

ZH Final Dissertation

by Zeina Hawa

Submission date: 02-Sep-2019 12:21PM (UTC+0100)

Submission ID: 110446576

File name: 63859_Zeina_Hawa_ZH_Final_Dissertation_1064857_216719788.pdf (14.68M)

Word count: 21278

Character count: 130423



UNIVERSITY COLLEGE LONDON
FACULTY OF THE BUILT ENVIRONMENT
BARTLETT SCHOOL OF PLANNING

Co-designing Bicycle Networks An Exploration of Public Participation in Beirut

Zeina Hawa MEng



Being a dissertation submitted to the faculty of The Built Environment as part of the requirements for the award of the MSc Transport and City Planning at University College London:

I declare that this dissertation is entirely my own work and that ideas, data and images, as well as direct quotations, drawn from elsewhere are identified and referenced.

Zeina Hawa
September 2, 2019

Word count: 10966
Appendices: 4367

Acknowledgements

A special thanks to my supervisor Astrid for her insightful guidance, reality checks, and inspiration to become a better researcher and appreciate the dreadful literature review.

I would like to thank my tutor and course director Robin Hickman, without whose encouragement I wouldn't be at UCL. Despite my grumbling, he was right about the necessity of writing academic essays - lots of them.

Thanks to the members of The Chain Effect team who inspire me to keep doing more in this wonderful city.

Thanks to all those who were willing and eager to speak to me throughout the process, and those who supported in other ways: to Hussein from Riwaq for hosting us in his cafe, to the workshop participants for their eagerness and commitment, to the interviewees for their time and insight, to Tom Cohen for his stimulating questions, to Brian Deegan for his inspiring work, to Guilherme and Gonzalo who provided support when I most needed it, and last but not least to Alex, Farah, Naoum, Nour and Elena for their valuable eyes, brains and hearts.

Finally, I thank the Said Foundation for the opportunity to pursue my interests and return to a city and institution that have done so much to widen my scope of thought.

Contents

Acknowledgements.....	2
List of Figures and Tables	4
List of Abbreviations	5
Abstract	6
1. Introduction	7
1.1 Research Aims.....	8
1.2 Outline.....	9
2. Selected Literature Review	10
2.1 Public Participation in Planning.....	10
2.2 Collaborative Bicycle Network Planning	16
2.3 Beirut's Transport Planning and Participation Context.....	18
3. Methods.....	22
3.1 Participatory Workshop.....	22
3.2 Semi-Structured Interviews with Practitioners, Decision-makers, and Academics	25
3.3 Desk Based and Other Research	25
3.4 Ethics.....	26
4. Results and Discussion	27
4.1 Current planning and PP processes and their barriers	27
4.2 How Should PP Take Place?.....	32
4.3 The Workshop as a participatory process and contributions to planning.....	37
5. Conclusion	48
Bibliography.....	50
Appendix A: Bicycle Network Planning in Selected Cities	59
Appendix B: Workshop Framing as a Participatory Exercise.....	62
Appendix C: Workshop Contents and flow	64
Appendix D: Pre-Workshop Questionnaire	67
Appendix E: Post-Workshop Questionnaire.....	69
Appendix F: Interview Template.....	70
Appendix G: Interviewees, Affiliations and Relevance	71
Risk Assessment.....	73
Blank Consent Form (Interviews version)	78
Blank Information Sheet (Practitioners).....	80

