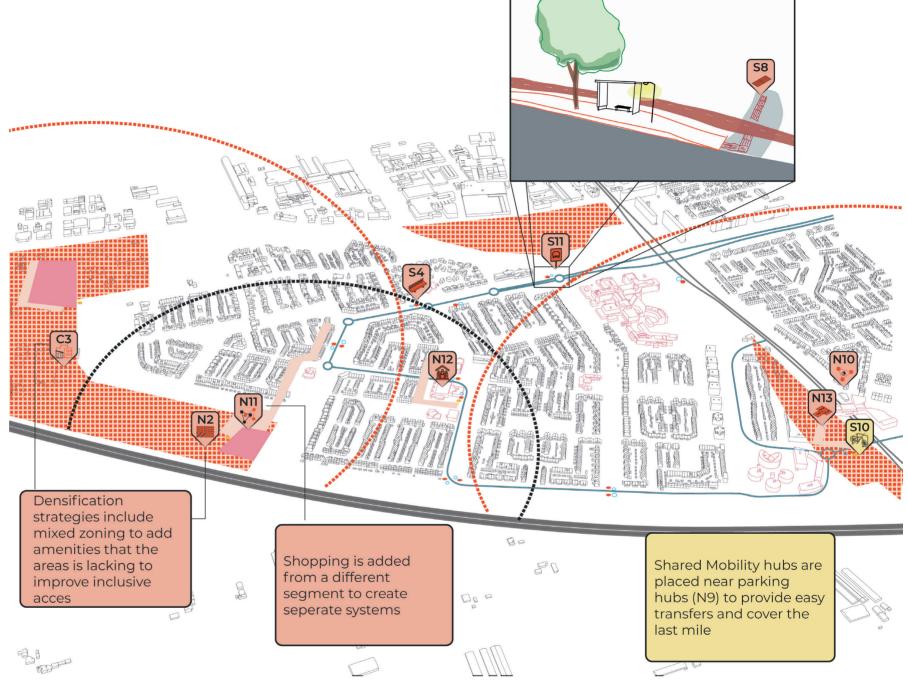


Figure 91: Synthesis map of the value 'Neighbourhood Safety' - Author

Inclusive Access to Amenities

Here, citizens focused on the basic amenities they desire, being close to home. Policymakers add the largescale hierarchical spread, but with 'Balanced Density' N2 and 'Quality of Amenities' N11, we can serve each area and neighbourhood accordingly. While Rietkampen has a shopping centre, it is the only real place for a cluster of amenities. With limited space and the need for housing, parts of the industrial area can be transformed with a mixed function in mind, not just densifying to create houses for living, but also introducing more functions to accommodate the current and new residents better. By paying attention to different qualities of amenities, every group of society can be served. To ensure that the presence of amenities and the accessibility of 'Priority for the Minority' S8 and 'Inclusive Accessibility' S11 are added. Improving the current public transport network and providing guidelines for the new developments.







Locality of Nature

During the workshop, participants found the urban green patterns similar. mostly stating that more green should be added and nothing removed. Policymakers were focused on the built environment not exceeding limits and removing any green, while socially promoting good use of nature through 'A Natural Appearance' S7. By adding 'Path Context' N7 and 'Blooming Neighbourhoods' S6, we can introduce biodiversity and quality to existing and newly added urban green and ensure that developments are part of a larger network, creating a framework for implementation. The current green structures around the canals are beautiful spaces that fully reach their potential by adding biodiversity and natural street furniture, bringing nature to the neighbourhood. These canals, together with the public green space, create a framework for the interventions of N7, creating a walkable route through the natural open spaces. Furthermore, the neighbourhood has an abundance of space in its street network outside of this framework. To align with the structures of the canals, neighbourhood streets oriented north introduce urban green structures outside of the current existing framework.





Figure 93: Synthesis map of the value 'Locality of Nature' - Author

Active Mobility for Health

Both perspectives had an easier time identifying patterns that could spatially translate the value of active mobility for health. However, the shift away from the car focused on the bike, which is only half of the modal forms of active mobility. Walking is important not only to refrain from exclusion through mobility but also to support the bicycle network. To introduce the perspective of walking, 'Walkable Distances' N5 and 'Places to Sit' S4 are introduced. The walkable form is related to the existing green structures of the neighbourhood, while the bicycle network improves the current situation. Fast bike paths are connected through biking streets, visually showing the shift of focus in modal priorities. Both networks of active mobility are completed by adding urban green in the streets that lacked implementation. Leading to a visual representation of the neighbourhood's infrastructure and showing that the modal priorities lie with the bike and the foot.



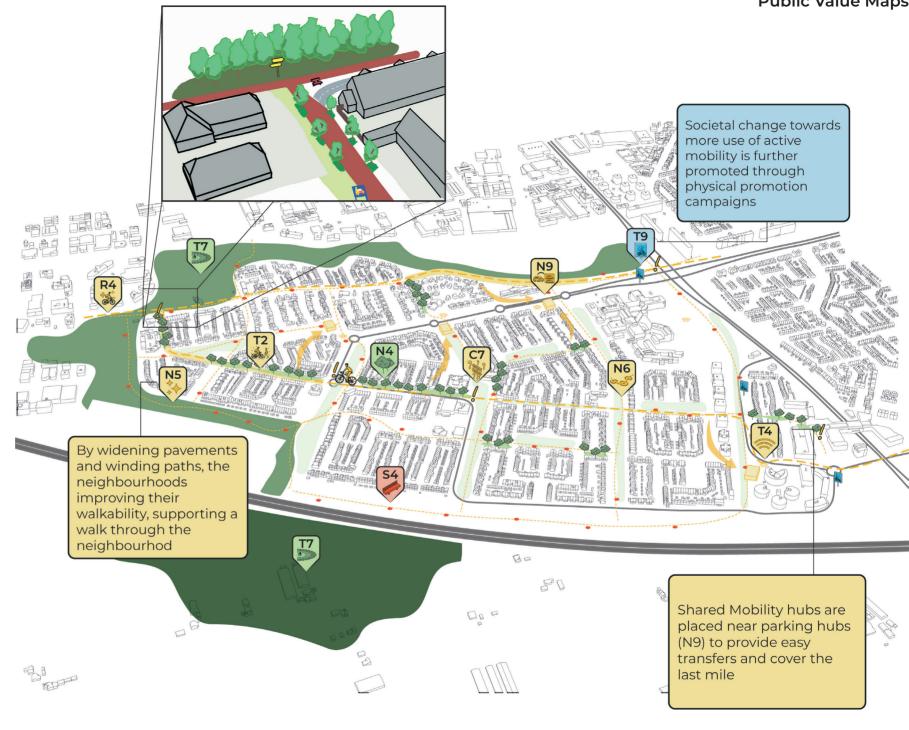


Figure 94: Synthesis map of the value 'Active Mobility for Health' - Author

Urban Liveability

Lastly, the value of Urban Liveability is meant for the citizens, removing the car from the neighbourhood and getting people on the streets. Where citizens believe 'Sustainable Parking' N9 is unrealistic in existing neighbourhoods, policymakers do not beat around the bush. To ensure these actions are not a form of fragmented urbanism, network patterns are again introduced with 'Walkable Distances' N5 and 'Path Context' N7. Furthermore, with the patterns from their perspective, removing the car as much as possible from the neighbourhood, space gets freed up for other interventions. While they focus on lively space and reclaiming the street, by introducing urban green in these spaces, they become pleasant spaces to stay.



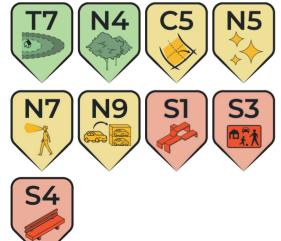




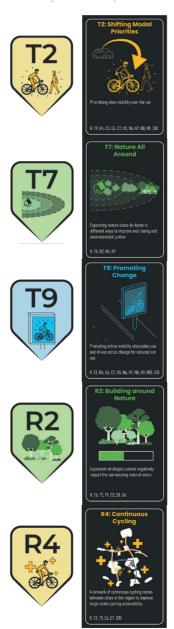
Figure 95: Synthesis map of the value 'Urban Liveability' - Author

This series of public value maps shows how a specific focus on one value would lead to a specific set of spatial interventions. However, as often reiterated in this thesis, public values do not exist as singular entities. So, the next two maps show how these five public values can be combined to satisfy the needs of the 15-minute city.

The spatial strategy works with six pillars based on the public values. Each pillar has three or four patterns that mainly support it, but work in synergy with the other patterns. The pillars are shifting mobility focus to the bike, stimulating public transport, more people on the street, enhancing green structures, improving the walkable form, and densification.

Different combinations of pillars help satisfy the needs of the 15-minute city. For example, stimulating public transport and densification satisfy inclusivity needs. More people on the street and enhancing green structures support improving the walkable form for walkability. And, all pillars have an impact on sustainability needs.

Figure 96: Overview of chosen patterns for the final synthesis map - Author









Synthesising the Value Maps

These pillars synergise to create a holistic approach. Enhancing the green structures is linked to the new bike routes and walking paths, but also used to support the patterns to get more people on the street. The execution will fit the pillar it supports. Enhanced green structures along the walkable paths are visually engaging and more biodiverse. In relation to getting more people on the street, the nature interventions focus

more on creating shade at places to rest.

These pillars require space in the streets for their interventions, and some require the same space. This is why the networks for walking, recreation on the street and biking are separated from each other, following the natural flows in the neighbourhood. However, they still need space, currently predominantly occupied by the car. This is the main reason for introducing N9, 'Sustainable Parking'. Most of the streets integrated in these networks are spacious, and removing some or all parking creates enough space to integrate these pillars.

Figure 88 explains each pillar's function and combination of patterns further, and on the next page, Figure 89 shows the final synthesis map with icons to support its clarity.

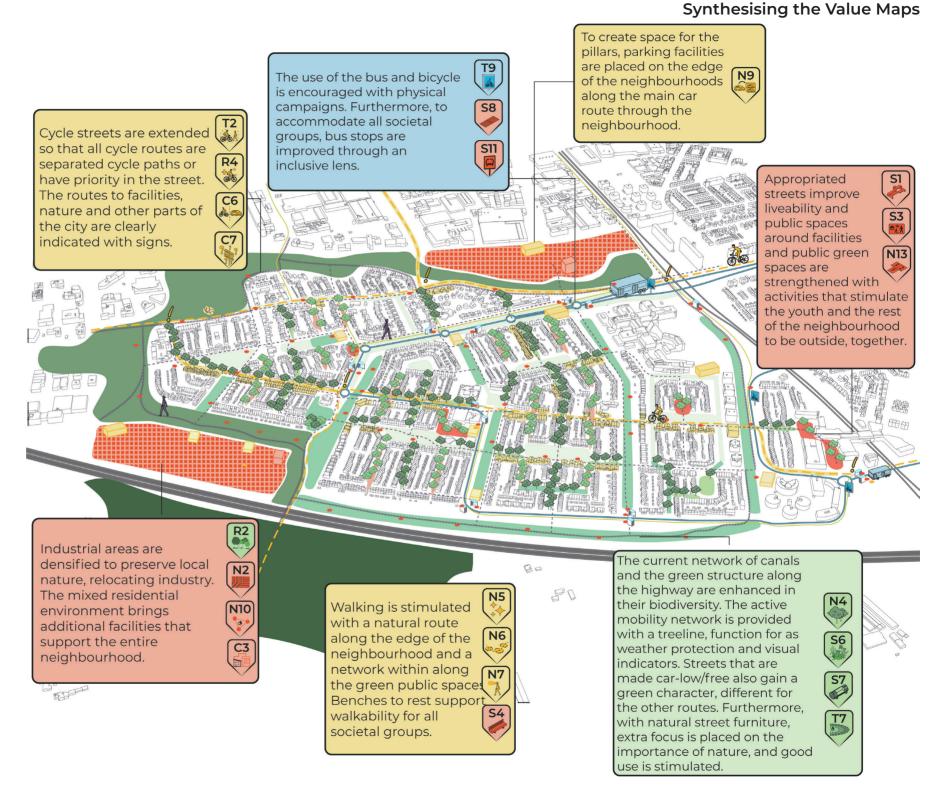


Figure 97: Final synthesis map of all five public values with explainers - Author



Synthesising the Value Maps



Citizens' Perspective Citizens' Perspective

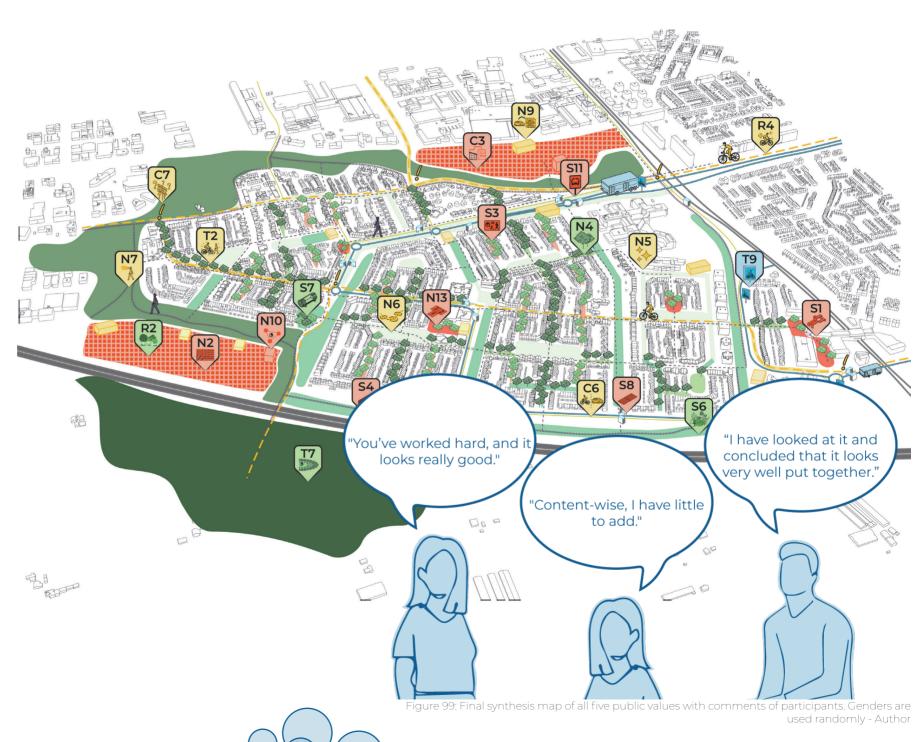
To integrate the citizens' perspective in all stages of the thesis, the complete series of maps was send to the participants of the co-creation workshop. The maps were supported with a page that explained their development and the Dutch version of the patterns that are used in the maps. They were asked to respond to the material in their own way, but were provided with three possible questions to help them think about how they could approach the material.

