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Rethinking Planning and Spatial Assessment from a Care Perspective

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1 ABSTRACT

The implementation of the New Urban Agenda in most cases focuses on one of the UN Strategic Development Goals (SDG2030), for example either on 5) Gender Equality or 11) Sustainable Cities & Communities. Nonetheless, a considerable body of knowledge exists [see references] that brings together gender and sustainability, and explains how strategies to achieve Gender Equality and Urban resilience can enhance each other. The empirical studies underlaying these insights demonstrate that implementation requires a radical transformation of planning processes and methodologies towards collaborative planning cultures and residents' involvement. While direct dialogue needs to have a structural place in planning, in practice, it is difficult to include residents in all steps of the planning process, particularly preparing structural development plans on a larger scale. Moreover, there are parts of planning processes that can, and should, be done by professionals, such as preparatory analyses and making synergies of local data and conditions.

In this contribution, we argue that this needs to be done with an understanding of gender-inequalities because gender-blindness will lead to reproducing gender stereotypes, and re-inforce the existing inequalities in its wake. However, gender competences are often not part of planning and urbanism curricula, and few planners have the necessary knowledge and skills to transfer knowledge from genderstudies into planning decisions. In this paper we argue for an approach that puts ‚care' in the heart of planning and studies its implications at different scale-levels. Our approach is based on the Austrian pilot project "Smart through Gender+" and builds on two decades of research and exchange amongst European Gender Planning Experts.

Keywords: Gender Mainstreaming, Care, Diversity, Planning Instruments, Smart Cities

2 INTRODUCTION

Planners often claim to be highly democratic and "plan for everyone" without exclusion. However, as long as not everyone has the same starting point in society, not making a diffence means certain groups or activities remain invisible with a high risk of being excluded. While collecting gender-segregated data for this purpose is a necessity, it also holds the risk of collecting findings based on given assumptions on gender roles- and develop strategies fixed on gender-typical roles. One of the consequences of stereotyping is, that it implicitly reproduces the established norms (see Damyanovic 2007) and puts different perspectives on how space works out of (the formal planning) order. A body of knowledge existst that brings Gender Equality and Urban resilience together, and explains how both strategies can enhance each other. The empirical studies underlaying these arguments, demonstrate that implementation requires a radical transformation of planning processes and methodologies; towards collaborative planning cultures and residents' involvement. However, in practice, it is difficult to include residents in all steps of the planning process, particularly when preparing spatial development plans on a larger (regional) scale. Moreover, there are parts of planning processes that can, and should, be done by professionals, such as preparatory analyses and making synergies of local data and conditions.

In our experience, planning and urban analyses needs to be done with an understanding of gender-inequalities because gender-blindness will lead to reproducing gender stereotypes, and re-inforce the existing inequalities in its wake. However, gender competences are often not part of planning and urbanism curricula, and few planners have the necessary knowledge and skills to transfer knowledge from genderstudies into planning decisions. For this reason, we as collaborating geographer and engineer, are developing practical tools that can support gender-aware planning.

The tool we discuss here, is a matrix from the users' and residents' perspective, integrating these principles in a differentiated urban analysis and spatial assessment. The matrix differentiates from the habitual definitions of "target" or "user" groups, in that it does not put the personal characteristics (such as age or gender) on the foreground, but looks at the determining conditions for the use of (semi)public urban space.

Performing Urban Analyses based on the Gender Mainstreaming principles are a promising approach to avoid "stereotyping" or "victimising" certain user groups and advance towards equal rights to the city.

In this paper we explain the background of this approach, and how it can help a dynamic urban assessment, rather than static, role-confirming diagnosis. We depart from the main principles identified for Gender Mainstreaming as an officiel EU-strategie in line with SDG-5:

- Facilitating the reconciliation of home and job, to ensure economic independance
- The recognition of the diversity amongst social/user groups and
- Bodily integrity, the right to decide about one's own body andmove freely in public space.

(EIGE 2021 – https://eige.europa.eu/gendermainstreaming/concepts-and-definitions).

We illustrate a dynamic assessment by the example of the case study of the city of Linz (AT) from the research project SmartThrougGender+. The project Smart Throug Gender+ involved developing and testing a set of analytical tools and planning instruments for inclusive urban planning, adressing diverse needs of residents in the city of Linz. The task of the two authors in the research project was, among others, the articulation of gender equality goals, their translation in planning guidelines for implementation, as well as the definition of gender+ groups for a differentiated recording and description of urban qualities and deficits.

We conclude the paper by summarizing the benefits and limitations of this approach, and give some recommendations on how it could be implemented elsewhere.