List of Figures and Tables

FIGURE 1: EXISTING BICYCLE INFRASTRUCTURE AND ANNOUNCING NEW LANES. (SOURCE: AUTHOR)..	7
FIGURE 2: ARNSTEIN'S LADDER OF PARTICIPATION. (SOURCE: ARNSTEIN, 1969).....	11
FIGURE 3:IAP2 PUBLIC PARTICIPATION SPECTRUM. (SOURCE: IAP2, 2018).....	12
FIGURE 4: KEY DIMENSIONS DETERMINING HOW PARTICIPATION IS FRAMED AND PRACTICED	13
FIGURE 5: TRANSPORT GOVERNANCE IN BEIRUT. (SOURCE: AUTHOR)	19
FIGURE 6: PLANS FOR FIRST SEGREGATED BIKE LANE IN A CIRCULAR LOOP. (SOURCE: BEIRUT MUNICIPALITY)	20
FIGURE 7: TIMELINE OF BICYCLE PROJECTS IN BEIRUT.....	21
FIGURE 8: WOKSHOP PARTICIPANT PROFILES.....	23
FIGURE 9: LEGEND OF FUTURE DIAGRAMS.....	27
FIGURE 10: PERSPECTIVES OF PARTICIPANTS ON CURRENT TRANSPORT PLANNING.....	28
FIGURE 11: ATTITUDES TOWARDS CURRENT BICYCLE PROJECTS	28
FIGURE 12: BARRIERS TO BETTER TRANSPOT PLANNING	29
FIGURE 13: PP BARRIERS IN BEIRUT	30
FIGURE 14: PERSPECTIVES ON OBJECTIVES AND IDEALS OF A BICYCLE NETWORK: PARTICIPANTS & INTERVIEWEES.....	36
FIGURE 15: PERSPECTIVES ON AN IDEAL BICYCLE NETWORK	36
FIGURE 16: WORKSHOP MAPPING EXERCISE.....	37
FIGURE 17: PARTICIPANTS' PERCEPTIONS OF THE WORKSHOP	38
FIGURE 18: PARTICIPANTS' EXPECTATIONS OF THE WORKSHOP.....	39
Figure 19: Mapped Areas versus Living Areas	40
FIGURE 20: PARTICIPANTS' PERCEPTIONS OF THE MAPPING PROCESS	41
FIGURE 21: PARTICIPANTS' PERSPECTIVES ON STAKHOLDERS.....	43
FIGURE 22: THE PRELIMINARY WORKSHOP NETWORK (TOP) AND THE PROPOSED STRATEGIC NETWORK IN THE PDD (BOTTOM).	44
FIGURE 23: VALUE OF WORKSHOP TO PARTICIPANTS AS USERS	46
FIGURE 24: PERCEPTIONS FROM PARTICIPANTS ON TAKING WORKSHOPS FURTHER.....	47
TABLE 1: PARTICIPANTS' VIEWS ON IDEAL PARTICIPATION IN BICYCLE PLANNING.....	32

List of Abbreviations

PP	Public Participation
CP	Citizen Participation
TP	Transport Planning
MoE	Ministry of Environment
CDR	Council for Development and Reconstruction
PDD	“Plan des Deplacements Doux” (Soft Mobility Plan)
UTDP	Urban Transport Development Project
UNDP	United Nations Development Program
EIA	Environmental Impact Assessment
OEA	Order of Engineers and Architects
TfL	Transport for London
WB	The World Bank

Abstract

Public participation (PP) is increasingly permeating transport planning discussions as the nature of planning propagates towards pluralistic governance. However, the concept remains difficult to operationalise. In bicycle planning, participation is often employed for specific schemes but less frequently explored in earlier strategic networks. In Beirut, transport planning is addressed through uncoordinated short-term projects, and wider applications of participation have yet to be seen. The study explores how collaborative bicycle planning in Beirut might be exercised, and what it might contribute to transport planning. Three participatory workshops were conducted with recent bicycle adopters, focused on developing a preliminary user-informed bicycle network and the criteria to shape it. Pre and post workshop questionnaires gauged participants' perceptions of their participation and the workshop. Wider stakeholder interviews focused on perceptions of ideal participation, the workshop's evaluation as a participatory process, and its contributions to improved planning.

Findings highlighted the unique contribution of user experience and an appetite for more PP, with such workshops valuable as platforms for information provision, learning, knowledge exchange and group building, particularly in cities with little interest in PP and cycling. In the absence of overarching transport strategies, workshops as such can act as advocacy and pressure tools on governments, pushing for broader mobility plans or specific user-informed interventions. General gaps in knowledge on both PP and bicycle planning were apparent, affecting perceptions of their usefulness in city development. Mixed views on how PP might take place means that greater discussions on participation and its objective are necessary, as well as a greater awareness of the multiple dimensions that affect its framing and execution. Institutional, financial, interest and capacity-related barriers could hinder uptake of more collaborative PP, but NGOs or other liaison entities can bridge the gaps, widening outreach and the practice of PP, supporting institutionalised co-production.

1. Introduction

On April 19 2019, Beirut's mayor announced the implementation of the city's first segregated bike lanes. When prompted as to why no citizens, urbanists or cycling organisations were involved in an opportunity to potentially transform mobility in the city, his response was "aren't you happy that there are bike lanes?"