The following questions were proposed:

- What is your first impression of the maps?
- Do you feel represented in the decisions that have been made in the maps? Why/why not?
- Do you feel that the urban interventions are in line with how you see the future of your living environment?

Out of the fifteen participants, three participants found the time to respond to the material. Figure 90 shows some of their reactions to the maps. As you can see, they responded positively on the material.

A first response that a participant had nearly nothing to add on the content of the maps, sadly not specifying what they would possibly want to add. Another had a good first impression of them and felt that they represented how they would see a future for their neighbourhood. However, they did raise a question of the transferability of this specific set of patterns to areas like the city centre with more densification and a higher volume of traffic movements. Which is a valid response, but logically outside the scope of the research as city centres are not seen as peri-urban areas.



Citizens' Perspective Citizens' Perspective

The final respondent took the time to all write down their thoughts to each specific pattern used in the maps, They concluded with: "If the government resulting in some interesting questions raised.

restrict cars from neighbourhoods or city centres, but then you must bus transport, for example. And not years later or left to 'the market'. The government must realise this together with market parties immediately, or not at all." A comment often made during the co-creation workshop and reworded differently as a response to other patterns as well.

comment on N9: "Very unfortunate measure, especially if you need your car." Removing modal options from citizens, or hampering the accessibility of one, does require replacement with a good alternatives. Within the scope of this thesis, the 15-minute city need for inclusiveness should always be held up that relate to such changes,

For the pattern T9, 'Promoting Change', they said:" Good wine needs no praise. A good plan will be embraced naturally." This comment is interesting when we look back at the discussion of the policymakers. On of their main points regarded social buy-in, which as discussed in the process chapter might be more of a prerequisite then a public value. Policymakers were adamant that social buy-in could only be sufficiently reached if a certain change, like a big modal shift, is also promoted besides physical changed in the urban environment. Referring to anti-smoking

campaigns, for example.

wants to stimulate cycling and reduce car use for local transport, then more small-scale facilities and neighbourhood Firstly stating that: "You may want to shopping centres should be built and distances should not exceed 500 metres. Large central malls at the edge of the offer alternatives, frequent public city only lead to more car traffic, like the AH XXL, for example. If shops are on the corner, people will walk or cycle. This is a policy decision, not something you should or can leave to the market."

Public values of citizens can only be integrated well if specifically integrated int a value-based planning approach. Improving on proximity and walkability This point was reiterated with this cannot be left to natural market development, without specific pushes from the field of urban planning or governance.

> The participants other comments are visualised in Figure 100.

Generally speaking, the three as a mirror to reflect on design choices participants refrained from strong critiques on the material showing that the value-based planning approach used in the thesis can form a good basis for the integration and specialisation of public values of peri-urban inhabitants.

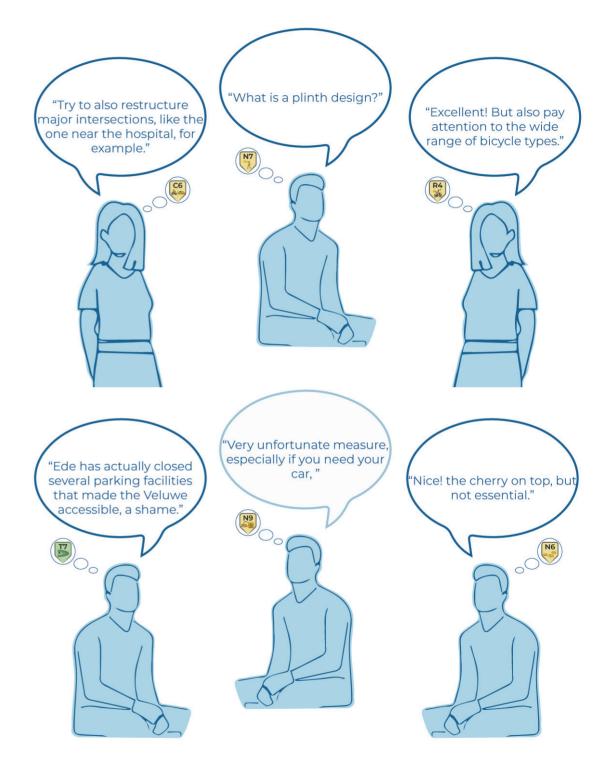
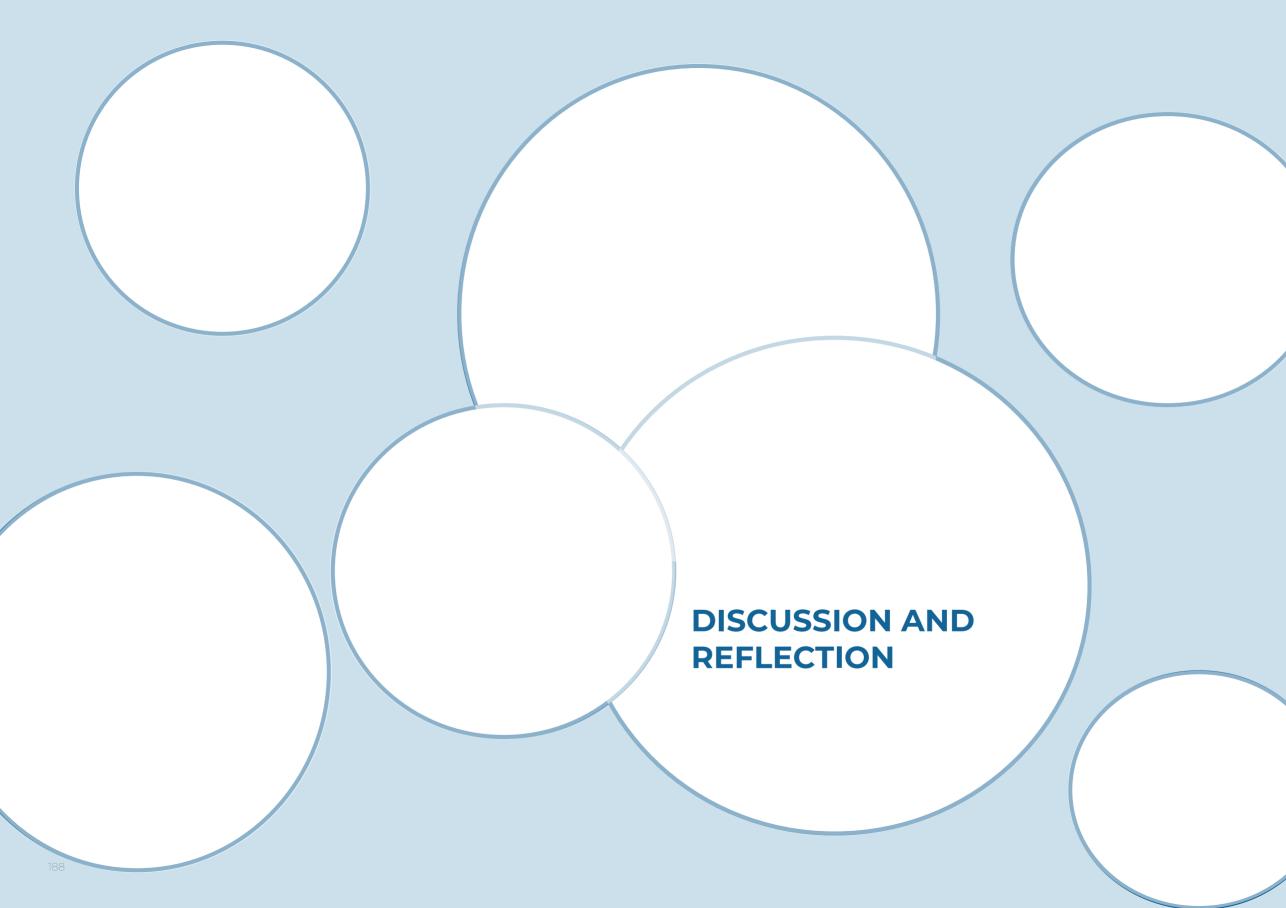


Figure 100: Comments of the last respondent. Genders are used randomly - Author





Conclusion

Peri-urban areas in the Netherlands will be at the forefront of change over the coming decades. While rapidly growing in population, peri-urban areas will continuously have less to offer without intervention. Declining amenities and investment in public transport strain liveability and create a modal focus on the car, making citizens depend on it to reach a desired level of accessibility.

The 15-minute city tackles these issues in an urban context, but the ill-defined model falls short in the peri-urban context, being criticized left, right, and centre. By shifting away from the notion of efficiency to needs, going from timebased planning to value-based planning. we can intervene effectively in the peri-urban context. Re-understanding the 15-minute city through the lens of public values, firstly requires a sound definition. By deriving their definitions from philosophical value theory, public values are instrumental moral principles held by the public on a social basis that are constantly in flux, reflecting cultural and socio-economic context.

Which main principles and features of the 15-minute city are applicable in periurban areas?

Then, the contextual needs of the 15-minute city can be spatially translated desired spatial interventions, guiding a sustainable transition for peri-urban areas. Re-understanding the 15-minute city in the peri-urban context will show five core needs: Inclusiveness, mixed land use. sustainability. walkability, and connectivity. These needs are specified for the peri-urban areas from the three core principles of the 15-minute city: proximity, diversity, and accessibility. These instrumental public values become 'satisfiers' that

satisfy the 'needs' of the intrinsic public value sphere in which they exist. These needs can be linked to the needs of the 15-minute city, turning public values into tools to guide the implementation of the 15-minute city.

To identify these public values in the local context, an approach for value specification can be used from the Delft. Design for Values approach. Through participation methods. 32 public values have been identified in the local context. of Ede and its surroundings. These 32 public values can be situated into five public value spheres: live ability, economic opportunities, ecological quality, health and safety, and social equity. The definition of Herzog et al. (2024) of these spheres can be broadened to include the experience and use of the technical urban aspects the spheres describe, or include another realm of urban planning in it, like expanded safety and health, to relate to public spaces as well as mobility.

What are the key public values of Dutch peri-urban inhabitants?

Relating these public values to a group of citizens shows a clear grouping of perceived key public values. However, these public values that citizens identify with do not represent all their desires and wishes for a sustainable transition. Thus, understanding the key public values of citizens requires a more comprehensive approach to identifying values than letting citizens do it themselves. Here, citizens cannot translate all their desires into public values without being asked the question 'Why?' do they want their desires. Translating this rationale and their perceived public values will result in an understanding of what key public values are of inhabitants. In the case of Ede and its surroundings, based on the

study participants, key public values can be defined as: 'Safe Neighbourhoods', 'Inclusive Access to Amenities', 'Locality of Nature', 'Active Mobility for Health', and Urban Liveability'. With the focus being on the first three values.

What can spatial designers do to bridge the gap between spatial interventions and public values to re-understand the 15-minute City?

Translating these public values into spatial interventions follows the specification phase of the Delft Design for Values approach. A pattern language of spatial interventions can function as a tool to understand the relation between the public values of people and their desired spatial interventions. A tool that helps organise thoughts, the thoughts of citizens during participation, and the thoughts of a designer. Hereby, spatial designers can identify public values in society while defining related spatial interventions, bridging the gap between them. Bridging this gap brings in the context of the study area, and to satisfy the needs of the 15-minute city in the peri-urban areas, we need a contextspecific implementation. Looking at the 15-minute city needs, the task for the spatial designer is to identify spatial interventions, linked to the public values, that satisfy the present needs through a participation approach using a tool linked to the pattern language.

To what extent can public values of periurban inhabitants spatially translate the applicable principles of the 15-minute City in peri-urban areas?

And, in the case of Ede and its surroundings, the public values identified can spatially translate the contextual needs of the 15-minute city, using the related patterns. However,

the single perspective of citizens is largely based on personal experiences. Experiences that relate to the small scale. Only by integrating the perspective of other stakeholders and creating a framework for these perspectives to thrive in, can public values effectively translate applicable principles of the 15-minute city in peri-urban areas.

Bringing these findings together enables me to answer my main research question of how key public values of peri-urban inhabitants can inform the implementation of the 15-minute city principles. As discussed, the lens of public values can help guide a sustainable transition. This approach enables citizens to articulate their desires into tangible spatial interventions. These interventions, encapsulated in a pattern language, represent their public values. These interventions can act as satisfiers to the needs of the 15-minute city. Creating a strong base for a spatial designer to implement the principles of the planning model in peri-urban areas. taking local context into account.

Discussion Discussion

This reflection chapter rounds off The method and perspective used to this thesis. It opens by discussing the concepts' scientific and societal relevance and results. This is followed by a discussion of the value of the methodological approach of the thesis. The chapter then moves on to what the thesis considers to be the role of the designer. Additionally, the ethical considerations of the methods and findings are discussed. Furthermore, the scope and limitations of the thesis are discussed before moving on to the transferability and possible pathways for future research. Then, the thesis is related to the broader educational program, the balance between research and design is discussed before finally ending of with a personal reflection.

Scientifc relevance

15-minute city.

Academically, this thesis contributes to the expanding literature on the 15-minute city. First, the theoretical chapter addresses critiques of the urban planning model, presenting a current and comprehensive overview. Second, the research extends the discussions surrounding the concept by applying it in the peri-urban context, where the model has received limited research attention.

Because of the new context, the thesis also offers a new perspective on the model's applicable principles in the peri-urban landscape. This landscape often faces spatial and infrastructural challenges such as increased car dependency, declining proximity of amenities, and declining amenities. It can address these specific challenges by re-understanding the 15-minute city model's principles and applying them in this context.

re-understand the 15-minute city also provide a possible answer to specific critiques of the concept, namely the lack of integration of urban nature and public transport, a broader inclusion of amenities, negating mobility based exclusion through the need of inclusiveness, and a way to deal with the discourse by leaving the term '15-minute city' behind and focus on the principles instead. The easy branding associated with the term is also unrealistic and unwanted in this context. Finally, the model's claimed ubiquitous qualities are already challenged through the application outside of its original scope.

Public values

This thesis links the fields of public value theory and spatial planning, offering new insights into applying public values through value-based design. It provides theoretical innovations by formulating a possible definition of public values in urban planning. This definition builds upon Rico Herzog's (2024) public value spheres framework by expanding the spheres' definitions and introducing a spatial dimension. This added dimension offers a practical method for translating public values into context-specific design interventions and shows how they could be translated into a spatial strategy. This practical method comprehensively applies the methodological Delft Design for Values approach. The three-phase methodology was closely followed and expanded upon by showing a spatial translation of public values.

To enable this translation, it offers a methodological innovation by linking the public value sphere framework to the human needs framework based on Max-Neef's work. Hereby, the thesis provides insights into the systematic inclusion of public values in the entire planning process through citizen participation, which is underrepresented in existing literature.