3 FRAMING – CONTEXT

3.1 Fresh view on spatial conditions: From feminist planning targets to core topics

Virtually all societal orders are informed to a large extent by a (bipolar, heterosexual) gender divide. However, the roles assigned to men and women and the relations between them vary through time and place. In gender studies the term "gender" is used to refer to social and cultural constructions of masculinities and femininities. Gender differences go beyond variations that may exist between individual men and women, and focus on systemic aspects such as the gender paygap which lead not only to "injustices" but also to economic loss (https://www.europarl.europa.eu/legislative-train/theme-deeper-and-fairer-internal-market-with-a-strengthened-industrial-base-labour/file-gender-pay-gap-action-plan). In this context Garber and Turner (1992) remind that "gender" in urban studies explicitly excludes reference to biological differences to focus on cultural differences. A ‚gender-differentiated planning approach" is about the societal aspects of activities or places perceived as "typically male and female for example: sport-facilities; production or manufacturing locations, playgrounds during the day or parks during the night. Gender Mainstreaming is concerned with this gender dynamic at policy level and legally binding within the European Union (eige.europa.eu/gender-mainstreaming). Gender Mainstreaming is a top-down strategy to embed equality policies in all sectors, including planning processes. Pursuant to Article 2, 3, and 13 of the Treaty of Amsterdam, all EU member states have adopted formal equal opportunity policies and anti-discrimination legislation.

Applying Gender Mainstreaming in Planning Processes thus involves looking at gendered differences in the use as well as in the production of space. In order to do so, the first impulse often is to ‚count male and female bodies' and set equality goals on this basis. In the production of space, this could for example mean an equal participation of both sexes in the decisionmaking institutes and positions. For the use of space, this could imply adapting bus-routes or time-tables to the needs of under-represented groups, or making public transport, parks and squares more "safe" for groups expressing a feeling of vulnerability or fear of going out (Knoll and Schwaninger, 2020). While these responses in themselves are locally useful, the trouble with this approach is that it often relies on pre-set images of activities and needs of female and male population groups.

Spatial planning decisions and the subsequent urban design proposals contain implicit gender-stereotyping and behavioural assumptions (Jarvis et al., 2012; Fainstein and Servon, 2005; Greed, 2005; etc.). The planning models for the CIAM functional city included elaborate guidelines for the domestic sphere, labelled this "dwelling" and departed on the model of the (male) breadwinner household unit with the other (female) partner performing the household (Tummers & Zibell, 2012). Since the womens‘ movement of the 1970s this

concept based on unwaged ‚domestic labour' was subject to criticism, and household-units have beed diversifying. Nonetheless, these underlying assumptions are still reproduced in planning documents such as texts, maps, and images of structure visions, master plans, and technical briefings, which contain language and symbols with implicit models of gender roles. For example, a structural vision to enhance the competitiveness of a region may contain strategies for economic development without any reference made to unwaged (household) activities as part of the economic model. Planning documents inform planning decisions on, for example, density, mixed use, or road profiling, which in turn have an impact on the level of services that can be maintained and on user qualities such as safety and accessibility. Similarly the design for cyclist networks is based on a single speed assumption, usually 20 km/h, which can be very hard to achieve when accompanied by young children or elderly people. The effect of such decisions will be different for distinctive user groups (Sanchez de Madariaga and Roberts, 2014; Damyanovic et al., 2013).

This has led feminist scholars to criticise planning practice, as they have other applied sciences, for taking the "white middle-class male" as a normative standard (Wankiewicz & Tummers, 2020). Ignoring such differences and operating on out-dated social models leads to planning decisions that are not future-proof and do not respond adequately to societal trends and challenges. Transport Planning is relatively advanced in understanding for example that mobility is not only steered by displacements for waged work (commuting) or recreation (funshopping) but primarily by the care-responsabilities that residents have, or the care that they need (Knoll and Schwaniger, 2020). Not offering public transport that enables the socalled trip-chaining (for delivering children at school on the way to work, and picking up shopping during tthe return trip) obliges households to use a car, with as consequence increased presssure on the environment, the quality of urban space, and the household budget.

Many planning authorities acknowledge this by issuing guidelines for "special needs" groups, such as people with disabilities or child-friendly school routes. The SDG2030 Target 11.7 aims for example, by 2030 provide universal access to safe, inclusive and accessible, green and public spaces "in particular for women and children, older persons and persons with disabilities" (https://sdgs.un.org/goals/goal11). While seeing "women" as a "special needs group" can be strategically necessary, it also has some long-term disadvantages. In the first place, special budgets are temporary and in most cases do not lead to structural embedding or imrpovement. Second, the plans and documents of local authorities or planning departments issue for Gender Mainstreaming in planning mostly talk about the "needs and interests of women", implicitly suggesting that women have something to "catch up with" without specifying which economic or decision-making injustice that is being addressed. Without such critical perspective, consultancies with local women are likely result in a strategy to improve access for people with prams and accompanied by small children, or improving the lightning in certain streets. The share (vulnerable) groups of men may have in the accessibility of public space thus remains out of sight. Most importantly: ‚care' thus remains a secondary category of activities, instead of being visible and prioritised in general planning activities.