With its small size and dense urban fabric, Beirut is a city with much unfulfilled bicycle potential. An absent transport strategy, top down decision-making (Carmona, 2013), and limited citizen-state dialogue, however, mean that the little bicycle 'planning' that takes place is approached through patchy, uncoordinated projects behind closed doors, without thought on an overarching network. While obstacles like institutional capacity, data scarcity, and financing (CEDRO, 2014) impede strategic planning, a fundamental issue remains the prevailing view of citizens' role as insignificant in decision making, and the clientelistic patterns dictating public service delivery (see Atallah & Helou, 2018). This combination of an "urban laissez-faire" (Carmona, 2013), over-politicised and factionalised planning, and public exclusion, stifles city livability, yielding a pattern of socially and environmentally insensitive transport projects, and compromise the fragile democracy and citizen-state relations that exist. It also begs the question: what would happen if citizens had bigger voice and a bigger role in designing their surroundings and the systems that dictate their everyday movements?



FIGURE 1: EXISTING BICYCLE INFRASTRUCTURE AND ANNOUNCING NEW LANES. (SOURCE: AUTHOR)

Public Participation in city-making has a social justice, equity, and empowerment facet (Innes, 1996), and one of better informed sustainable outcomes (Nabatchi, 2012). However, its reality is more complex, resource-intensive and less magical than the idealised planning processes and outcomes that the buzzword evokes (Cornwall and Brock, 2005). It is not a goal, rather a tool for better planning (UN Habitat, 2008). Streaks of ambivalence surround most debates on PP, and challenges abound in practicing it properly (Innes and Booher, 2010). These challenges are compounded in transport planning, a process seen as exclusive, limited to information and superficial consultation (Jones and Thoreau, 2014). Used as a blanket term, the weak conceptualisation of PP can hinder discussion into its effectiveness, and risks its inappropriate use (Rowe and Frewer, 2005). Exploring the practical dimensions of participation in a structured manner and how these impact the participation and planning process is therefore necessary.

The opportunities bicycle development presents in Beirut are limited by ineffective planning, and a narrow understanding and limited practice of participation. The world of PP is quickly evolving with alternative models like co-production and collaborative planning regaining traction, but the debate remains skewed toward formal participation (Watson, 2014). Additionally, there is less insight on how co-production can work in citywide plans, as the practice today is neighbourhood and street focused. The context of collaborative bicycle planning at city-scale in Beirut has not been explored, let alone collaborative transport planning at any scale, and we have yet to see how a participatory process can effectively be carried out. This study explores the larger debate on public participation in a city with weak practices of citizen involvement and political interest in cycling.

1.1 Research Aims

The overall aim of the dissertation is to evidence the contribution that PP, specifically collaborative planning, might bring to the development of a strategic bicycle network in Beirut. By making space for a participatory process, relying on input from less experienced cyclists, the research also examines how a collaborative bicycle planning process might best be carried out, and how it can enrich transport planning, drawing from perspectives of various different stakeholders.

Research Question

How can PP, through collaborative bicycle network planning with early bicycle commuters, contribute to transport planning in Beirut?

Translating the impacts of PP to planning inherently requires an exploration and understanding of how the dimensions of PP affect its own 'success'. In effect, the research question addresses two intertwined issues in the context of bicycle planning in Beirut: (1) How can PP take place as a meaningful, effective process in itself? How do stakeholders assess this process? (2) How can PP contribute to the transport planning process?

To answer the question, this dissertation will:

- Evaluate issues and barriers with the current transport planning process and the practice of PP in Beirut.
- Conceptualise PP and identify some of the dimensions that affect it, and what is perceived as 'good' public participation.
- Conduct a participatory workshop on bicycle network planning simulating aspects of PP, evaluating its process and outcomes as a PP exercise, and synthesising perspectives of its potential contribution to the bicycle planning process.

1.2 Outline

The introduction chapter provides a background, the relevance of the topic and context, and aims. Section two brings together three areas of literature, giving grounds for the study: (1) debates surrounding PP, dissecting its multiple dimensions, (2) the significance of bicycle network planning, and how PP can better accommodate diverse preferences, and (3) Beirut's transport context and potential contributions of collaborative bicycle network planning. Section three presents the methodology and its choice to address research aims. Section four discusses the results structured around research objectives (barriers to participation, good participatory processes, and contributions of the workshop), and section five concludes with policy implications and further research.