Grounding urban transitions in context By identifying how public values can serve as a perspective to understand and translate 15-minute city principles, the research highlights the importance of grounding urban transitions in moral and cultural context through public values rather than treating planning models as universally applicable solutions. This shows that a contextual approach to implementing 15-minute city principles not only broadens the model's scope but also tackles sociospatial issues in peri-urban areas.

Going beyond values: norms vs values However, as mentioned in the Contextualising Values chapter, the perspective of public values creates a blur when we examine the participatory process. An indication emerged that a possible hierarchy exists between values. This raises the question of whether the identified public values reside on the same level or if some values operate on a higher level than others. It is here where we move beyond the definition of public values, as defined in this thesis, and begin to approach the concept of norms.

A hierarchy among values or different types of public values starts to blur the lines between values and norms. This is also recognised in social sciences when defining norms. In a paper discussing the distinctions between norms, values, and cultural practices, Frese (2015) reflects on when an agreement on a routine is the result of values or norms, suggesting

that some studies could benefit from a clearer differentiation between the two Across various fields, many definitions of norms exist, not unlike values. Bicchieri et al. (2023) define norms as actions people control, and are supported by what society believes should be or should not be done. This is a philosophical definition, which is also the basis for my definition of public values.

Thus, based on the earlier definitions. we see norms as concrete rules, and public values as the more abstract idea that underpins these actions (Wright, 2020, Frese, 2015). This thesis views the public values of people as unique languages. Continuing with this metaphor, norms function as grammar (Bicchieri et al., 2023). They structure how the public values are expressed in practice. Just as grammar enables the coherent articulation of meaning within a language, norms express the articulation of values.

Going beyond values: When norms shape the 'why'

The connection between norms and values becomes even further intertwined when Frese (2015) goes on to describe that norms are both the input and output for what he sees as values. So values define norms, as we said before. But norms also become values over time.

The methodology of this thesis sees public values as the fundamental building blocks of people's 'why', and understanding that 'why' is the key to an inclusive participatory process. The grev area between norms and values creates tension for this value-based methodology. The Scope and Future Research sections further reflect on these tensions.

Discussion Reflection

Informing InPUT

Finally, this graduation project aligns with the broader research aims of the Engaging Places and Communities for Integrated Peri-Urban Transitions (InPUT) project, which TU Delft leads as part of the Driving Urban Transitions Partnership. The upcoming phase of the InPUT project, work package two, will follow similar steps regarding visioning with values, and insights from this research can inform their next steps.

Societal relevance

How people deal with public values This thesis discusses a value-based planning approach aimed at fostering more inclusive and participatory planning practices. Public values were derived through focus groups with local inhabitants and further explored in a cocreation workshop, where participants were tasked with identifying their own perceived public values.

Participants selected their first few values with ease, but selecting the fourth or fifth value proved to be more challenging. People's indecisiveness led to some naming six or seven values above their given limit. The desired spatial interventions ultimately revealed that, even in their broader selection of values, participants are unable to fully articulate their desires through public values alone.

This might be partly explained by the blurred relationship between values and norms and Maslow's (1943) explanation that some needs are perceived as met and move to the background. People skip foundational values not because they don't matter, but because they're assumed. This assumption could lead to problems in the long term.

However, this inability to directly articulate their desires through their public values alone can be mitigated by exploring the 'why' behind their desires. eventually uncovering their underlying values. The participants' reflection on the final material shows that they felt represented by the choices, even though their perceived public values were not all directly included. The final material still reflected how they looked at the future of a neighbourhood in Ede.

This showcases, even if it is a small sample size, that including citizens in every step of the planning process and using their uncovered public values can help address challenges of public distrust and society's feeling of being unheard

The powers of the Pattern Language The pattern language was the notso-secret key to enabling citizens to articulate their desires. This thesis advocates for a more inclusive approach to citizen participation, bridging a gap between spatial planners and citizens. This methodological tool empowers citizens to co-create their meaning with urban planners.

had their Participants interpretations of the patterns, resulting in different uses than initially intended, an example being the contrast between articulations of 'safety' and 'liveability' (discussed in detail on page 116). Even though participants attributed different meanings to patterns, the patterns still allowed them to articulate their 'why' successfully. The communicative potential of the pattern language is a key takeaway from this thesis, especially regarding a value-based approach that aims to include citizens in an inclusive

manner

The value of my values approach

My systematic methodology

I personally see value in my chosen approach due to the systematic methodology it provides. This systematic approach ensured a clear structure early on, knowing what outcomes would follow each step and inform the next. By integrating the Delft Design for Values approach to structure the spatialisation of values, the entire process would be grounded in a theoretical framework, removing possible doubts about the next steps.

Additionally, this methodology allowed for a well-defined research trajectory from the outset of the thesis. This helped me know what to expect during which period and stay on course. Most of the steps were also clearly mapped out from the beginning, except for what the outcome of the final phase would look like. How the values would eventually be spatially translated only became clear once the previous steps had delivered their outcomes. Overall, this early outline of the thesis helped me maintain focus and steadily progress towards my goals.

The balance between idealism and realism in graduation theses.

The methodology integrates a lot of empirical data, and for the final synthesis, maps also base a large part of the interventions on this data. Eventually, a spatial strategy for the neighbourhood of Rietkampen is developed that does not express big dreams of change from an idealistic perspective but grounds its interventions in realistic expectations of what such a development could look like.

I personally see the value of this realistic lens to the outcomes, as citizens are integrated throughout the process. The goal was to show how a value-based approach could lead to a specialisation of values to inform planning practices. If the whole planning practice were to focus on idealism, our definitions of idealism and realism would merge, as we would be living in an idealistic world. Something I believe should lean more on the side of realism than idealism. This is not a statement that suggests that all theses should lean towards realism, but a conscious decision should be made based on the trajectory and intended outcomes of the thesis.

Reflecting on the role of the designer

In the approach to value-based design, this thesis discovers in what roles a designer must act to shape the process. The approach to value-based design builds upon the Delft Design for Values approach, but requires a strong feedback loop achieved through participation and engagement.

As shown, in this participatory process, participants cannot articulate all their desires through their perceived public values. People make sense of their environment on a personal level, associating meaning based on their values. They seek a form of simplicity to share their interpretations. To uncover the foundation of this simplicity, we must enable citizens to articulate their 'why' by asking "Why?". While doing this, they must be aware that interpretations of individuals are loaded with assumptions, which is the cause for misinterpretations if we only uncover the 'what' and the 'how'. Assumptions need to be removed, or at least understood, through a reflective loop along the thought process

of a human, as described by the ladder of Inference

need to create symbols to communicate with, in my case, a pattern language that each individual can interpret. Planners need to be fluent in these interpretations, just like a translator is fluent in spoken languages around the world. All of this is to eventually connect different perspectives to reach meaningful and effective outcomes. Thus, in this valuebased design approach, the role of the designer becomes threefold: a creator, a translator, and a connector. However, this threefold role also mirrors the broader characteristic of participatory planning practices.

Spatial designer as a Creator

First of all, to allow stakeholders to share their desires, the designer needs to be a creator. A creator of symbols, which people can interpret and attribute meaning to. In this thesis, these symbols took the shape of a pattern language, of which I have already described the communicative qualities. However, in the broader scope of urban planning, symbols do not necessarily take the shape of a pattern language. However, in every planning process that engages with stakeholders, planners need to create a toolset that bridges the gap between the spatial designer and the knowledge of the involved.

Spatial designer as a Translator

Having created a toolset of symbols, the engaged can start their sensemaking process. Interpreting the material, attributing meaning to it, and articulating their answers to the proposed questions through those interpretations. These articulations are all their own languages.

based on the specific lived context of an individual's life. The designer needs to translate these and understand to To facilitate this whole process, designers what expert knowledge these relate. Here, the designer searches for their deepest motivations, to which they can attribute solutions based on their expert perspective. This demands a deep understanding of both the toolset and the expert knowledge surrounding the proposed questions' solutions.

Spatial designer as a connector

Urban planning is a complex field that requires the integration of many perspectives. Having engaged with each of them and translated their desires, the task of connecting all of these together arises. Satisfying each perspective to the best of their ability in a combined holistic approach that fits the larger themes of just and sustainable transitions. Only by connecting these interpretations, compared to simply adding them, can a spatial designer move beyond technical problem-solving and towards valuedriven, inclusive transformations.

Working with the 'Why'

As mentioned, the question of "Why?" is more than a simple inquiry in valuebased planning. It is a crucial tool for designers to use in all their roles.

We propose the question inwardly, challenging our own creations, as a reflective tool to refine our work. We use it outwardly to help us find meanings. moving from surface-level assumptions to working with deeper, socially and culturally rooted motivations. We combine these answers to connect and mediate between perspectives, grounding them in dialogue.







Asking "why" continuously throughout the process prepares designers and planners to create more meaningful, inclusive, and effective interventions by engaging themselves and their communities in a shared search for purpose and meaning.

Ethical considerations

Power in planning

This thesis encourages spatial designer to apply a value-based approach to urban planning, but a concern also raised by one of the participants and the policymakers boils down to the question: Who shapes our environments? Who holds the responsibility to ensure the envisioned proximity based landscape?

It is the ethical responsibility of the government to ensure equitable access to amenities and opportunities, but the moral responsibility of planners and policymakers is to ensure a balance between public and private interests in this equitable access. Leaving things to the market will not ensure equitable access to shops within the ideal proximity. Addressing this requires decision-makers to be transparent, held accountable, and committed to a socially just urban development.

Citizen engagement and their privacy Ethically, this thesis recognizes the contextuality of public values. Public values are fluent and not easily articulated by citizens. This is why the thesis emphasizes the role of a designer as a translator and connector. It is our responsibility to navigate the different perspectives of citizens. This is a sensitive task, as we are asking people to explain their desires and try to identify the rationale behind this. Such an approach should then always be transparent in

how we, as spatial designers, interpret their desires and translate them into spatial strategies. Furthermore, there is an obligation to try to engage with diverse communities, a difficult task, but essential to ensure the fair representation of society.

Additionally, it is important to protect the participants' privacy in these participatory processes. People share their desires willingly and should not be scrutinised based on their values. Anonymising sources is a delicate task to ensure a safe space for people to share their desires.

The 15-minute city discourse

Finally, this discourse surrounds the term 15-minute city. The concept has sunk into a conspiracy-driven discourse, particularly in the UK and the USA, where it has been misinterpreted as a form of social control by the government, aimed at restricting individual mobility. Locking people up within the boundaries of their cities. Reactions have escalated to death threats towards the developer, Carlos Moreno.

A negative perspective of the urban planning model has taken over general the perception. It has become deeply polarized, undermining its original intention of enhancing urban liveability and accessibility for everybody. The use of the term should be carefully considered when dealing with stakeholders when engaging in citizens participation that links with the 15-minute city. To mitigate the influence of existing biases and misinformation, this thesis includes a thorough literature review that deconstructs the principles underlying the 15-minute city and tries to use them during discussions with participants.

Scope and limitations

Contextual constraints

exploratory, grounding itself in the specific regional context of the Dutch peri-urban area. While the project does not offer a one-size-fits-all solution. advocating for the exact opposite as the approach should be applicable independent of the context due to the nature of the definitions of public values and the spheres in which they exist. However, applying the method in other contexts might reveal new insights and further improvements for the methodology of the approach.

The sample size

Further limitations lie in the sample size and its bias. The resulting values of the group of participants cannot be projected on the larger Dutch peri-urban landscape without more comprehensive research. Furthermore, the bias towards the bike and a sustainable shift in transportation do not align with the current opinions in the Dutch political landscape, which leans towards a more conservative approach.

However, the sample size and their bias should not necessarily take anything away from the methodology, as a continuous bias within the participants during the different participatory stages should be seen as a positive. The methodology should still hold as long as the bias throughout the process remains similar.

Late integration of theory

In the final stages of the thesis, the results regarding the workshop process have been embedded in theories from the social sciences. While the theories seem to facilitate a deeper understanding

of the results, a more comprehensive literature review should be performed In terms of scope, the project is on The Golden Circle, Sensemaking, and the Ladder of Inference.

Limited by definition

A similar point can be made about public values and norms. Although the scope of this thesis only includes public values, the results hint at the need to include a definition of norms in the conversation to further understand the results. This addition could also allow for a better integration of the aforementioned theories

Transferability

The framework structure developed in this thesis is context-independent. making the methodology transferable beyond the scope of this specific case study, even with the limitations mentioned above

While the content that emerged is very context-specific, the methodological value-based approach is applicable elsewhere. This distinction is important as the context of peri-urban areas is fundamentally fast-changing and varied in characteristics. Specific results from any peri-urban area will be hard to translate directly to other places, which is also why the thesis advocates for a contextual lens.

Further research

15-minute city principles in the periurban

The thesis suggests a re-understanding of 15-minute city principles through the lens of public values. This recontextualisation expands on the model's potential applicability. It opens up pathways to further examine the potential of this broader application of

the principles, a pathway that will be explored by InPUT but likely requires even further examination. Possible lines of inquiry include the contextindependent nature of the principles or whether the main principles and needs might eventually also differ in other periurban areas

Developing the methodology

This thesis does not provide a definitive roadmap for designing with values: however, it offers interesting insights that should be considered during a value-based design approach. Testing the methodology on a larger scale, with a larger study group, should offer a better understanding of the methods' applicability in the real world. But by opening up the 15-minute city to the peri-urban context and integrating value-based design, the graduation project opens up the way for further research into both fields.

urban planning

A future path for research includes an expansion of public values in urban planning. For example, Shalom Schwartz's (1999) Theory of Basic Human Values could be integrated into the literature body to offer a new perspective. The theory offers 10 universal value types structured with two bipolar dimensions. His work could help cement the understanding of relations between the public value spheres and the definition of public values in the context of urban planning. Furthermore, the theory conceptually aligns with Sinek's (2009) model, allowing the other theories to be further established.

Additionally, Schwartz's theory could help clarify the relationship between

values and norms, as it Frese (2015) identifies a clear relation. This integration could strengthen the conceptualisation of public values in urban planning.

A better understanding could help us look at the potential hierarchy between values. The current definitions already suggest a certain hierarchy as we look specifically at moral principles. Frese (2015) makes the same suggestion that something about morality distinguishes it from other spheres of values. However, as experienced in the process of this thesis, some values were assumed to always be present. Are these "silent" values more universal? Or just more deeply embedded in the cultural context? What would happen to such self-evident values if left unmentioned in participatory processes? Could planners miss these because they're assumed? What would that mean for the longevity of the results from such planning processes? These are possible questions A deep dive into values and norms in to elaborate on this topic further.