3.2 Nurture vs. nature – avoiding stereotyps and sex counting

An important condition to implement Gender Mainstreaming is the availability of gender-segregated statistics. While gender-segregated data are indispensable, to distinguish between the condition of (for example) men and women, the difficulty with them is that it it makes

(1) homogeneous categories of (all) men and (all) women – despite crossvariables such as income or age; and

(2) appears to connect women structurally with ‚disadvantages' and implicitly building equality strategies towards a "catching up with the men" in other words the male-dominated forms of economy.

One example illustrates this dilemma: As can be seen in time-pattern statistics, men participate less in domestic tasks, such as child-care, cleaning, and washing (ec.europa.eu/eurostat/statistics-explained/index.php?title=Labour_market_and_household_statistics). This however does not mean that "men" per se are less "caring" as can be observed in societies and generations where men get the oppportunity to "take care". Moreover, the growing amount of single-person households, especially in the western world and amongst senior citizens, implies that many more people have to combine waged work and care-tasks for themselves, in one -male or female- body. Consequently, if planners continue to perceive women (only) as the care-takers, it ignores other demographic developments that lead to a widening of the ‚interest group' (or target group in marketing terms) of gender-aware planning. It also ignores, that an

increasing number of households with women interested in having a professional career "outsource" the care-work to nannies, cleaners, canteens and meal-caterers, laundry and other services. In spatial terms this outsourcing has implications in global migration, bringing in its wake different housing needs, in the best case extending the nuclear fmily home with appartments for staff, comparable to the "chambres de bonnes" in early modern Paris, so far only affordable for upper salary ranges (Sassen, 2009). The migration of domestic staff virtually always involving living in two locations for the personell involved, and while this is increasingly an issue for seasonal agricultural labourers, for domestic workers so far it is hardly cosidered. Here "gender" intersects with "class" and often "(ethnic) origin".

In order to advance Gender equality in and through planning, it is needed to address urban design, quality of place, and the planning process itself. Following the earlier mentioned principles of Gender Mainstreaming, the state of the art in gender-aware planning now presents considerable knowledge available for local implemetation, such as:

- Facilitating the reconciliation of home and job, which means to rethink the functional segregation of the CIAM urban model. The concept of the "city of short distances" also called "walkable city" or "15-minute city" has become a wide-spread reference. Where (low) densities do not allow the implementation of this concept, compensation needs to be found amongst others in transport planning and the re-organisation of services for example in space or time-sharing.

- The recognition of the diversity amongst social/user groups has lead to important innovations of participation methods, aiming for empowerment rather than for consultation;

- Bodily integrity involves the recognition of subjective experiences as imposing restrictions for moving freely in public space, such as fear of harrasment of uncomfort by sexist advertisement. Design criteria for "safe" parks and streets are available.

Based on this body of knowledge, particularly the analysis of Gender Planning handbooks, we have identified key dimensions which strongly influence the temporal and spatial flexibilty or rigidity of daily routines and the autonomy or dependency of persons/users from urban qualities and facilities. The next section zooms into these aspects and the experimental implementation in the case for Linz.

4 GENDER IN PLANNING – OUR APPROACH

4.1 Care-Work in focus: Rethinking user groups to spatial-temporal use patterns

As planners, we are committed to the goals and targets of the SDGs, in the first place target 5.4:

"recognize and value unpaid care work and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate".

One of the consequences to be considered within planning processes is the diversity and complexity of daily use patterns and need for care-work related infrastructures and spatial qualities. all EU countries surveys and statistics show strong inequalities in the distribution of these taks between women and men (e.g. Eurofounds 2012): since decades, women care for children, household and reproductive work. This generates another inequality in the share of part-time working arrangements, e.g. in Austria 47,7 % women, 10,7 % men in 2019 (Statistik Austria 2020). Another consequence of this gender bias is a big gap in income between women and men and a dramatic low income pension age (women have 50% less than men in 2020 – (Trapez 2020). This income gap has an impact upon, amongst others, achieving the targets of SDG 11.1 to "ensure access for all to adequate, safe and affordable housing and basic services" because less household income implies less tax-income thus reducing on two fronts the budgets for housing and basic infrastructure. The same can be said for 11.2 to 'provide access to safe, affordable, accessible and sustainable transport systems'.