2. Selected Literature Review

2.1 Public Participation in Planning

The wide literature on PP dates back to Aristotle (Winthrop, 1978) and contributes to critical debates on humans' social organisation. In urban planning, how citizens, the state, and professionals engage with the field and each other has become a prominent theme (Khisty, 2000; Hillier and Healey, 2008), with a push for broader CP (Roberts, 2008), and diversification of its meanings, goals and strategies (UN Habitat, 2008).

PP however is largely not well formulated as a concept (Rowe and Frewer, 2005): terminological ambiguity, and using terms interchangeably without agreement on activities and meanings hinder discussion around participatory methods and their effectiveness (AbouAssi et al., 2013). This review focuses on PPs framing, typologies and factors that affect its practical applications.

Typologies

Definitions of PP broadly relate to involvement of 'the public' in agenda setting and decision making with the intention of influencing choices (O'Faircheallaigh, 2010, Rowe and Frewer, 2005). To understand PP's effectiveness, numerous models deconstruct it (e.g., Arnstein, 1969; Creighton, 2005; Fung, 2006) but many remain theoretical and impractical (AbouAssi et al. 2013).

Though PP's multidimensionality is recognised, it is often differentiated along a single dimension. Arnstein's ladder of participation (1969) (Figure 2) presents PP as an eight-rung ladder of citizen control, warning PP may become a tool for manipulation if at least full partnership is not involved. Adaptations (Wilcox, 1994; Burns, 1994) add dimensions like quality, but remain hierarchical conceptualisations, placing citizen control as an apex. This linear relationship lacks consideration for the weight of various factors affecting participation, like methods and feedback systems (Collins and Ison, 2006). Framed as a struggle for power (Hayward et al, 2004), Arnstein's model is laden with assumptions that citizen-driven, process-focused PP generates positive outcomes (Wesser, 2019). It does not consider the fact that complex issues require different approaches (Bishop and Davis, 2002), or the time and effort needed to build trust, capacity and "consensus around goals and agendas" (Tritter and McCallum, 2006), nor does it give weight to citizens' role in framing problems (Quigley et al, 2004).

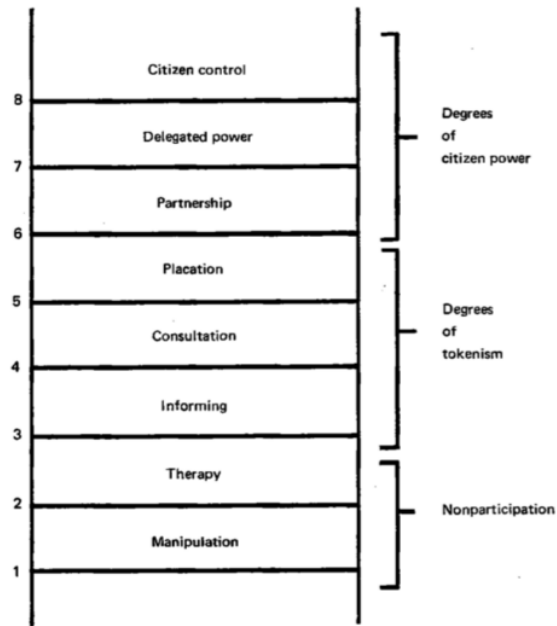


FIGURE 2 *Eight Rungs on a Ladder of Citizen Participation*

FIGURE 2: ARNSTEIN'S LADDER OF PARTICIPATION. (SOURCE: ARNSTEIN, 1969).

The IAP2 Spectrum (FIGURE 3) in contrast, makes no preferences but legitimises each level of participation depending on conditions like resources, attitudes of decision makers, stakeholders and project complexity. Similarly, Rowe and Frewer (2005) present a more holistic 12 typologies accounting for multiple dimensions and discussing three conceptual differences: communication (information and problems are prescribed), consultation (authorities receive comments but can reject those deemed inappropriate (Gil et al, 2011)), and participation (some power redistribution).

IAP2'S PUBLIC PARTICIPATION SPECTRUM



The IAP2 Federation has developed the Spectrum to help groups define the public's role in any public participation process. The IAP2 Spectrum is quickly becoming an international standard.

INCREASING IMPACT ON THE DECISION

	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

© IAP2 International Federation 2014. All rights reserved.