> Continuing with Frese (2015), he also adds norms to have different levels. Different definitions of norms previously mentioned in this thesis show how closely related they are, and in some cases, follow a similar definition. This overlap suggests the necessity for a clarification between norms and values, which will open up further research inquiries into not only possible hierarchies between values, but also between norms and values.

A similar study could be done on norm conflicts, as these relationships do exist for values. Or, conceptualising norms next to public values can help clarify why certain value conflicts happen and provide ways to deal with

them. All of these pathways can help towards a clear distinction between the concepts of public values and norms in urban planning and their mutual relations. The questions related to the complexity of working with norms and values underscore the need for further interdisciplinary studies into these possible pathways.

Related the thesis to the educational program

My graduation thesis has a clear relation to the major topic of the graduation studio, Planning Complex Cities, which is part of the larger master's track of Urbanism and the total master's program. Architecture. Urbanism and Building Sciences.

First, the core themes the studio builds upon are expertise in spatial planning, development. spatial territorial governance, and participation. A further division is made between two sub-themes: Complex Regions in Transformation, focusing on the regional scale with more governmentled approaches, and Planning as Critical Engaged Practice, with a local lens, focusing on co-creative and communityled approaches. Most graduation topics emphasis on civic engagement and how that can be used to achieve a more sustainable transformation of spatial structures, elaboration on the interrelationships between spatial and institutional conditions (Complex Cities, n.d.).

This small description shows why my thesis fits perfectly with this studio. It builds upon a spatial planning model, the 15-minute city, through participation and uses the local-contextual lens of

public values in a co-creation process to achieve a more just and sustainable transition of the spatial structures of peri-urban areas.

Furthermore, the research explicitly addresses the interrelationship between spatial and institutional conditions by linking public value theory with a spatial planning model. Combining two existing frameworks combines both sets of conditions and brings a common understanding through the lens of public values.

By offering a methodological approach that bridges theory and practice and engaging with the real-world planning context through citizen engagement, the thesis contributes to the goal of recommending institutional change and envisions how this change to value-based design can lead to more development sustainable urban patterns.

The most obvious broader connection to the Department of Urbanism lies in the alignment with the InPUT project, which is part of the department. This thesis benefited from the project's relationship, and its insights could inform their next stage. It further aligns with two of the four research themes: Inclusive Urbanism and Green Urbanism (Department of Urbanism, n.d.). The value-based planning approach aims to be an inclusive process, and the eventual goal is to guide a sustainable transition that can deal with the problems we are facing with climate change.

Finally, urban planning, at its core, requires an interdisciplinary approach. No urban design can be realised without consulting the other departments that

are part of the overall master's program. A value-based planning approach is no different from this

Relation between research and design perceive as close by.

My thesis combines research and design as complementary tools that inform The realisation of having to readjust even one another at different stages of the project. An extensive literature study informed the methodological approach, which resulted in the need for a pattern language to converse with citizens. These patterns result from the combined effort of research and design, forming an iterative process. The designed patterns were then used to further research. This brings me to my second reflective identifying public values in a cocreative setting. This research part again formed the basis for the final design of the synthesis maps. Eventually, the conclusion from both the research and design stages informs possible next steps for future research. This thesis was built upon the relationship between research and design, and how a continuous cycle that includes them both can best help further a master's thesis.

Final personal reflection

My first question to myself goes back to my motivation: How did my background, as a person who has only lived in urban environments, influence my approach to researching the peri-urban context?

As I mentioned in my motivation, I have always lived in large cities. So, focusing on research in the peri-urban context resulted in my inability to relate past experiences to understand the contextual dynamics. Listening to the participants of the focus groups at the beginning of the project made me realise how much of a difference their experience was compared to mine. Even though there was a bias towards

the bike, the younger participants even discussed travel distances that they perceived as normal, exceeding my own boundaries of what I would personally

the simple notion of what we perceive as close-by made me extra aware of the importance of contextualising urban developments. This motivated me to develop this value approach and take it to heart for my own career and future as a spatial designer.

question: How has this thesis influenced the way I see the role of the designer in spatial planning?

Answering this question directly ties into the insights gained through the value-based design approach explored in my thesis. From high school to this master's programme, reflection and providing feedback have consistently been integral elements of my learning journey. I have long attributed the fact that my primary interest, besides urban planning, is in sociology and psychology. Helping people is an interest that I have been naturally inclined towards, coming from a family of teachers and doctors.

Within the field of urban planning, I have always wanted to do something with citizen participation. I have an intrinsic motivation to help others, and I've come to recognize that one of my strengths lies in helping people reflect on or crystallize ideas. I was rarely the person during projects with the big ideas, but I could easily navigate to sharpen them quickly and add to them, starting with the simple question: "Why?"

I never anticipated that one of the key outcomes of my thesis would so clearly align with something I've intuitively practiced for years in my personal and academic life. While I understood that successful citizen participation in planning requires active listening and an openness to diverse perspectives, this thesis helped me understand how that abstract understanding could materialize into a meaningful, professional role.

Answering the question of what the role of the designer is is something we have had to do before during the master's, and I always struggled with answering this question for me personally. I could describe the designer as someone who solves complex spatial problems by mediating between stakeholders and being responsible for creating a holistic approach. This aligns with the role of a connector described earlier.

However, this thesis has helped me understand that, at least in the case of working with citizens, the role of the designer is actually threefold, as explained earlier in this chapter. It is not just about bringing together different perspectives and trying to represent them to the best of your abilities. We are not meant just to bring together perspectives, but to try and understand their desires and public values by engaging in a dialogue with citizens, so we, as the experts, can translate these into spatial design.

A translation that transcends the quality of just bringing together perspectives. This value-driven perspective has helped me reframe my understanding of what I believe my role as a designer should be. A fluid role, not set in stone, that

adjusts itself to its context, translating desires into a language understandable to the other stakeholders that the spatial designers are conversing with next. The role of a designer is a continuous dialogue, translating insights from others, with the goal of finding values.

Bibliography

Abdelfattah, L., Deponte, D., & Fossa, G. (2022). The 15-minute city: interpreting the model to bring out urban resiliencies. Transportation Research Procedia, 60, 330–337. https://doi.org/10.1016/j.trpro.2021.12.043

Ahlefeldt, V. A. P. B. F. (2019, 9 juli). The What is water? fish story. Museum Of Psychology - Illustrations About Us. https://museumofpsychology.org/2019/07/09/the-what-is-water-fish-story/

Alexander Wandl, D. I., Nadin, V., Zonneveld, W., & Rooij, R. (2014). Beyond urban-rural classifications: Characterising and mapping territories-in-between across Europe. Landscape and Urban Planning, 130(1), 50–63. https://doi.org/10.1016/j.landurbplan.2014.06.010

Allam, Z., Chabaud, D., Gall, C., Pratlong, F., & Moreno, C. (2022a). Enter the 15-minute city: revisiting the smart city concept under a proximity based planning lens. In Resilient and Sustainable Cities: Research, Policy and Practice (pp. 93–105). Elsevier. https://doi.org/10.1016/B978-0-323-91718-6.00002-5

Allam, Z., Chabaud, D., Gall, C., Pratlong, F., & Moreno, C. (2022b). On proximity-based dimensions and urban planning: historical precepts to the 15-minute city. In Resilient and Sustainable Cities: Research, Policy and Practice (pp. 107–119). Elsevier. https://doi.org/10.1016/B978-0-323-91718-6.00005-0

Allam, Z., Khavarian-Garmsir, A. R., Lassaube, U., Chabaud, D., & Moreno, C. (2024). Mapping the Implementation Practices of the 15-Minute City. Smart Cities, 7(4), 2094–2109. https://doi.org/10.3390/smartcities7040083

Allam, Z., Nieuwenhuijsen, M., Chabaud, D., & Moreno, C. (2022). The 15-minute city offers a new framework for sustainability, liveability, and health. In The Lancet Planetary Health (Vol. 6, Issue 3, pp. e181–e183). Elsevier B.V. https://doi.org/10.1016/S2542-5196(22)00014-6

Boer, J. (2024, May 13). De 15-minuten stad onder vuur. ROmagazine. Nl. https://romagazine.nl/artikel/28358/de-15-minuten-stad-onder-vuur

Bozeman, B. (2007). Public Values and Public Interest: Counterbalancing Economic Individualism. Georgetown University Press. https://doi. org/10.1353/book13027

Bruno, M., Melo, H. P. M., Campanelli, B., & Loreto, V. (2024). A universal framework for inclusive 15-minute cities. Nature Clties, 10, 633–641. https://doi.org/https://doi.org/10.1038/s44284-024-00119-4

Büttner, B., Seisenberger, S., Larriva, M. T. B., De Gante, A. G. R., Haxhija, S., Ramirez, A., & McCormick, B. (2022). Urban Mobility Next 9 ±15-Minute City: Human-centred planning in action Mobility for more liveable urban spaces. chrome-extension://efaidnbmnnibpcajpcglclefindmkaj/https://www.eiturbanmobility.eu/wp-content/uploads/2022/11/EIT-UrbanMobilityNext9_15-min-City_144dpi.pdf

Büttner, B., Seisenberger, S., McCormick, B., Silva, C., Filipe Teixeira, J., Papa, E., & Cao, M. (2024). Mapping of 15-minute City Practices Overview on strategies, policies and implementation in Europe and beyond Imprint Deliverable 2.8. https://dutpartnership.eu/

Cambridge University Press & Assessment. (n.d.). Meaning of value in English. Cambridge Dictionary. Retrieved January 22, 2025, from https://dictionary.cambridge.org/dictionary/english/value

Caprotti, F., Duarte, C., & Joss, S. (2024). The 15-minute city as paranoid urbanism: Ten critical reflections. Cities, 155, 105497. https://doi.org/10.1016/J.

CITIES.2024.105497

Cardoso, R., Sobhani, A., & Meijers, E. (2022). The cities we need: Towards an urbanism guided by human needs satisfaction. Urban Studies, 59(13), 2638–2659. https://doi.org/10.1177/00420980211045571

Chiaradia, A. J. F., Sieh, L., & Plimmer, F. (2017). Values in urban design: A design studio teaching approach. Design Studies, 49, 66–100. https://doi.org/10.1016/j.destud.2016.10.002

Complex Cities. (n.d.). About this graduation studio. Planning Complex Cities TU Delft. Retrieved June 11, 2025, from https://complexcitiesstudio.org/about-us/

Department of Urbanism. (n.d.). Research. TU Delft. Retrieved June 11, 2025, from https://www.tudelft.nl/bk/over-faculteit/afdelingen/urbanism/onderzoek

Dobbinga, B. (2024, November 18). The social roots of radicalisation: What Europe's largest extremism study reveals. Universiteitleiden.NI/.

During, R., Bock, B., Frissel, J., Walther, C., & Wegman, R. (2023). Leefbaarheid op het platteland: uiteenlopen van idylles en werkelijkheden; Een literatuuronderzoek naar wat wedenken te begrijpen van leefbaarheid op het platteland. https://doi.org/https://doi.org/10.18174/586532

Foster Wallace, D. (2009). This is Water: Some Thoughts, Delivered on a Significant Occasion, about Living a Compassionate Life. Little, Brown and Company.

Frese, M. (2015). Cultural Practices, Norms, and Values. *Journal of Cross-Cultural Psychology, 46*(10), 1327–1330. https://doi.org/10.1177/0022022115600267

Geneletti, D., La Rosa, D., Spyra, M., & Cortinovis, C. (2017). A review of

approaches and challenges for sustainable planning in urban peripheries. Landscape and Urban Planning, 165, 231–243. https://doi.org/10.1016/j.landurbplan.2017.01.013

Gilbert, D. (2023, October 2). The 15-Minute City conspiracy theory goes mainstream. WIRED.

Guzman, L. A., Oviedo, D., & Cantillo-Garcia, V. A. (2024). Is proximity enough? A critical analysis of a 15-minute city considering individual perceptions. Cities, 148. https://doi.org/10.1016/j.cities.2024.104882

Halpern, L. (2015). Solving Global Issues with "Why." The Brown Journal of World Affairs, 22(1), 369–376. htt-ps://www.proquest.com/magazines/solving-global-issues-with-why/docview/1783017991/se-2

Herzog, R. H. (2021). Cities for Citizens: Identification of Public Values and their Conflicts in Urban Space [Delft University of Technology]. https://doi.org/10.4121/15142287

Herzog, R. H., Gonçalves, J. E., Slingerland, G., Kleinhans, R., Prang, H., Brazier, F., & Verma, T. (2024). Cities for citizens! Public value spheres for understanding conflicts in urban planning. Urban Studies, 61(7), 1327–1344. https://doi.org/10.1177/00420980231207475

Integrated Peri-Urban Transitions (InPUT). (n.d.). Retrieved January 13, 2025, from https://complexcitiesstudio.org/complex-cities-planning-for-change/projects-and-networks/

Khavarian-Garmsir, A. R., Sharifi, A., Hajian Hossein Abadi, M., & Moradi, Z. (2023). From Garden City to 15-Minute City: A Historical Perspective and Critical Assessment. In Land (Vol. 12, Issue 2). Multidisciplinary Digital Publishing Institute (MDPI). https://doi.org/10.3390/land12020512

Khavarian-Garmsir, A. R., Sharifi,

204 FINDING VALUES — FINDING VALUES

Bibliography

A., & Sadeghi, A. (2023). The 15-minute city: Urban planning and design efforts toward creating sustainable neighborhoods. Cities, 132, 104101. https://doi.org/10.1016/J.CITIES.2022.104101

Kinder, T., & Stenvall, J. (2024). Public Value, Values, and Public Services (1st ed.). Springer Cham. https://doi.org/https://doi.org/10.1007/978-3-031-43230-9

Kucharek, J.-C. (2021, December 16). Carlos Moreno: 15 minutes to save the world. The RIBA Journal.

Malano, H., Maheshwari, B., Singh, V. P., Purohit, R., & Amerasinghe, P. (2014). Challenges and Opportunities for Peri-urban Futures. In The Security of Water, Food, Energy and Liveability of Cities (Vol. 71, pp. 3–10). Springer. htt-ps://doi.org/10.1007/978-94-017-8878-6_1

Mallick, S. K. (2024). Peri-urban interface: challenges and opportunities in spatial planning and management. In M. Sahana (Ed.), Modern Cartography Series (Vol. 11, pp. 529–542). Academic Press. https://doi.org/10.1016/B978-0-443-15832-2.00023-X

Markuske, A. (2024, July 1). Urban peripheries and the 15-Minutes City. A comparative study of planning policies aiming at applying the concept of proximity to suburban and semi-dense areas. GAME CHANGER? Planning for Just and Sustainable Urban Regions". https://proceedings.aesop-planning.eu/index.php/aesopro/article/view/1410

Marquet, O., Anguelovski, I., Nello-Deakin, S., & Honey-Rosés, J. (2024). Decoding the 15-Minute City Debate: Conspiracies, Backlash, and Dissent in Planning for Proximity. Journal of the American Planning Association. https://doi.org/10.1080/01944363.2024.2346596

Marquet, O., Mojica, L., Fernández-Núñez, M. B., & Maciejewska, M.