However for analysing spatial qualities and the accessibility and quality of urban infrastructures it is not of primary importance if the accompanying person who brings a child to Kindergarden/creche, cooks meals and keeps the houshold has a male or female or hybrid body. We propose a tool for urban assessment that aims to integrate the users' & residents' perspective and at the same time avoiding stereotyping. The matrix differentiates from the habitual definitions of "target" or '"user" groups, in that it does not put the persona characteristics on the foreground, but looks at the determining conditions for the use of (semi-)public urban

space. Gender studies has shown that this is not only steered by displacements for waged work (commuting) or recreation (funshopping) but primarily by the care-responsabilities that residents have, or the care that they need. Key condition which influence stongly the temporal and spatial flexibilty and the autonomy of persons to access urban ressources are:

- Care-responsibility: (single) parents, partners or daughters caring for old age care dependant people are higly dependant on location, accessibility and opening hours of care facilities, supportive infrastructures, shopping and leisure offers as well as the quality and reliability of mobility networks

- Care dependeny: babies, children and teenagers up to 15, adults with disabilities need other adults who care for them, need certain spatial qualities and a variety of everyday life infrastructures (playgrounds, meeting points, bike lanes, benches and

- Occupation /Employment: daily routines and spatial needs with fulltime, part time jobs or minor and informal jobs, as well as between office- industry- or service related occupations are very different.

- Physical presence/well-being: bodily or mental Mobility restrictions (visually & or mobility impaired persons): freedome to move within the city, accessibilty of infrastructures of children, young adults, families and old aged people need barrer-free public, semi-priate an private spaces. We include in this category also socially learned spatial use patterns: e.g. domination of playgrounds by male teenagers and avoiding strategies of girls at night-time ("imaginated" places of fear and danger).

Based on these relevant conditions we developed matrix to illustrate a diversity of spatial use patterns and daily routines by adding the dimension of income as financial ressourcces. We argue that deficits in urban infrastructures hit low income groups stronger, while higher income groups may compensate by buying a service privately (figure 1).

CARE-PROFILES		low income	medium income	high income
autonomous				
in need for support		eg peole with visual / mobility disabilities, children & teens, senior citizens		
dependent on nursing/care		eg very old people, wheelchair users, children and teens		
caring for children	*(< 12 years)*			
caring for elderly (>75 years)				
standard activity schedule		eg. 5 - 8 office cleaner	eg '9-5' office 16-22 production	zB CEO's; top-athlete
irregular actitvity pattern		zB Busfahrer; communitycentre volunteer	eg self employed consultant; midwife; pensioner	eg. Pensioner, TV-Star
Legend of profiles:		less problematic		unproblematic
		highly problematic/urgent		mobilisierbar

Fig. 1: Types of daily routines and spatio temporal use patterns from a care perspective. Source: Working paper Tussen Ruimte/planwind.

With the matrix, we identify groups of users in the city whose daily routines are very rigid and who depend strongly on the offer, the quality and the reliability of public and private infrastructures and on the quality of public (and private) spaces. These legend colours are indicator for the distance to "Right to the City" and show the need for/urgency of planning-action/interventions & for co-design. As long as the "domestic labour" statistics remain un-equal, it can be expected that many women find themselves in the "red" categories. From a gender mainstreaming point of view, these than should become planning priorities.

4.2 Identifying spatial needs for daily routines to assess spatial qualities and deficits from a care perspective

For the next step to operationalizing these goals and targets for a city and quarter, it is necessary to define basic services and to assess spatial structures from the different perspectives of users. Based on the above described typologie of user profiles of the urban infrastructure, we strive to identify specific infastructures of

everyday, required spatial qualities and offers. Only then, a digitally supported assessement of qualitys or deficits of spatial structures is possible. As relevant destinations for daily routines we identfy six groups:

(1) housing, residence

(2) services of proximity (e. g. shops, pharmacies and financial personal services),

(3) places to eat during the day,

(4) care facilities (children and adults)

(5) workplace for paid or voluntary jobs, including secondary school, training or eduation

(6) leisure: places of recreation, relaxation, culture.

The needs and preferences for different services and destinations generate trip chains of the users. Public transport and public space (sidewalks, streets and bikelanes, squares) are the linking network between the destinations and create a trip chain.

Based on this conceptualization of spatial needs, the analyses of spatial structures, qualities and deficits can start. The research team in the project SmartThroughGender+ used digitally available data for city-wide mapping, and in addition analogue mapping, interviews and walks for the spatial analysis at district/area level.