FIGURE 3:IAP2 PUBLIC PARTICIPATION SPECTRUM. (SOURCE: IAP2, 2018)

PP in Transport Planning

Transport planning is still perceived as an elitist process dominated by a technical authority (Whitelegg, 1997; Bickerstaff et al, 2002). The 'decide–announce–defend' approach is common in decision-making (Renn et al., 1995). Instrumental rationalities in transport planning steer PP goals towards optimising means to reach outcomes through a unitary body (Wilson, 1999). Public debate in transport is often a series of arguments on individual infrastructure investments rather than holistic policy (Glaister, 2006).

Though participation helps citizens understand the planning process better (Civitas), information provision and consultation dominate the practice (Jones and Thoreau, 2014). Only recently have planners “realised the pluralistic nature of planning”, with scope for widening and emphasising interactive participation (Gil et. al, 2011).

A number of PP issues are more prominent in transport planning: Differential capabilities, and the long term, cross-geographical nature of projects are perceived as limiting participatory input (Jotin, 2000; Jones and Thoreau, 2014; Boisjoly and Yengoh, 2017 Marshall, 2016). Framing questions from the perspective of mobility versus livability elicits different responses from the same people. Difficulties imagining places beyond people's horizons (Cohen, 2019) is surmountable with good facilitation.

Dimensions

Evidence of PP's influence in transport planning is hard to capture (Bickerstaff et al.,2002), and exploring its practical dimensions, difficulties and their impact on the process is necessary. FIGURE 4 presents selected key dimensions framing PP.

Objective	What goals is the participation aiming to achieve?	Abou Assi et al, 2013, Michener 1998
Type	What type of public participation is this? How much power is given to the 'public'? Is it one-way or two-way participation?	Arnstein 1969, Allmendinger & Tewdwr-Jones, 1998 Parker, 2002 Ostrom, 1996
Initiator(s)	Who is the initiator of the public participation? Is it formal, government-led, practitioner-led, or organisation led? Is it a response to exclusion?	Watson 2013, Ostrom 1996
Stage	At what stage of the planning process is the public participation happening? What are the assumptions?	Wilson 2001, Bickerstaff et. al 2002, McGuirk 2001, Bovaird 2007
Information & Conditions	How are participants learning about the topic at hand? Does the process allow anyone to participate regardless of ability/knowledge?	Khisty, 2000, SLIM, 2004, Collins et al, 2006, Meneget, 2002
Continuity	How long is participation taking place for? How many opportunities for engagement are there? How involved can people be throughout stages?	Bickerstaff et al, 2002
Methods of PP	Do the methods allow a diversity of "citizens" to participate, deeply engage and reflect a medium people can understand (language)?	Rowe and Frewer, 2013, Parker, 2002, Nabatchi, 2012, IHT, 1996, Bickerstaff et al. 2002
Stakeholders	Who is involved in participation? What is the role of the ordinary citizen or user? Are stakeholders mixed or segregated into similar groups?	Arnstein 1969, Tritter and McCallum, 2006, Bickerstaff et al, 2002
Feedback Loops	How is stakeholder input incorporated? Are participants aware about decision making and kept up to date about the process and changes?	Collins et al, 2006

FIGURE 4: KEY DIMENSIONS DETERMINING HOW PARTICIPATION IS FRAMED AND PRACTICED

Goals

While PP is assumed as inherently good and should be built into the entire planning process (Bickerstaff et al.,2002), transport policy literature suggests specific conditions for PP to work positively, differentiating the concept and objectives of PP from its execution, process, outcomes and wider institutional context.

Research has also focused around mechanisms of participation, exceeding that around the notions conceptualising it: participation risks being practiced inappropriately, with undesirable outcomes (Collins and Ison, 2006). An understanding of the goals of PP (in specific scenarios and overall) is therefore a prerequisite.

Michener (1998) distinguishes between planner-centred outcomes, focused on participation as a means to improve efficiency (AbouAssi and Trent, 2013), and people-centred outcomes, where

participation, empowerment and capacity building are ends in themselves. Other PP goals focus on improved information provision, obtaining feedback and ideas, building collaborative action (Nabatchi, 2012), meeting people's needs, highlighting controversial topics (Civitas), building consensus, cultivating citizenship and participatory democracy (Innes, 1996), creating social capital (Potapchuk and Crocker, 1999), and generating better policy through unique local expertise (Berke and Conroy, 2004; Wasser, 2019). Given the pluralistic nature of decision-making, participants should be knowledgeable about the objectives of participation (Khisty, 2000).