(2024). Pathways to 15-Minute City adoption: Can our understanding of climate policies' acceptability explain the backlash towards x-minute city programs? Cities, 148. https://doi.org/10.1016/j.cities.2024.104878

Maslow, A. H. (1943). A Theory of Human Motivation. Psychological Review, 50(4), 370–396. https://doi.org/https://doi.org/10.1037/h0054346

McAuliffe, C., & Rogers, D. (2019). The politics of value in urban development: Valuing conflict in agonistic pluralism. Planning Theory, 18(3), 300–318. https://doi.org/10.1177/1473095219831381

Moreno, C. (2021a). Definition of the 15-minute city: WHAT IS THE 15-MINUTE CITY? The OBEL AWARD. https://www.researchgate.net/publication/362839186

Moreno, C. (2021b). Living in Proximity in a Living City. Glocalism, 3. https://doi.org/10.12893/gjcpi.2021.3.8

Moreno, C., Allam, Z., Chabaud, D., Gall, C., & Pratlong, F. (2021). Introducing the "15-Minute City": Sustainability, Resilience and Place Identity in Future Post-Pandemic Cities. Smart Cities, 4(1), 93–111. https://doi.org/https://doi.org/10.3390/smartcities4010006

Mouratidis, K. (2024). Time to challenge the 15-minute city: Seven pitfalls for sustainability, equity, livability, and spatial analysis. Cities, 153. https://doi.org/10.1016/j.cities.2024.105274

Nabatchi, T. (2018). Public values frames in administration and governance. Perspectives on Public Management and Governance, 1(1), 59–72. https://doi.org/10.1093/ppmgov/gvx009

Nabatchi, T. (2012). Putting the "Public" Back in Public Values Research: Designing Participation to Identify and Respond to Values. Public Administration Review, 72(5), 699–708. https://doi.org/10.1111/i.1540-

6210.2012.02544.x

Newton, C., Yu, C., Czischke, D., Bracken, G., Gonçalves, J. E., Höller, L., Dąbrowski, M., Qu, L., Rooij, R., Rocco, R., Cardoso, R., Chereni, S., & Balz, V. (2023). BIG SHIFTS in Spatial Planning in The Netherlands. The Evolving Scholar. https://doi.org/10.59490/6516baf3dd4bbd3edc360463

Ostad-Ali-Askari, K., Gholami, H., Dehghan, S., & Ghane, M. (2021). The Role of Public Participation in Promoting Urban Planning. American Journal of Engineering and Applied Sciences, 14(2), 177–184. https://doi.org/10.3844/aieassp.2021.177.184

Papas, T., Basbas, S., & Campisi, T. (2023). Urban mobility evolution and the 15-minute city model: from holistic to bottom-up approach. Transportation Research Procedia, 69, 544–551. https://doi.org/10.1016/J.TRPRO.2023.02.206

Platteland en stad ervaren amper verschil in bereikbaarheid. (2023, April 3). Binnenlands Bestuur. https://www.binnenlandsbestuur.nl/ruimte-en-milieu/begroting-en-jaarre-kening/platteland-en-stad-ervaren-amper-verschil-in-bereikbaarheid

Poorthuis, A., & Zook, M. (2023). Moving the 15-minute city beyond the urban core: The role of accessibility and public transport in the Netherlands. Journal of Transport Geography, 110. https://doi.org/10.1016/j.jtrangeo.2023.103629

Pozoukidou, G., & Chatziyiannaki, Z. (2021). 15-minute city: Decomposing the new urban planning Eutopia. Sustainability (Switzerland), 13(2), 1–25. https://doi.org/10.3390/su13020928

Rhoads, D., Solé-Ribalta, A., & Borge-Holthoefer, J. (2023). The inclusive 15-minute city: Walkability analysis with sidewalk networks. Computers, Environment and Urban Systems, 100,

101936. https://doi.org/10.1016/J.COM-PENVURBSYS.2022.101936

Samadi, A., & Rafatshahmari. (2017). The Role of Public Participation in Sustainable Urban Development. Scholars Journal of Engineering and Technology, 5(SJET), 350–354. https://doi.org/10.21276/sjet

Senge, P. M., Kleiner, A., Roberts, C., Ross, R. B., & Smith, B. J. (1994). The Ladder of Inference. In The Fifth Discipline Fieldbook: Strategies for Building a Learning Organization. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://assets.super.so/b091f13e-a478-4b06-88d7-2f9cc-25d435e/files/0dd438d1-3d0f-4f50-b290-699e09f1bbf2.pdf

Shaw, B. J., van Vliet, J., & Verburg, P. H. (2020). The peri-urbanization of Europe: A systematic review of a multifaceted process. In Landscape and Urban Planning (Vol. 196). Elsevier B.V. https://doi.org/10.1016/j.landurbplan.2019.103733

Silva, C., Büttner, B., Seisenberger, S., & Rauli, A. (2023). Proximity-centred accessibility—A conceptual debate involving experts and planning practitioners. Journal of Urban Mobility, 4, 100060. https://doi.org/10.1016/J.URB-MOB.2023.100060

Sinek, Simon. (2009). Start with Why: How Great Leaders Inspire Everyone to Take Action. Portfolio. http://ci.nii.ac.jp/ncid/BB07258461

Teixeira, J. F., Silva, C., Seisenberger, S., Büttner, B., McCormick, B., Papa, E., & Cao, M. (2024). Classifying 15-minute Cities: A review of worldwide practices. Transportation Research Part A: Policy and Practice, 189. https://doi.org/10.1016/j.tra.2024.104234

Thabit, S., Sancino, A., & Mora, L. (2024). Strategic public value(s) governance: A systematic literature review

206 FINDING VALUES — FINDING VALUES :

Bibliography

and framework for analysis. Public Administration Review. https://doi.org/10.1111/puar.13877

The DUT Partnership. (n.d.).
Retrieved January 13, 2025, from https://dutpartnership.eu/the-dut-partnership/

UN DESA. (2024). The Sustainable Development Goals Report. https://unstats.un.org/sdgs/report/2024/

Verheijen, T., & Dijkstra, I. (2023, September 7). "15-minutensteden gaan over controle, niet over gemak." Deanderekrant.Nl. https://deanderekrant.nl/nieuws/15-minutensteden-gaan-over-controle-niet-over-gemak-2023-09-07

Visser, F. S., Stappers, P. J., van der Lugt, R., & Sanders, E. B.-N. (2005). Contextmapping: experiences from practice. CoDesign, 1(2), 119–149. https://doi.org/10.1080/15710880500135987

Von Der Dunk, A., Grêt-Regamey, A., Dalang, T., & Hersperger, A. M. (2011). Defining a typology of peri-urban land-use conflicts - A case study from Switzerland. Landscape and Urban Planning, 101(2), 149–156. https://doi.org/10.1016/j.landurbplan.2011.02.007

Weick, K. E. . (1995). Sensemaking in organizations. Sage Publications.

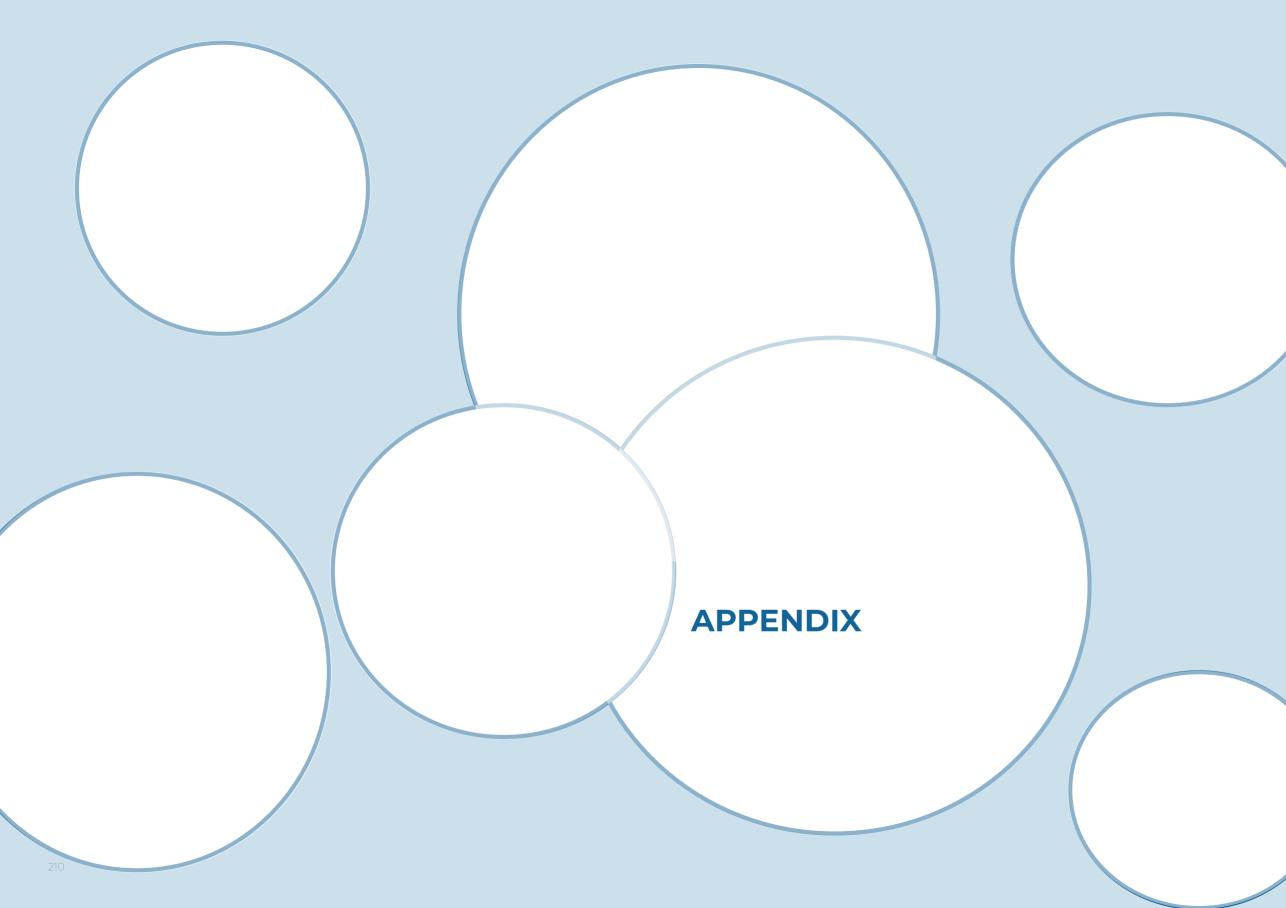
Wright, C. (2020). The Meaning of Norms and Values. https://www.rese-archgate.net/publication/344730839

Zancheti, S. M., & Jokilheto, J. (1997). Values and urban conservation planning: some reflections on principles and definitions. Journal of Architectural Conservation, 1.

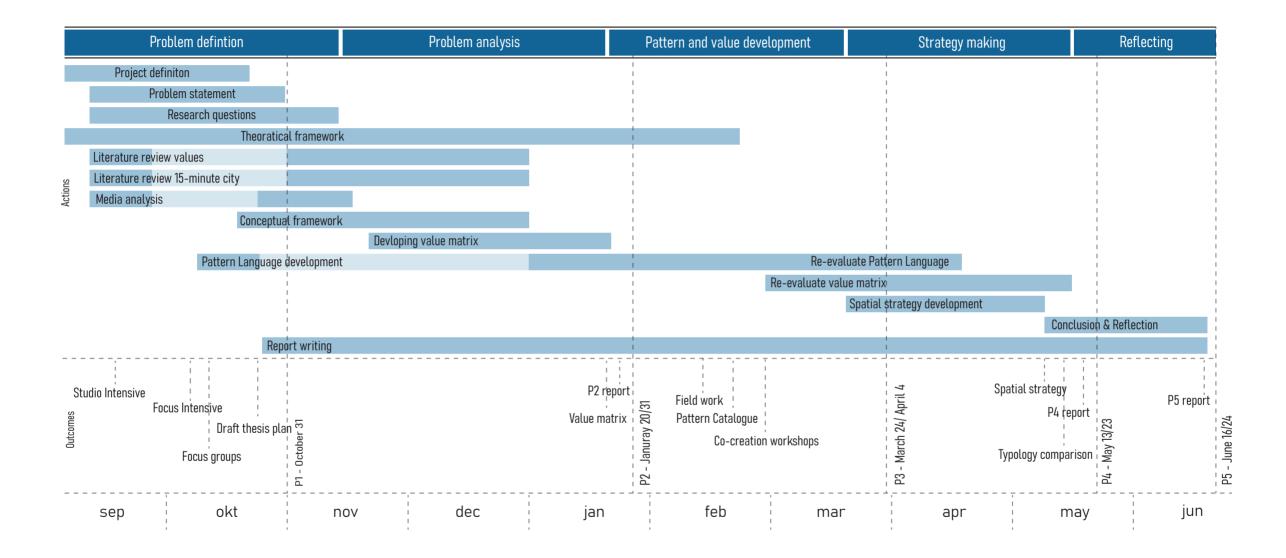
Zijlstra, T., Bakker, S., & Witte, J.-J. (2022). Kennisinstituut voor Mobiliteitsbeleid | Het wijdverbreide autobezit in Nederland.