For more information on digital tool development and data see the paper of Gebetsroither, Bürbaumer & Fink (Real Corp 2020) and two manuals: one for the city-wide digital tool https://cities.ait.ac.at/projects/smtg/Gesamtstadtebene/SMTG+_Explorer.html and for the tools at district/quarter level https://cities.ait.ac.at/projects/smtg/Stadtteilebene/SmartThroughGender.html

In the next step, we connect the first matrix to the care-profiles, to elaborate a set of urban space-related criteria and indicators (figure 2). The income situation largely determines how autonomous or restricted people are in shaping their everyday lives, or how dependent they are on good open space quality, public transport quality and everyday infrastructures (local supply, playgrounds and sports facilities, childcare facilities, etc.). Evidently, people with higher financial resources have more opportunities to cater for their needs.

daily infrastructure	housing, residence	services of proximity	meals	care facilities (professional)	workplace	leisure	
N/A = non applicable	(Bound)	in/out of neighbourhood		in neighbourhood	in/out of neighbourhood	inside neighbourhood	outside neighbourhood
autonomous	X	in & out	job-related (Mensa, Canteen)	NA	in & out	green, sports, hobby	Culture
in need for support	XX	NA	mealservice at home/in neighbourhood	day-care	inside	playground, green (dogs)	specialised training, wellness
dependent on nursing/care	XXX	NA	mealservice at home/in care-accommodation	meal, housecleaning	NA	social/contact	hospital
caring for children (< 12 years)	XXX	inside neighbourhood	child-care, clubs	daycare, clubs	in & out	playground, media,- and hobby offers	sports, cinema, etc
caring for elderly (>75 years)	XX	inside neighbourhood	daycare; accommodation	daycare (care-accomm)	in & out	social/contact	excursions, wellness
standard activity schedule	location	fixed routes	regular routines	regular times	fixed time-space patterns	regular/team possible	
irregular actitvity pattern	equipment	variable routes	variable needs	variable time schedule	variable time-space patterns	individual schedule	
Basic infrastructure: (examples)	laundry privacy untilities	Grocery stores General Practitioner Open Market	fast-food take-away meal- grocerydelivery	Kindergarten Daycentre communitycentre Clubs	employer co-working space schools	Green areas playground Library/mediacentre Sports	

Fig. 2: Who needs what and where? Linking user profiles/use patterns to spatial structures (infrastructures of everyday life) in an urban neighbourhood. Source: Working paper Tussen Ruimte/planwind.

5 OPERATIONALIZATION CARE IN PLANNING: THE LINZ PILOT

5.1 Mapping based on care-work

We illustrate a care-based assessment by the example of the case study of the city of Linz (AT) from the research project SmartThroughGender+. The SMTG+ tool set can identify qualities and deficits with regard to criteria of a Gender+-responsive urban planning and identify the need for action.

At the overall city level, the assessment is carried out quantitatively in the form of a "gender score" (see fig 3). The gender-score for the city is based on demographic data (to establish potential demand); points of interest (here defined as everyday infrastructure) and the quality of green areas.
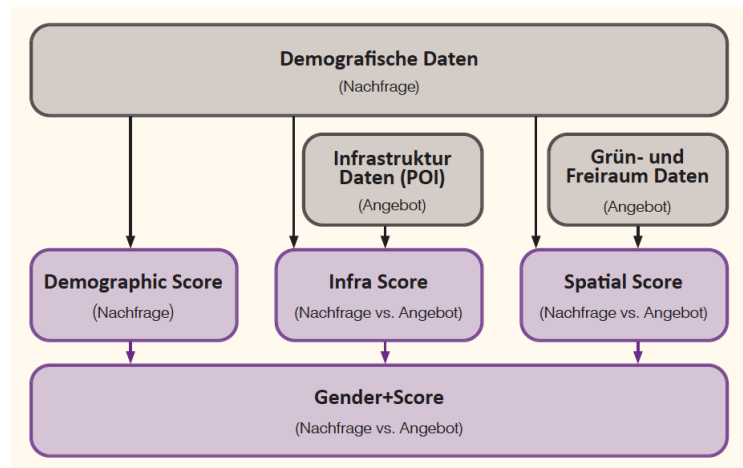

Fig. 3: Gender score for the city. Source: Autorinnen- und Autorenkollektiv SMTG+ (2021), AIT.

This shows where gender inequalities are located. The in-depth analyses at neighbourhood level make it possible to identify deeper inequality dynamics.