Gaps and Constraints

Complexities in the field can hinder genuine people focused participation (Michener, 1998). Though many studies recognise the difficulties of coinciding concepts with practicalities (Carpentier, 2016), some - including this one - still exhibit the rhetoric-reality gap in their discussion: PP theories are framed around empowerment, democracy, engagement, but case studies retain power hierarchies and traditional consultation (e.g. Cascetta and Pagliara, 2013).

Resource, time and capacity (officer and public) constraints hamper the extent to which planning can be participatory (Irvin & Stansbury, 2004). Rational ignorance among the public can mean the cost of educating oneself about an issue outweighs benefits (Krek, 2005; Rydin & Pennington, 2000). Politics and vested interest means that mistrust of authorities' sincerity in engaging the public is common, with beliefs that PP only legitimises decisions (OECD 2001).

Stakeholders

Decisions on who to involve change PPs meaning and goals. PP studies in transport acknowledge the difficulty of aligning multiple conflicting interests (Manheim, 1979; Meyer and Miller, 2001; Ortuzar and Willumsen, 2001; Cascetta, 2009) as well as that of ensuring representation of a full spectrum of positions (Bickerstaff et al., 2002). Descriptions of participation often bypass the need to define 'the public' and their role (Bickerstaff et al., 2002). Though inherently different, participatory efforts directed at organisations, agencies and the public are sometimes grouped together in discussions (AbouAssi et al., 2013).

The drive for participation assumes that groups are homogeneous in opinion, and all citizens want to be involved, to the utmost level, and in the same way, which is not reflective of the diversity of participation (e.g. rational ignorance). Balancing how involved versus how representative certain users are of a population or interest group should be considered. O'Faircheallaigh (2010) considers not all participation as equal: PP must actively seek out involvement of those affected by a project. Improved methods and capacity building can diversify who gets to participate and how (Tritter and McCallum, 2006).

The need for collaborative stakeholder relationships to build on conflicts positively and openly is frequently raised (Healey, 1997) but this ignores the difficulty of delivering consensus in increasingly unequal, diversified societies with multiple motives. Involvement is different from empowerment (Miraftab 2003;2004), and the acknowledgement of stakeholders' agenda is important (Tritter and McCallum, 2006). Without information and balanced representation, special interests and better resourced, vocal stakeholders can hijack dialogues and decisions (Allam,2011).

Methods

The outcomes of participation are partly dependent on how PP is designed (Nabatchi, 2012). No particular category embodies 'good participation' but is dependent on the context and appropriateness of methods (Bickerstaff et al, 2002). Too often relying on traditional forms of PP limits people's ability to properly contribute (ibid). The compromise between deepening and widening consultation is also highlighted (Parker, 2006).

Information, Continuity, and Feedback

Though regular opportunities to contribute to a process should be available to the public (notably problem identification and monitoring), continuous participation is difficult to operationalise (Bickerstaff et al. 2002). As governments proceed along the path of least resistance, ordinary citizens' involvement is limited to fine tuning projects. For more meaningful PP, citizens must also be armed with relevant information (Gelders, 2005; Gudowsky and Bechtold,2013). Decision-making transparency is key (Bickerstaff et al.,2002), and developing mechanisms to evaluate the outputs and impact of PP on planning is vital but rarely done (Rowe and Frewer, 2004).

Initiators

Beyond decision-making, power manifests itself in setting agendas and controlling contexts in which decisions are made (Lukes, 1974). This can lead to biased project selection and active discussions versus omissions, preventing early conversation and allowing the ability to ignore people's opinions when it becomes inconvenient (Cohen, 2019). Limiting planning to professionals questions the possibility of subjecting the process to democratic scrutiny and assigns them "some ethereal quality" (Pomeroy, 1953). Ultimately, PP should not replace governments or act as a referendum on a certain issue: an opinion does not make a decision and risks PP becoming the tyranny of the majority and limiting sustainable solutions (Allam,2011). PP should instead be a tool to promote debate and "improve evidence-based policy making" (ibid). Indeed, more approaches to PP aim to facilitate "an enriched decision-making process in an uncertain world" rather than provide optimal solutions (Rosenhead 1989; Khisty, 2000).

Alternative Paradigms

The failure of top down formal participation creates the need and space for alternative models. For example, Sittig's (2013) discussion of housing organisations forming a citizen education platform sheds light on the importance of who initiates participation on its quality, depth and effectiveness. Alternative models diversify the meanings and possibilities of participation (by altering aspects like goals, type, initiators, methods etc.) and may be more useful in tackling cities' challenges today (Albrechts, 2013).