Zivarts, A. (2021, April 22). The '15-Minute City' Isn't Made for Disabled Bodies. Bloomberg. https://www.bloomberg.com/news/ articles/2021-04-22/the-people-that-the-15-minute-city-leave-behind



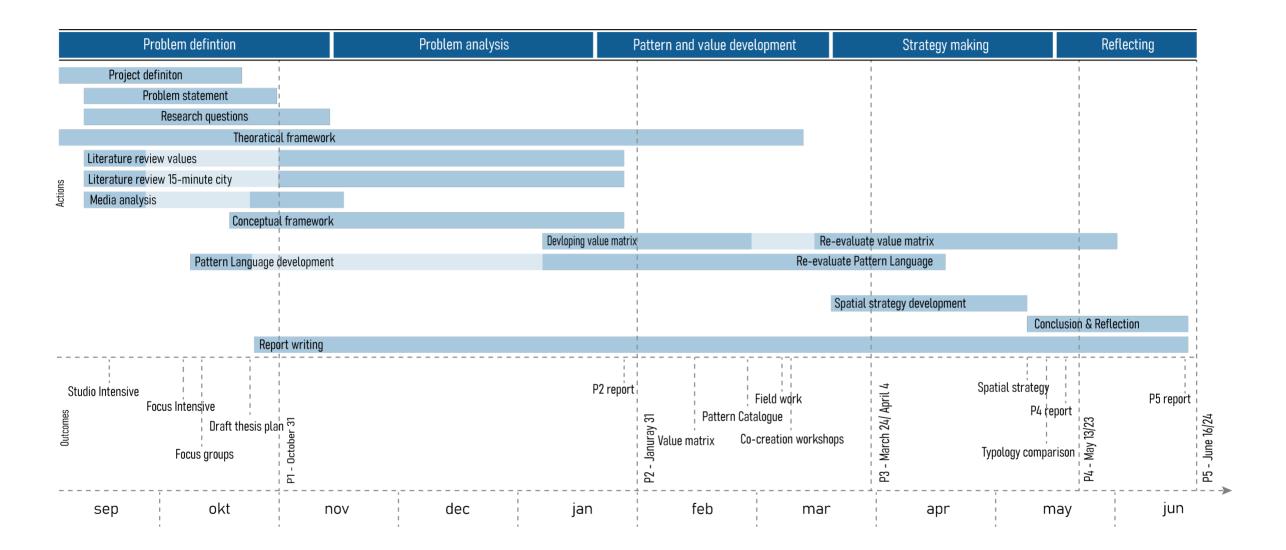


Timeline at P1





Timeline at P2





Timelien between P3 en P4

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Expected outcomes

Value matrix

To develop the overall value matrix, they will be first constructed per focus-group that was held. This will allow me to get a sense of which public values are present across all different groups and which are more specific to each group. This will inform the understanding of the relations between them better in a later step.

Figure 22 shows the first draft of a value matrix made for the group: recently moved. 12 possible public values were identified, of which the level of abstractness is still a work in progress. This will finalize itself after all matrixes are made.

It is important to be aware here of the present biases in the people that joined the focus-groups and limited data pool. Which biases this could be are still to be developed.

The example of the public value of 'neighbourhood safety' will show how the next steps will be made. Six spatial interventions and or design requirements where identified in relation to this public value through the data methods. These spatial interventions have a relation to this public value, but can very well effect also other possible values, as these 'satisfiers' can satisfy multiple 'needs'.

Liveability	Economic opportunities	Ecological quality	Safety/Health	Social equity
Rest places	Closeness of amenities	More diverse nature in streets	Push for slow mobility	Travel time acceptance
		Living by nature	Neighbourhood safety	Understandable routing
		Quiteness	Safe crossing	Qualitave public transport

Figure 22: Value matrix of focus-group: Recently moved - Author

Neighbourhood safety

Wider bike paths to force attention from drivers

Traffic sign for '30 km' roads

Traffic bumps in streets

Discourgae car use by one-way road network Playable street Bike street

Figure 23: Spatial interventions related to Neighbourhood Safety - Author



Expected outcomes

Pattern Language

The next step is the translating these interventions and requirements to a pattern language. In the case of neighbourhood safety, 4 patterns are derived from the requirements. An example is show here, in figure 24, for the pattern of changing priorities. The core patterns identified will be fully developed, with the remaining pattern being developed to a lower degree. The total pattern language will consist of 40 to 50 patterns and the core patterns will be around 10 to 12 of them.

These will then be used in the co-creation workshop back in Ede with citizens. During this workshop it is important to truly understanding why people want something, not only what they want, for which specific questions will be asked. Furthermore, empty cards will be brought to the workshop for possible new ones that could arise. Lastly, these results will be the starting point for the final phase: strategy development.

Neighbourhood safety

- 1. Centre of attention
 - 2. Slowing traffic
- 3. One-way streets
- 4. Changing priorities

Figure 24: Patterns related to Neighbourhood Safety - Author

N4: SLOWING DOWN



Hypothesis

Slowing down cars and making them secondary users in neighbourhood streets will improve safety on the streets.

Theoratical back-up:

As cities have densified, private green spaces such as gardens have tended to be lost, without corresponding creation of replacement green spaces in the public realm (Croeser et al, 2022). The spaces for parking makes way to plant more trees an open green spaces in the urban areas.

Practical implications:

Parking on the streets is reduce and clusters on the edges of neighbourhoods. Seperating visitors and resident parking spots help achieve less cars in the neighbourhood. Green spaces that are put back are dependend on the already present green structures in the area. Where green open spaces are common, trees are put back. Where as, if there is a lack of open spaces, they are put back.

Source:



References:

Relations:



Figure 25: Example of a fully develop pattern- Author



Expected outcomes

Spatial Strategy

The spatial strategy will show how the different applied patterns will spatially intervene with the case study through the scales. The example in figure 26 shows how the patterns could be applied and explained through the scales. The exact scope and size of these scale will be defined once the pattern set is finalized.

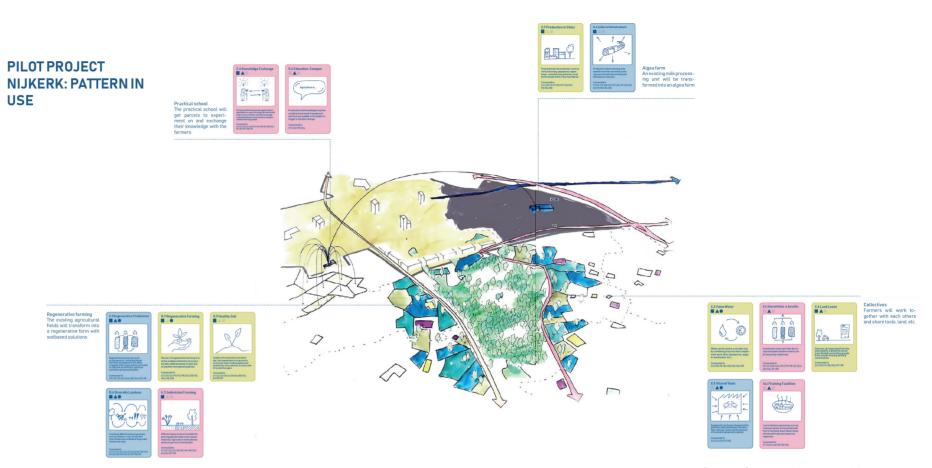


Figure 26: Reference for spatial strategy with patterns

V.K. Bansal, J. Boersma, J.C. Schotanus, W. Stadtlander, A.M. de Boer. (2024)

Donut Diet | TU Delft Repository. http://resolver.tudelft.nl/uuid:01b79aaa-c314-4fcf-aa6f-7ef207409a39



Expected outcomes

Typology comparison

Finally, the link between my graduation research and the InPUT projects allows for the results to be projected in a more abstract way across the study locations of the InPUT project. This is done by using a set of typologies defined for the project, informing possible further research steps into this topic on a broader scale.

Spatial Typologies with GSI - CL9 motorized

	population density	natorized centrality	œ
G	19 1	high	low
œ	206	medium	low
C5	220	low	low
CS	361	high	low
CI	513	medium	low
C4	7 19 ,5	high	nedium
C 7	1265,5	high	high
CS	1644	high	nedum
C9	3514,5	high	nedum
			Ē

Spatial Typologies with GSI - CL9 motorized

	population density	motorized centrality	GSI
C6	low	high	low
	361	1,41048	0,079
3,7%	18,8%	7,3%	6%
NL	BE	AT	PT

Figure 27: Developed Typologies for InPUT - E. Anghileri (2024) *InPUT project TU Delft*



Informed consent form that was signed by the participants of the co-creation workshop

Formulier voor geïnformeerde toestemming Finding Values-project – Co-creatieworkshops

U wordt uitgenodigd om deel te nemen aan een afstudeeronderzoek met de titel Finding Values. Deze studie wordt uitgevoerd door Jelle Schotanus van de TU Delft onder supervisie van Rodrigo Viseu Cardoso en Reinout Kleinhans.

Het doel van deze onderzoek studie is om te begrijpen hoe de principes achter de 15-minutenstad kunnen worden geïmplementeerd in het peri-urbane gebied door de lens van sociale waarden. Deze co-creatieworkshop dient om te begrijpen wat de ruimtelijke wensen zijn aan de hand van een vooraf gedefinieerde set interventies. De workshop zal ongeveer 1,5 uur duren.

We willen de bijeenkomst opnemen om het maken van aantekeningen achteraf te vergemakkelijken. Uw antwoorden tijdens de workshop zullen naar ons beste vermogen vertrouwelijk blijven.

We zullen eventuele risico's minimaliseren door: 1) de opname te vernietigen nadat notities zijn gemaakt, 2) de notities te anonimiseren door alle persoonlijke verwijzingen te verwijderen. Het bestand met uw naam en contactgegevens wordt opgeslagen in een gecodeerd bestand en is alleen toegankelijk voor het onderzoeksteam van de TU Delft.

De gegevens die in dit onderzoek worden verzameld, worden gebruikt voor wetenschappelijke publicaties en het masterscriptieverslag.

Uw deelname aan dit onderzoek is geheel vrijwillig en u kunt zich op elk moment terugtrekken. U bent vrij om vragen weglaten.

U ontvangt een voucher ter waarde van 25,- euro voor uw deelname.

Als u ons uw toestemming geeft, vul dan onderstaand formulier in en onderteken het. U kunt uw toestemming altijd intrekken en de verzamelde informatie opvragen door een e-mail te sturen naar Rodrigo Cardoso: rovcardoso@tudelft.nl.

VINK DE JUISTE VAKJES AAN	Ja	Nee				
A: ALGEMENE OVEREENKOMST – ONDERZOEKSDOELEN, DEELNEMERSTAKEN EN VRIJWILLIGE DEELNAME						
Ik heb de bovenstaande informatie over het onderzoek gelezen en begrepen, of het is aan mij voorgelezen. Ik heb vragen over het onderzoek kunnen stellen en mijn vragen zijn naar mijn tevredenheid beantwoord.						
2. Ik stem er vrijwillig mee in om deel te nemen aan dit onderzoek en begrijp dat ik kan weigeren						
vragen te beantwoorden en dat ik mij op elk moment uit het onderzoek kan terugtrekken, zonder dat ik een reden hoef op te geven.						
3. Ik begrijp dat deelname aan het onderzoek het volgende inhoudt:						
Het bespreken en kiezen van een reeks ruimtelijke interventies						
Een audio-opname van de workshop						
4. Ik begrijp dat ik voor mijn deelname word gecompenseerd met een voucher.						
5. k begrijp dat het onderzoek in juni-juli 2025 zal eindigen						
B: POTENTIËLE RISICO'S VAN DEELNAME (INCLUSIEF GEGEVENSBESCHERMING)						
6. Ik begrijp dat deelname aan het onderzoek ook het verzamelen van specifieke persoonlijke gegevens inhoudt, met het potentiële risico dat mijn identiteit wordt onthuld en direct in verband wordt gebracht met standpunten die in deze groepsbijeenkomst worden geuit.						
7. Ik begrijp dat persoonlijke informatie die over mij wordt verzameld en die mij kan identificeren, zoals naam en leeftijdsgroep, niet buiten het onderzoeksteam zal worden gedeeld.						

VINK DE JUISTE VAKJES AAN	Ja	Nee
9. Ik begrijp dat de volgende stappen zullen worden genomen om de dreiging van een data lek te minimaliseren en mijn identiteit te beschermen in het geval van een dergelijk lek: vernietiging van de audio-opname, anonimiseren van de notities van de workshop, opslag van persoonlijke gegevens in een gecodeerde map.		
10. Ik begrijp dat de (identificeerbare) persoonsgegevens die ik verstrek, uiterlijk 1 maand na afloop van het onderzoek worden vernietigd.		
C: PUBLICATIE, VERSPREIDING EN TOEPASSING VAN HET ONDERZOEK		
11. Ik begrijp dat de geanonimiseerde informatie die ik verstrek na afloop van het onderzoek zal worden gebruikt voor mijn masterscriptie en onderzoekspaper.		

Handtekeningen								
Naam van de deelnemer [printed]	Handtekening	– —— Datum						
Als onderzoeker heb ik de informatie nauwkeurig voorgelezen aan de potentiële deelnemer en heb ik er, voor zover ik kon, voor gezorgd dat de deelnemer begrijpt waarvoor hij/zij vrijwillig toestemming geeft.								
Naam van de onderzoeker [printed]		 Datum						
Voor meer informatie kunt u contact opnemen met: Jelle Schotanus, 0634047407, jcschotanus@student.tudelft.nl . of Rodrigo Cardoso, rovcardoso@tudelft.nl .								



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Plan Overview

A Data Management Plan created using DMPonline

Title: Finding Values - Defining key social values of peri-urban inhabitants to inform the implementation of 15-minute city principles

Creator: Jelle Schotanus

Affiliation: Delft University of Technology

Funder: Delft University of Technology

Template: TU Delft Data Management Plan template (2021)

Project abstract:

This research aims to understand how the principles behind the 15-minute city can be implemented in the peri-urban area through the lens of social values. To achieve this goal, the social values of inhabitants need to be defined. Results from focus groups organised for the InPUT project and seperate street interviews will be used for this. These values will then be translated into spatial interventions though a pattern language. During co-creation workshops with local inhabitants this pattern language will be used. Results from these workshops will uncover (mis)alignments between perceived social values and desired values from the chosen spatial interventions. This process reinforms the understood social values and helps redefine the importance of certain social values of peri-urban inhabitants. Through a spatial strategy for the case study, this research aims to show how developing a spatial strategy based on social values can help implement the principles of the 15-minute city and improve liveability, proximity and accessibility in the peri-urban environment. Finally, this research aims to contribute to the InPUT project by applying the results to a set of typologies defined in the InPUT project. These typologies are present across the four different case studies and this way the results from my graduation project can be applied to across all of them. This step can help inform specific further research steps that should or could be taken within the InPUT project.

ID: 164554

Start date: 02-09-2024

End date: 24-06-2025

Last modified: 28-01-2025

Finding Values - Defining key social values of peri-urban inhabitants to inform the implementation of 15-minute city principles

0. Administrative questions

 ${\bf 1.} \ {\bf Name} \ {\bf of} \ {\bf data} \ {\bf management} \ {\bf support} \ {\bf staff} \ {\bf consulted} \ {\bf during} \ {\bf the} \ {\bf preparation} \ {\bf of} \ {\bf this} \ {\bf plan}.$

The data and DMP for this project has been discussed with my supervisor, Rodrigo Viseu Cardoso.