At the city level, the evaluation and identification of the need for action can be done by interpreting the results of the analysis with regard to the Gender+ criteria (figure 4).
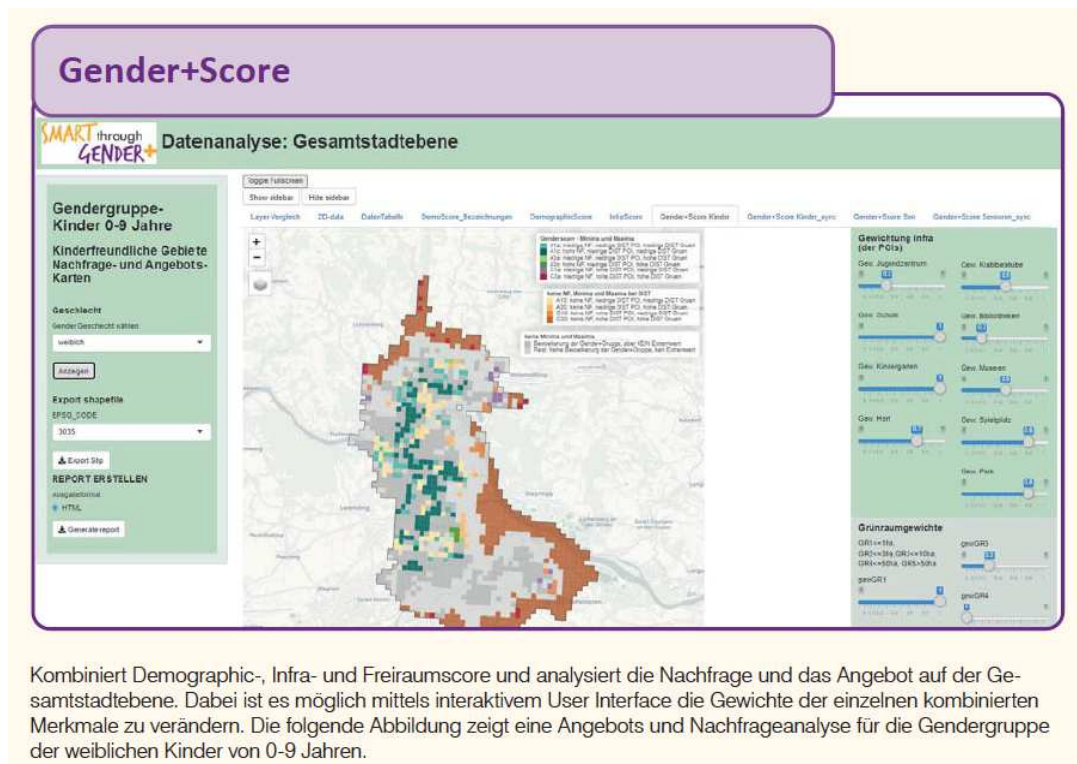

Fig. 4: The gender score for young girls in the city of Linz. Source: Autorinnen- und Autorenkollektiv SMTG+ (2021), AIT.

A look at common planning documents (such as urban development concepts, master plans or sectoral sectoral concepts), shows whether there is room for action such in areas for example upcoming actualisation of the zoning plan, empty buildings available for re-use or land. Ideally, the next step would be focussing on these areas. For the pilot, an urban district (Bulgariviertel) was pre-defined and analysed with a combination of qualitative and quantitative methods, both from social science and landscape/geographical mapping. The pilot in Linz mapped groups with ‚care responsibilities' through demographic statistics, and focussed on the everyday infrastructure and the accessibility and quality of green spaces (fig 5).

Ultimately, a gender-score on district-level could provide concrete planning information (fig 6).
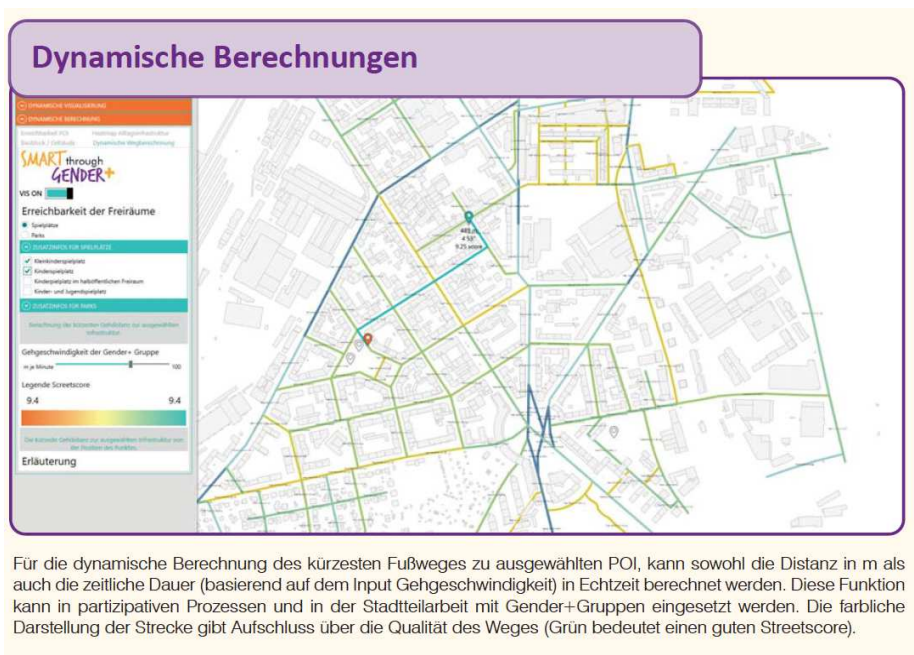
Fig. 5: The digital tools enables differentiating distances according to the speed of walking. Source: Autorinnen- und Autorenkollektiv SMTG+ (2021), AIT.