Collaborative planning emphasises 'undistorted', consensus-oriented communication as opposed to experts' current uneven power (Allmendinger & Tewdwr-Jones, 1998; Jukuda, 2010), with users shaping how their involvement occurs. Through collaborative planning, those who actively participate are more committed and likely to support policies (Potapchuk, 2007): authorities can improve policy based on interaction with partners (Berke and Conroy, 2004).

Additionally, PP literature is focused on formal planning, but recent approaches from the Global South expand and shift planning debates (Watson, 2009; Yiftachel, 2009). Informal, grassroots initiatives working outside or alongside formal planning significantly alter aspects of traditional participation (Legacy, 2017; Watson, 2014), demonstrating their potential contribution (Kyriakou, 2014). Co-production (Ostrom, 1996) expands notions around state-society engagement. Variations, like social movement or bottom-up co-production, give organisations greater control over the process, deciding who to engage and how. Planners are involved through NGOs, providing mutual learning rather than expert provision (Archer et al., 2014). "Institutionalised co-production" (Joshi and Moore, 2004) looks at hybrid organisation-state arrangements. In all three, the possibility of corruption remains (ibid), especially where NGOS are politicised.

Another paradigm, social learning, encourages thinking about meanings and not just means of participation, uncovering the mental models that inform practices (Collins and Ison, 2006). Communicative rationality in transport planning, though less prevalent, places communication and interactive learning as central to planning, reducing assumptions (Willson, 2001).

2.2 Collaborative Bicycle Network Planning

The Value of Networks

Cycling is increasingly recognised for its contribution to cities and as a central pillar of sustainable transport policies (Banister 2008, Pucher et al. 2010; Pucher & Buehler, 2012). Increasing cycling requires an integrated package of interventions (Pucher et al., 2009). Infrastructure investment, however, is most effective, with strong links between levels of utility cycling and the presence of bicycle

infrastructure (Houde et al., 2018; Dill and Carr, 2003; Moudon et al., 2005). Even more, investments targeted at new cyclists produce greater cycling increases (Rajé and Safrey, 2016). Networks in particular maximise benefits from investment in infrastructure, unlocking cyclable areas and creating intuitive links (Buehler and Dill, 2016).

Inclusive planning and mobility's social nature

Cycle planning does not consistently account for the needs of a diverse population and can exclude the vulnerable and less experienced (WAC UK, 2010): mixing with motorised traffic is a bigger fear among less experienced users, women, and youth (Heinen et al., 2010; Stinson and Bhat, 2003; Krizek and Roland, 2005). Commuters are less sensitive to car volumes and speeds compared to non-commuters (Broach et al., 2012; Sener et al., 2009), and experienced cyclists sometimes prefer cycling without lanes (Abraham et al., 2002; Kang & Fricker, 2013). Initiatives to promote 'inclusive' infrastructure (ex. Vancouver's AAA infrastructure, 8-80 Cities) (Toderian, 2019; WAC UK, 2010) aim to enhance the cycling experience for everyone, but whether this infrastructure meets the needs of potential cyclists is still under-researched (Hull & O'Holleran, 2014). In places with low cycling levels, deliberately targeting under-represented groups' design preferences is vital in creating a mass cycling culture (Aldred et al., 2006; 2017).

Participation in Bicycle Planning

Opportunities for public input in bicycle planning are important (Litman et al., 2006) and have established value in improving plan quality (Tang et al., 2009). Network configurations, however, incompletely reflect city-dwellers' preferences (Manum and Nordstrom, 2013), and their implementation is often more erratic, political and fund-reliant, even where 'strategic' plans exist. Leveraging PP in addressing inclusive network planning can be more important in cities where bicycle thinking is nascent. Guidance documents aim to improve this process but are largely design oriented with little about PP (see TfL, 2014). Global South cities are developing context-specific guidance addressing this: Colombia's "Inclusive Cycling Guidance" (Van Laake and Pardo, 2018) explicitly discusses public involvement and Brazil's "Bicycle in the Plans" (UCB and Bike Anjo, 2015) target organisations engaging with government.