My faculty Data Steward, Janine Strandberg, partially reviewed this DMP for the first time on 10-12-2024, furtherfeedback was on hold until some initial aspects were clarified.

My faculty Data Steward, Janine Strandberg, has reviewed this DMP fully on 14-12-2024.

2. Date of consultation with support staff.

2024-12-14

I. Data description and collection or re-use of existing data

 ${\bf 3. \ Provide \ a \ general \ description \ of \ the \ type \ of \ data \ you \ will \ be \ working \ with, \ including \ any \ re-used \ data:}$

Type of data	File format(s)	How will data be collected (for re-used data: source and terms of use)?	Purpose of processing	Storage location	Who will have access to the data
Focus groups					
Written notes of focus groups held for the InPUT project (DMP: ID 141905) about views on mobility, amenities and desired changes.	.doc, .pdf scans	Data will be gathered by taking notes during the focus groups in written notes. Afterwards the written notes will be digitalised. These are focus groups held for the InPUT project, for which I am granted access.	Understanding the view of different citizen groups in regards to mobility and amenities that they encounter in their daily life.	booklet stored by the author, destroyed after the creation of digital scans and upload to primary storage.	supervisors
Field work					



Fieldnotes and observations of mobility related infrastructure of the build environment in the case study area.	.txt, pdf scans	Data will be collected during fieldwork in Ede and its	Get an understanding of the case study region and the feasibility of possible spatial interventions and quality of current spatial areas, for example looking at specific roads, bike paths, bus lines, open spaces, lighting, pavements, resting places etc.	stored by the author,	Master Student + Supervisiors
Photographs of locations that require interventions or of good spatial areas. Photographs will not include identifiable people to avoid collected personal data.	.jpg	fieldwork in Ede and its	Get an understanding of the case study region and the feasibility of possible spatial interventions and quality of current spatial areas, for example photos of roads, parks, squares, open spaces without resting places, unsafe roads/crossings, etc.	camera by the author, destroyed after uploading them to	Master Student + Supervisiors
Spatial analysis of the location					
GIS data, spatial analysis of the case study region	QGIS formats	GIS software will be used to collect, process, analyse and map data on thematic key issues. Sources include publicly available datasets form OpenStreetMap and other geographical databased (to be defined). The data obtainded will be used according to the licenses operated bu the data owners (e.g. OpenStreetMap under the ODbL license).		TU Delft OneDrive.	Master Student + Supervisiors
Street interviews					
Personal Data from interview participants (name for informed consent form and age bracket) Interviews are conducted in public in the case study area	.xls, .csv files, pdf scans	argitised.	To maintain GDPR standards, consent forms, and information sheets are given to each participant for the interview. Age bracket data is used to moniter diversity and representativeness of participants.	printed forms: kept by the main researcher, destroyed at the end of the project digital scans: TU Delft OneDrive.	Master Student + Supervisiors

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Qualitative interview data from questions regarding spatial problems and desired changes related to infrastructure and services.	.xls, pdf scans of original notes	Data will be collected during street interviews in written notes. Data will be processed anonymously in .xls format from notes.	The data will be used to get understanding about the local quality of life and mobility.	[temporary] fieldnotes written in booklet stored by the author, destroyed after the creation of digital scans and upload to primary storage. [primary storage] TU Delft OneDrive	Master Student + Supervisiors
Anonymous survey data on perceptions of spatial problems and desired changes related to infrastructure and services. + age group	.cvs	Online survey in Qualtrics. Anonymous link will be used and IP- adress tracking will be turned off. Survey is distributed by QR-code carried by researcher.	The data will be used to get understanding about the local quality of life and mobility.	Qualtrics server (temporary storage) + OneDrive (primary storage)	Master Student + Supervisiors
Quantitative interview data from questions regarding spatial problems and desired changes related to infrastructure and services.	.xls, pdf scans of original notes	Data will be collected during street interviews in written notes. Data will be processed anonymously in .xls format from notes.	The data will be used to get understanding about the local quality of life and mobility.	[temporary] fieldnotes written in booklet stored by the author, destroyed after the creation of digital scans and upload to primary storage. [primary storage] TU Delft OneDrive	Master Student + Supervisiors
Co-creation workshop					
Personal Data for consent forms for in- person co-creation workshop participations (Name)	.xls, .csv files, pdf scans	Personal Data will be collected when processing consent forms. These are collected on paper, digitised and handed over to the resposnible reseacher of the InPUT project	To maintain GDPR standards, consent forms, and information sheets are given to each participant for co-creation workshops.	printed forms: kept by Responsible researcher following InPUT's apporoved HREC guidelines (DMP:ID 141905 and HREC 4574) digital scans: TU Delft OneDrive.	Master Student + Supervisiors
Audio recordings from co-creation workshops.	.m4a, .mp3, .mav	An external recording device is used. Data collected for transcribtion of audio.	To capture discussions of citizens on decision making between desired spatial interventions during cocreation workshops. This data will help me understand decision making between spatial interventions.	[temporary] external recording device, destroyed after creation of transcripts	Master Student + Supervisiors

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Anonymised transcript of co-creation workshop on opinions of local residents on desired spatial interventions.	.doc, .csv		To capture discussions of citizens on decision making between desired spatial interventions during cocreation workshops.	TU Delft	Master Student + Supervisiors
Photographs of results of co-creation workshop, for example: photgraphs of maps, sketches, sticky notes or other provided workshop material like the pattern language (cards with spatial interventions).	.pdf, .jpg, .png		Results of co-creation workshop will provide an understanding of desired spatial interventions and their related values. This understanding will reinfom developed values and provide inspiration for a spatial strategy.	TU Delft	Master Student + Supervisiors
Written data from co- creation workshops including: written notes by researcher.	.pdf, .jpg, .png	Written notes are taken by the researcher during the workshop. Afterwards the written notes will be digitalised.	Results of co-creation workshop will provide an understanding of desired spatial interventions and their related values. This understanding will reinfom developed values and provide inspiration for a spatial strategy.	TU Delft OneDrive	Master Student + Supervisiors

4. How much data storage will you require during the project lifetime?

• 250 GB - 5 TB

II. Documentation and data quality

5. What documentation will accompany data?

- · Other explain below
- Methodology of data collection

Empty template of informed consent forms for interviews and co-creation workshop

The dataset will not be shared in a data repository, but the methodology of data collection will be explained in the MSc thesis, which is made available in the TU Delft Education repository.

Qualtrics server: Server of online survey platform. Temporary storage for anonymous survey responses.

III. Storage and backup during research process

6. Where will the data (and code, if applicable) be stored and backed-up during the project lifetime?

- OneDrive
- Another storage system please explain below, including provided security measures

Data from the fieldwork observations and notes of the focus groups will temporarily be stored in written notes. These will be destroyed after the digitisation.

Photographs will be temporality stored on external device, which will be destroyed after transfering the photos to the OneDrive.

Qualtrics server: Server of online survey platform. Temporary storage for anonymous survey responses. Anonymised data will be

stored on the OneDrive permantently

External recording devices for temporary storage of audio. Recordings will be deleted from device as soon as they are moved to the Project Storage.

Both printed consent forms will be destroyed after the end of the project and digitised so they can be stored in the OneDrive as back-up.

Copies of consent forms will be encrypted separately from the research data in the TU Delft OneDrive.

IV. Legal and ethical requirements, codes of conduct

7. Does your research involve human subjects or 3rd party datasets collected from human participants?

Yes

8A. Will you work with personal data? (information about an identified or identifiable natural person)

If you are not sure which option to select, first ask you<u>Faculty Data Steward</u> for advice. You can also check with the <u>privacy website</u>. If you would like to contact the privacy team: privacy-tud@tudelft.nl, please bring your DMP.

Yes

The research data collected in the project will be anonymised, but processing of personal data is required for conducting the research project.

8B. Will you work with any other types of confidential or classified data or code as listed below? (tick all that apply)

If you are not sure which option to select, ask your Faculty Data Steward for advice.

- No, I will not work with any confidential or classified data/code
- 9. How will ownership of the data and intellectual property rights to the data be managed?

For projects involving commercially-sensitive research or research involving third parties, seek advice of your<u>Faculty</u> <u>Contract Manager</u> when answering this question. If this is not the case, you can use the example below.

The student conducts the research independently, and is the owner of the fieldnotes, interview, audio, consent form, transcript and visual data.

The InPUT project grants access to events like focus groups to provide me the opportunity to conduct my own research. Other (personal) data is not shared.

The visual data from co-creation workshop and their fully anonymised transcripts underlying the graduation report will be included in the MSc thesis appendix, with the thesis being made publicly accessible in the TU Delft Education repository.

10. Which personal data will you process? Tick all that apply

- · Other types of personal data please explain below
- Data collected in Informed Consent form (names and email addresses)
- Signed consent forms
- Gender, date of birth and/or age
- audio-recordings (co-creation workshops)
- age group: e.g., 25-30; 31-34; 35-40; 41-45 (survey and co-creation workshops)
- perception on mobility and amenities (survey only)

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In the surveys the age range of participants is asked.

For the co-creation workshops a informed consent form will be used which will collect names. During the workshops the age range of participants will be asked.

The gathering of other personal data then age group is exluced from the street interviews. The structure of the questions asked during street interviews will be geared towards understanding spatial quality and functional organization of the case study region and will include no further insight on personal heatth, or other sensitive personal data.

11. Please list the categories of data subjects

- Survey: General public for the street interviews in locations in the case study area.
- Co-creation workshop: participants recruited through the InPUT project
- 12. Will you be sharing personal data with individuals/organisations outside of the EEA (European Economic Area)?
- No
- 15. What is the legal ground for personal data processing?
 - · Informed consent
- 16. Please describe the informed consent procedure you will follow:

In they survey, informed consent will be given by clicking thorugh the first page with an opening statement.

All study participants will be asked for their written consent for taking part in the study and for data processing before the start of the co-creation workshop.

- 17. Where will you store the signed consent forms?
- Same storage solutions as explained in question 6
- 18. Does the processing of the personal data result in a high risk to the data subjects?

If the processing of the personal data results in a high risk to the data subjects, it is required to perform <u>ata</u> <u>Protection Impact Assessment (DPIA).</u> In order to determine if there is a high risk for the data subjects, please check if any of the options below that are applicable to the processing of the personal data during your research (check all that apply).

If two or more of the options listed below apply, you will have tacomplete the DPIA. Please get in touch with the privacy team: privacy-tud@tudelft.nl to receive support with DPIA.

If only one of the options listed below applies, your project might need a DPIA. Please get in touch with the privacy team: privacy-tud@tudelft.nl to get advice as to whether DPIA is necessary.

If you have any additional comments, please add them in the box below.

- None of the above applies
- 22. What will happen with personal research data after the end of the research project?

Appendix

• Personal research data will be destroyed after the end of the research project

The anonymised research data consists of anonymised workshop transcripts and anonymised interview/survey data. These will be fully anonymised and added in the appendix

Audio-recordings of workshops are destroyed after completion of anonymised workshop transcriptions. All other personal research data will be destroyed at the latest 1 month after the end of the project.

V. Data sharing and long-term preservation

27. Apart from personal data mentioned in question 22, will any other data be publicly shared?

• All other non-personal data (and code) underlying published articles / reports / theses

The non-personal GIS data will be used in the project to produce maps which will be used in the Master thesis and the used data-sets will be cited in the thesis.

29. How will you share research data (and code), including the one mentioned in question 22?

• My data will be shared in a different way - please explain below

Anonymised transcripts collected during the project will be included in the body and appendix of the MSc thesis, made available in the TU Delft Educational repository.

30. How much of your data will be shared in a research data repository?

• < 100 GB

31. When will the data (or code) be shared?

• As soon as corresponding results (papers, theses, reports) are published

Anonymised data collected during the project will be included in the body and appendix of the MSc thesis, made available in the TU Delft Educational repository.

32. Under what licence will be the data/code released?

Other - Please explain

Research data are only shared within the MSc thesis, which is automatically placed under copyright in the Education repository.

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VI. Data management responsibilities and resources

33. Is TU Delft the lead institution for this project?

• Yes, the only institution involved

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34. If you leave TU Delft (or are unavailable), who is going to be responsible for the data resulting from this project?

Supervising professor, Rodrigo Viseu Cardoso of department of Spatial planning & Strategy (<u>r.o.v.cardoso@tudelft.nl</u>)

35. What resources (for example financial and time) will be dedicated to data management and ensuring that data will be FAIR (Findable, Accessible, Interoperable, Re-usable)?

Research data are only shared within the MSc thesis: no additional resources are required.



Delft University of Technology HUMAN RESEARCH ETHICS CHECKLIST FOR HUMAN RESEARCH (Version January 2022)

IMPORTANT NOTES ON PREPARING THIS CHECKLIST

- An HREC application should be submitted for every research study that involves human participants (as Research Subjects) carried out by TU Delft researchers
- Your HREC application should be submitted and approved before potential participants are approached to take part in your study
- All submissions from Master's Students for their research thesis need approval from the relevant Responsible Researcher
- 4. The Responsible Researcher must indicate their approval of the completeness and quality of the submission by signing and dating this form OR by providing approval to the corresponding researcher via email (included as a PDF with the full HREC submission)
- There are various aspects of human research compliance which fall outside of the remit of the HREC, but which must be in place to obtain HREC approval. These often require input from internal or external experts such as <u>Faculty Data Stewards</u>, <u>Faculty HSE advisors</u>, the <u>TU Delft Privacy Team</u> or external <u>Medical research partners</u>.
- 6. You can find detailed guidance on completing your HREC application here
- Please note that incomplete submissions (whether in terms of documentation or the information provided therein) will be returned for completion prior to any assessment
- 8. If you have any feedback on any aspect of the HREC approval tools and/or process you can leave your comments here

I. Applicant Information

PROJECT TITLE:	Finding Values - Defining key social values of peri-urban inhabitants to inform the implementation of 15-minute city principles
Research period:	February 2024 – April 2024
Over what period of time will this specific part of the	
research take place	A Live a Lab D Mag i
Faculty:	Architecture and the Built Environment
Department:	Urbanism
Type of the research project:	Master thesis
(Bachelor's, Master's, DreamTeam, PhD, PostDoc, Senior	
Researcher, Organisational etc.)	
Funder of research:	TUD
(EU, NWO, TUD, other – in which case please elaborate)	
Name of Corresponding Researcher:	Jelle Schotanus
(If different from the Responsible Researcher)	
E-mail Corresponding Researcher:	j.c.schotanus@student.tudelft.nl
(If different from the Responsible Researcher)	
Position of Corresponding Researcher:	Masters
(Masters, DreamTeam, PhD, PostDoc, Assistant/	
Associate/ Full Professor)	
Name of Responsible Researcher:	Rodrigo Viseu Cardoso
Note: all student work must have a named Responsible	
Researcher to approve, sign and submit this application	
E-mail of Responsible Researcher:	r.o.v.cardoso@tudelft.nl
Please ensure that an institutional email address (no	
Gmail, Yahoo, etc.) is used for all project	
documentation/ communications including Informed	
Consent materials	A
Position of Responsible Researcher:	Assistant Professor
(PhD, PostDoc, Associate/ Assistant/ Full Professor)	

Appendix

II. Research Overview

NOTE: You can find more guidance on completing this checklist here

a) Please summarise your research very briefly (100-200 words)

What are you looking into, who is involved, how many participants there will be, how they will be recruited and what are they expected to do?