Fig. 6: visualisation of final scores to identify need ofr planning intervention. Source: planwind April 2020.

5.2 Reality check: experts' and residents views

In Bulgariviertel, the "external" view of experts, such as planners and professionals in care-sectors, was held against the "inside view" from diverse groups of residents. Between september 2019 and March 2020, professionals from care-institutions such as Kindergartens and senior-accomodation, as wel as from migrant organisations and Blinden- und Sehbehindertenverband OÖ –Verkehrsreferat were interviewed. The findings were compared with the observations from residents. How important this type of verification is, can be illustrated by a simple example: although the genderscore on the map of the central square was positive, amongst others due to the presence of public toilets, the wheel-chair dependent users indicated that the toilets where difficult to find, hard to access and often locked. Both perspectives are necessary and complementary for a well-founded spatial analysis. Gender+-differentiated statistics, different building structures, density and equipment of road networks, location and density of everyday infrastructures and green and open spaces as well as their different qualities are analysed from the outside. Digital methods can partially support these analyses in order to calculate key figures, distances or catchment areas. It is only through surveys and inspections with residents and experts – with the view from the inside – that group-specific usage preferences, the perception of building and open space structures and their changes can be recorded and made visible. The view from the inside provides information on group-specific (subjectively) perceived spatial structures, quality of services and deficits, as well as on which strategies result from this for everyday

life. These include answers to planning-relevant questions such as: Where do groups move to? What is used as an alternative in the case of missing offers or lacking qualities (of footpaths and cycle paths, green and open spaces or everyday infrastructures)? What detours are accepted?

Particularly the analysis of "Physical Integrity" shows the different effects of sources of risk on the physical health and well-being of the residents. The view from the inside quickly provides specific information on danger spots or unsafe areas in the public open spaces from the residents' point of view. The view from the outside captures "objective" features that influence safety (e.g. lack of lighting, sightlines and features that obstruct vision such as furniture or parking in blind areas). A combination of a view from the outside and a view from the inside is absolutely necessary, as objective safety and subjective perception of safety must be analysed together. When identifying danger spots, unpopular places to avoid or areas of fear, the view from the inside provides more accurate results than the view from the outside. For a substantial analysis from the outside perspective, the data for urban spaces is usually not available in detail and not prepared in a gender-differentiated way. Statistics of crime-incidence, or accident frequency for example are organised in different categories. By looking from the inside, it is easier to capture group-specific differences and subjective perceptions.

6 DISCUSSION: OPERATIONALIZATION CARE IN PLANNING FOR GENDER JUSTICE

6.1 Towards operationalizing CARE in planning for gender justice: Potential

As long as the "domestic labour" statistics remain un-equal, it can be expected that many women find themselves in the "red" categories of figure 1, categories that should become planning priorities. By proposing to focus on the every-day needs rising out of gender roles, rather than on the gender-identity of the person involved we attempt both to put the care-economy on the planning agenda, and to discard with fixed gender roles. Doing so acknowledges the differences that exist amongst women, and men, for example between high-income career-professionals and low-income service-providers, or between well-off healthy grand-mothers and chronically ill young mothers. This is just one step in operationalising the theoretical notion of "intersectionality" (Lacey et all, 2013) thus placing "gender-equality" in a wider context of urban justice. It also acknowledges that any person or household can move from one category to another, since everyone is vulnerable for an unexpected crisis (such as loss of health or income) but also has potential to improve the conditions and quality of life.

The question whether "women" are natural care-takers and "men" are somewhere out conquering or hunting has more repercussions. It raises the question in how far a male-dominant profession has been "gender blind" because of the lack of representation of "female"/reproductive interests? Since (thus far) the initiatives for GM mostly come from female professionals, the absence of the care economy in planning was (and is) often related to the absence of female staffing in institutionalised planning entities (Greed, 2007). In some instances Gender Mainstreaming is even mistaken for human resource management. The composition of planning teams, as well as equal representation on all levels of decision-making, is therefore also a gender issue (Ortiz Escalante and Gutiérrez Valdivia, 2015). However, we (the authors) are not convinced that men are incapable of being agents of change towards gender equality. Planning for SDG5 is a competence that can be acquiered in much the same way as professionals are learning to plan for SDG11.

After the stage of data collection, important decisions have to be made for the further development of the tool. This concerns amongst other the question whether the tool includes a weighing of critieria, or leaves it to planners to validate the different aspects of gender-mapping that contribute to the general score. The latter option may produce a better match with local conditions, and advance a deeper understanding if discussed in an interdisciplinary team, but could also lead to untransparant results. Alternatively, the tool pre-sets values for the weight of specific factors in the final score, which is less adaptable to local conditions and does not enhance the understanding of gender-dynamic per se.

6.2 Towards operationalizing CARE in planning for gender justice: Limitations

Putting care at the heart of a planning method is ameans to get around fixed and polarised gender roles, but does not imply that the gender-inequalities are ignored. On the contrary, gender studies highlight time and again the vicious circle that the inequal division of waged work and unwaged domestic care means for many women. As long as the key-determinants of urban time-space patterns are based on gender-stereotypes, and

not based on facts and figures, the systemic inequalities remain invisible. However, there are hardly any statistical records with accurate representation of these spatial use groups. For example- children according to age groups can be recorded as a statistical category, but not adults in need of care who are cared for by relatives, by mobile care teams or by 24-hour one-person companies (personal care-givers). Persons in employment with care responsibilities for minor children can be identified, eg as ‚single parent' but there is no information on the extent and rhythm of employment – e. g. marginally employed persons, persons working part-time. Consequences of repairing such gaps in data gathering are to be established, and frictions with for example privacy-issues can be expected.

At this stage, it means that urban analyses can not rely only on digital data and needs to be complemented by qualitative assessment methods such as field observation and focusgroups. The risk of gender bias is also present in such methods, for example when choosing the time and location for fieldwork, or who is considered an ‚expert' and invited to participate in a focus group.

A further methodological pitfall is to limit gender-analyses to the local qualities in neighbourhood and building block. The accessibility of green spaces, distance to bus-stops and cross-over facilities for pedestrians to schools and shops are part of urban networks of green spaces, transport– mobility, accomodations and provision of care etc.. The smarter through Gender+ digital assessment at city level would be capable of demonstrating different qualitites and deficits between neighbourhoods, based on data for daily infrastructure if these were available at the cities' (or regions) scale. Showing such differences, and comparing them to demographic trends and the availability of housing types can have consequentces for planning processes in that priorities can be shifted to equipping neighbourhoods with inadequate care-infrastructures.

7 CONCLUSIONS

This paper reports on our search for planning instruments that can unite SDG5 (gender equality) with SDG11 (sustainable cities). Democratic and sustainable cities need active and informed citizens, who are not only concerned with personal career and well-being but also care for others and the environment, as public authorities can not provide everything for everyone at all times. Being able to take care of one-self, other people and the environment requires access to urban resources such as decent housing, education and health care. Gender Mainstreaming breaks with the idea that societal roles such as "care" and "wage-earning" are a natural given for women or for men. Gender Mainstreaming in planning aims to overcome the idea that the biological sex defines spatial use patterns. A key issue is the reconciliation of waged work and care-work. If a person has to fulfill care responsibilities for children, or adults, and how intense these care responsibilities are, determines the dependency on urban infrastructures and spatial qualities. We departed from this premises to design a method for urban analyses that integrates care-work, and with it gender in-equalities, in the planning agenda. Concrete mapping is needed to understand in how far these care tasks and the daily routines are supported or hindered by lack of facilities or unsafe streets. Moreover, mapping can make visible Gender inequality through spatial indicators: for example about the amount of m² or EUR dedicated to spaces for daily routines or activities related to the re-defined user groups. The pilot revealed specific data-gaps that are needed in order to further develop such digital planing tools.

While facilitiating care-tasks is an urgent planning-action, is it not the only planning aspect that contributes to "gender-equal" access to urban resources. Besides the "functional accessibility" of public space, the symbolic accessibility is highly gendered. Illustrative is the idea that women are not safe at night (especially in parks or abandoned areas) while the incidence of violence against women is far more higher inside the home or private places. On the other hand, men are much at risk in public space in statistics of violence or accidents. The appropriation of public space in terms of what activities and presence are considered appropriate is gendered to a large extent. Studies of youth on public spaces for example show segragated activities, and different behaviours for female or male peer-groups. These differences ar not a "natural consequence" of being a girl or a boy, but the result of expectations and role-models presented in all stages of life. Not all girls prefer to sit and chat on the side-line (otherwise the Fridays For Futures movement would not have come into being), and not all boys prefer to be loud and competitive.

User groups are both passive "object" of analysis and active subject of collaborative planning and design. Both in urban analyses and in participatory planning dialogues, stereotyped gender-roles need to be addressed explicitly. Applying use-profiles that depart from the dependency on care, as well as the care-

responsibilities of people, has the potential to embed "care" for others and for the environment structurally in the planning agenda and thus create urban conditions to facilitate active citizenship for all. Replacing stereotypes with concrete data on the activities connected to the care-economy, thus contributes to both SDG-5 and SCG-11 giving both a more durable perspective.

8 ACKNOWLEDGEMENTS

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