Add your text here – (please avoid jargon and abbreviations)

This Master Thesis research looks into how social values of citizens can help implement 15-minute city principles into the peri-urban. My project is aligned with the InPUT project (HREC submission: 4574) and I conduct my research in the area of Ede and its surroundings.

I will develop these value through focus groups for InPUT. The InPUT project provides me with access to this event so that I can conduct my own research. I will combine this with street interviews I will held myself in and around Ede. These will be anonymous street interviews to ask people about their experience with local mobility and amenities. These people will be approached in public areas in multiple locations in the case study area. The interviews will be held done with prepared questionnaires and supported with notetaking.

Additionally, co-creation workshops will be held in the case study area to understand desired spatial interventions. In the workshop I expect to involve 4-8 participants and I expect to conduct 4 different sessions. This workshop will be recorded so that it can be transcribed afterwards, while keeping the participants anonymous.

 If your application is an additional project related to an existing approved HREC submission, please provide a brief explanation including the existing relevant HREC submission number/s.

Add your text here – (please avoid jargon and abbreviations)

My master thesis is related to the InPUT project (HREC submission: 4574). This aims to explore how the concept of 15min city could be applied or adapted to urban peripheries across Europe. My project focusses on the Dutch case and is granted access to events like the aforementioned focus groups to be able to conduct my own research.

 If your application is a simple extension of, or amendment to, an existing approved HREC submission, you can simply submit an <u>HREC Amendment Form</u> as a submission through LabServant.



II. Risk Assessment and Mitigation Plan

NOTE: You can find more guidance on completing this checklist here

Please complete the following table in full for all points to which your answer is "yes". Bear in mind that the vast majority of projects involving human participants as Research Subjects also involve the collection of Personally Identifiable Information (PII) and/or Personally Identifiable Research Data (PIRD) which may pose potential risks to participants as detailed in Section G: Data Processing and Privacy below.

To ensure alighment between your risk assessment, data management and what you agree with your Research Subjects you can use the last two columns in the table below to refer to specific points in your Data Management Plan (DMP) and Informed Consent Form (ICF) – but this is not compulsory.

It's worth noting that you're much more likely to need to resubmit your application if you neglect to identify potential risks, than if you identify a potential risk and demonstrate how you will mitigate it. If necessary, the HREC will always work with you and colleagues in the Privacy Team and Data Management Services to see how, if at all possible, your research can be conducted.

			If YES please complete the Risk Assessment and Mitigation Plan columns below.			vide nt
ISSUE	Yes	No	RISK ASSESSMENT – what risks could arise? Please ensure that you list ALL of the actual risks that could potentially arise – do not simply state whether you consider any such risks are important!	MITIGATION PLAN – what mitigating steps will you take? Please ensure that you summarise what actual mitigation measures you will take for each potential risk identified – do not simply state that you will e.g. comply with regulations.	DMP	ICF
A: Partners and collaboration						
Will the research be carried out in collaboration with additional organisational partners such as:		No				
Is this research dependent on a Data Transfer or Processing Agreement with a collaborating partner or third party supplier? If yes please provide a copy of the signed DTA/DPA		No				
Has this research been approved by another (external) research ethics committee (e.g.: HREC and/or MREC/METC)? If yes, please provide a copy of the approval (if possible) and summarise any key points in your Risk Management section below		No				
points in your Risk Management section below B: Location						

			If YES please complete the Risk Assessment and Mitigation Plan columns below.			vide nt #
ISSUE	Yes	No	RISK ASSESSMENT – what risks could arise? Please ensure that you list ALL of the actual risks that could potentially arise – do not simply state whether you consider any such risks are important!	MITICATION PLAN – what mitigating steps will you take? Please ensure that you summarise what actual mitigation measures you will take for each potential risk identified – do not simply state that you will e.g. comply with regulations.	DMP	ICF
Will the research take place in a country or countries, other than the Netherlands, within the EU?		No				
5. Will the research take place in a country or countries outside the EU?		No				
Will the research take place in a place/region or of higher risk – including known dangerous locations (in any country) or locations with non-democratic regimes?		No				
C: Participants						
7. Will the study involve participants who may be vulnerable and possibly (legally) unable to give informed consent? (e.g., children below the legal age for giving consent, people with learning difficulties, people living in care or nursing homes,).	Yes		People from the general public will be approached on the street first street interviews/surveys. The risk there is that someone is approached who is unbale to give informed consent.	No children, or people who might seem to be possible under/close to the legal age of consent, will be approached during approaching the general public in conducting the street interviews/surveys. Furthermore, the location will not be directly in the vicinity of a care or nursing facility to prevent possibly approaching residents of these facilities.		
8. Will the study involve participants who may be vulnerable under specific circumstances and in specific contexts, such as victims and witnesses of violence, including domestic violence; sex workers; members of minority groups, refugees, irregular migrants or dissidents?	Yes		Participants involved in the interviews might fall under vulnerable groups, which creates extra risks for them.	The interview will only asked question related to mobility, amenities and livability to prevent data gathering related to any of the possible minorities a participant may fall under.	3, 10	
9. Are the participants, outside the context of the research, in a dependent or subordinate position to the investigator (such as own children, own students or employees of either TU Defit and/or a collaborating partner organisation)? It is essential that you safeguard against possible adverse consequences of this situation (such as allowing a student's failure to participate to your satisfaction to affect your evaluation of their coursework).		No				
10. Is there a high possibility of re-identification for your participants? (e.g., do they have a very specialist job of which there are only a small number in a given country, are they members of a small community, or employees from a partner company collaborating in the research? Or are they one of only a handful of (expert) participants in the study?		No				
D: Recruiting Participants						
11. Will your participants be recruited through your own, professional, channels such as conference attendance lists, or through specific network/s such as self-help groups	Yes		Participants will be recruited by the InPUT project.	Participants will be recruited by the InPUT project, which puts the responsibility with the InPUT project and thus mitigates any risk that is related to recruitment from myself.	11	

ISSUE	Yes		If YES please complete the Risk Assessment and Mitigation Plan columns below.		Please provide the relevant reference #	
		No	RISK ASSESSMENT - what risks could arise? Please ensure that you list ALL of the octual risks that could potentially arise -do not simply state whether you consider any such risks are important!	MITIGATION PLAN – what mitigating steps will you take? Please ensure that you summarise what actual mitigation measures you will take for each potential risk identified – do not simply state that you will e.g. comply with regulations.	DMP	ICF
12. Will the participants be recruited or accessed in the longer term by a (legal or customary) gatekeeper? (e.g., an adult professional working with children; a community leader or family member who has this customary role – within or outside the EU; the data producer of a long-term cohort study)		No				
13. Will you be recruiting your participants through a crowd-sourcing service and/or involve a third party data-gathering service, such as a survey platform?		No				
14. Will you be offering any financial, or other, remuneration to participants, and might this induce or bias participation?	Yes		Participants will be compensated by the InPUT project.	Participants will be compensated by the InPUT project, which puts the responsibility with the InPUT project and thus mitigates any risk that is related to recruitment from myself.		
E: Subject Matter Research related to medical questions/health may require special attention. See also the website of the <u>CCMO</u> before contacting the HREC.						
15. Will your research involve any of the following: Medical research and/or clinical trials Invasive sampling and/or medical imaging Medical and In Vitro Diagnostic Medical Devices Research		No				
16. Will drugs, placebos, or other substances (e.g., drinks, foods, food or drink constituents, dietary supplements) be administered to the study participants? If yes see here to determine whether medical ethical approval is required 17. Will blood or tissue samples be obtained from participants?		No				
If yes see here to determine whether medical ethical approval is required 18. Does the study risk causing psychological stress or anxiety beyond that		No				
normally encountered by the participants in their life outside research? J. Will the study involve discussion of personal sensitive data which could put participants at increased legal, financial, reputational, security or other risk? (e.g., financial data, location data, data relating to children or other vulnerable groups) Definitions of sensitive personal data, and special cases are provided on the TUD Privacy Team website.		No				
20. Will the study involve disclosing commercially or professionally sensitive, or confidential information? (e.g., relating to decision-making processes or business strategies which might, for example, be of interest to competitors)		No				
21. Has your study been identified by the TU Delft Privacy Team as requiring a Data Processing Impact Assessment (DPIA)? If yes please attach the advice/approval from the Privacy Team to this application		No				

ISSUE			If YES please complete the Risk Assessment and Mitigation Plan columns below.		Please pro the releva reference	int
	Yes	No	RISK ASSESSMENT – what risks could arise? Please ensure that you list ALL of the actual risks that could potentially arise – do not simply state whether you consider any such risks are important!	MITIGATION PLAN – what mitigating steps will you take? Please ensure that you summarise what actual mitigation measures you will take for each potential risk identified – do not simply state that you will e.g. comply with regulations.	DMP	ICF
22. Does your research investigate causes or areas of conflict? If yes please confirm that your fieldwork has been discussed with the appropriate safety/security advisors and approved by your Department/Faculty.		No				
23. Does your research involve observing illegal activities or data processed or provided by authorities responsible for preventing, investigating, detecting or prosecuting criminal offences if so please confirm that your work has been discussed with the appropriate legal advisors and approved by your Department/Foculty.		No				
F: Research Methods						
24. Will it be necessary for participants to take part in the study without their knowledge and consent at the time? (e.g., covert observation of people in non-public places).		No				
25. Will the study involve actively deceiving the participants? (For example, will participants be deliberately falsely informed, will information be withheld from them or will they be misled in such a way that they are likely to object or show unease when debriefed about the study).		No				
26. Is pain or more than mild discomfort likely to result from the study? And/or could your research activity cause an accident involving (non-) participants?		No				
27. Will the experiment involve the use of devices that are not 'CE' certified? Only, if 'yes': continue with the following questions:		No				
Was the device built in-house?		No				—
Was it inspected by a safety expert at TU Delft? If yes, please provide a signed device report		No				
If it was not built in-house and not CE-certified, was it inspected by some other, qualified authority in safety and approved? If yes, please provide records of the inspection		No				
28. Will your research involve face-to-face encounters with your participants and if so how will you assess and address Covid considerations?	Yes		We will follow the Dutch government's guidelines.	We will follow the Dutch government's guidelines.		
29. Will your research involve either: a) "big data", combined datasets, new data-gathering or new data-merging techniques which might lead to re-identification of your participants and/or b) artificial intelligence or algorithm training where, for example biased datasets could lead to biased outcomes? 		No				



			If YES please complete the Risk Assessment and Mitigation Plan columns below.			vide nt #
ISSUE	Yes	No	RISK ASSESSMENT – what risks could arise? Please ensure that you list ALL of the actual risks that could potentially arise – do not simply state whether you consider any such risks are important!	MITIGATION PLAN – what mitigating steps will you take? Please ensure that you summarise what actual mitigation measures you will take for each potential risk identified – do not simply state that you will e.g. comply with regulations.	DMP	ICF
30. Will the research involve collecting, processing and/or storing any directly identifiable PII (Personally identifiable Information) including name or email address that will be used for administrative purposes only? (eg: obtaining Informed Consent or disbursing remuneration)	Yes		There are risks of identification in case of data breach, given that I store the name and contact for the Informed Consent form.	The folder containing this data is separate from the research data and encrypted. The paper versions of the informed Consent forms will be collected and stored in a locked storage at the university.	3, 6	
3.1. Will the research involve collecting, processing and/or storing any directly or indirectly destrifiable RNB (Personally Identifiable Research Data) including videos, pictures, IP address, gender, age etc and what other Personal Research Data (including personal or professional views) will you be collecting?	Yes		Personal research data collected in this research consists of: • Audio recordings of co-creation workshops. • Co-creation workshops participants: age groups, gender. • Interviewees: age-bracket, personal views and experiences. There are risks of identification in case of data breach.	The folder containing personal data is separate from the research data and encrypted. Recordings will be destroyed after the transcription. Transcripts will be de-identified by using codes instead of names of participants and other potentially identifiable information. No identifiable personal data will be collected during the interviews as described in point 8.	3, 6, 8, 9, 10	
32. Will this research involve collecting data from the internet, social media and/or publicly available datasets which have been originally contributed by human participants		No				
33. Will your research findings be published in one or more forms in the public domain, as e.g., Masters thesis, journal publication, conference presentation or wider public dissemination?	Yes		The anonymised transcriptions of the co-creation workshops, anonymised interview data will be added to the appendix of the thesis, which is made available in the TU Delft Educational repository. This means its openly available which could cause reidentification risks.	In point 31 above we describe the measures taken to prevent the risk of identification of participants. The consent form also indicates this risk and the mitigation measures.	27, 29	
34. Will your research data be archived for re-use and/or teaching in an open,		No				

Appendix

H: More on Informed Consent and Data Management

NOTE: You can find guidance and templates for preparing your Informed Consent materials) <u>here</u>

Your research involves human participants as Research Subjects if you are recruiting them or actively involving or influencing, manipulating or directing them in any way in your research activities. This means you must seek informed consent and agree/ implement appropriate safeguards regardless of whether you are collecting any PIRD.

Where you are also collecting PIRD, and using Informed Consent as the legal basis for your research, you need to also make sure that your IC materials are clear on any related risks and the mitigating measures you will take – including through responsible data management.

Got a comment on this checklist or the HREC process? You can leave your comments here

IV. Signature/s

Please note that by signing this checklist list as the sole, or Responsible, researcher you are providing approval of the completeness and quality of the submission, as well as confirming alignment between GDPR, Data Management and Informed Consent requirements.

Name of Corresponding Researcher (if different from the Responsible Researcher) (print)

Jelle Schotanus

Signature of Corresponding Researcher:

Editarie

Date: 20-12-2024

Name of Responsible Researcher (print)

Signature (or upload consent by mail) Responsible Researcher:

Date:

V. Completing your HREC application

Please use the following list to check that you have provided all relevant documentation

Required:

- o Always: This completed HREC checklist
- o Always: A data management plan (reviewed, where necessary, by a data-steward)
- Usually: A complete Informed Consent form (including Participant Information) and/or Opening Statement (for online consent)



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