Studying PP practices in different cities' approaches to bicycle network planning is helpful to move away from idealised theories of PP (summary in Appendix A: Bicycle Network Planning in Selected Cities). Networks can have different purposes - connectivity, safety, equity, flagship routes, or a combination - which determine how and where interventions occur. Agreeing on and defining this purpose is important in a participatory setting. Approaches also differ: Some cities plan top down, data-based strategic networks (London, Seville), identifying key routes to segregate (ex. TfL's Strategic Cycling Analysis,

2017). Others identify severance lines and possible connection points (Dublin, Bogota), relying more heavily on user input.

Citizen involvement is prominent in neighbourhood/street schemes; defining a “community” is straightforward, non-experts imagining their neighbourhoods is fitting, and local feedback on concrete plans is valuable (Cohen,2019; Wesser, 2019). Collaborative planning at larger scale has been less explored. In network development, data is preferred over users or organisations that may skew input towards certain interests rather than reflect a larger spectrum of potential users (Longdon, 2019). However, data represents ‘the average’, and exclusively relying on it can create inequities (Oviedo,2019; Aldred, et al.,2016). In cities with patchier data or nascent cycle planning, co-planning a network with diverse stakeholders and crowdsourced data can compensate, as Manchester’s collaboratively planned network illustrates (Deegan, 2019).

Though emphasis is on physical infrastructure (Dill and Carr,2003), human infrastructure (Lugo, 2013, Goetzke and Rave, 2011), through social practices like rides considerably support cycling growth: Extending these practices to participatory network planning exercises suggests a role for PP in expanding social capital. Additionally, cycling relies on a degree of spatial understanding, and information sharing about routes and conditions among cyclists happens frequently (Kessler, 2011). As cartography democratises, mapping, qualitative GIS and crowdsourcing offer enormous potential in bicycle planning (Howe, 2006; Panek and Benediktsson, 2016).

2.3 Beirut’s Transport Planning and Participation Context

Transport Governance

Transport governance in Beirut is fragmented between the municipality, neighbouring municipalities, the MoPWT and CDR (FIGURE 5). Beirut does not have a transport plan (Semaan, 2019). Transport continues to be car-centric, with roadway projects receiving most financing (evidenced in the 2017 CDR Report). The result is a complete disregard for soft mobility, a public unable to hold the city accountable to plans, a mismatch between short term projects and long term development, little coordination, and fragmented project implementation. This chaos however has created room for a multitude of smaller initiatives hoping to fill in the gaps.

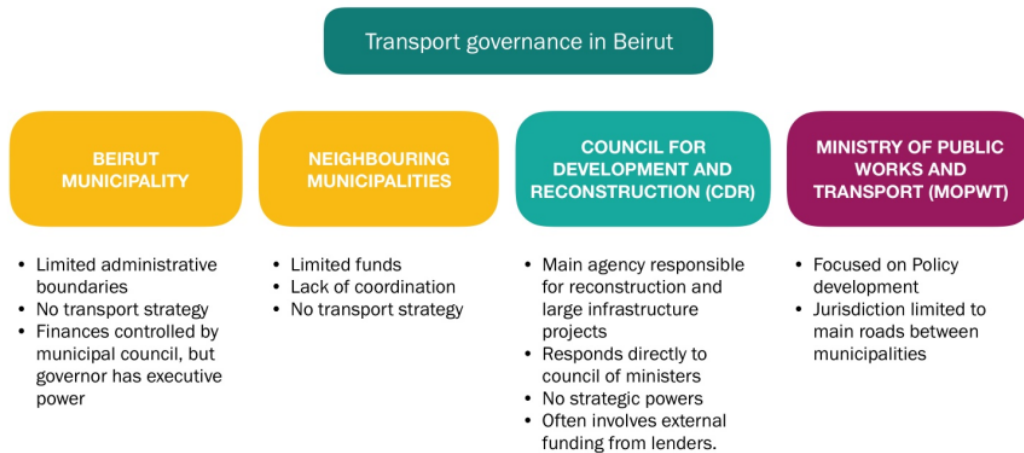


FIGURE 5: TRANSPORT GOVERNANCE IN BEIRUT. (SOURCE: AUTHOR)

Bicycle planning

Cycling continues to be sidelined in planning, and much of the discussion surrounding sustainable mobility is focused on emissions reductions rather than city impact (as seen in MoE, 2015). The conversation on cycling in the municipality has recently started to gain traction, though comes in parallel with a number of heavily car-oriented projects still receiving the green light (highways, car parks). The rhetorical interest in promoting cycling and lack of strategic framework have resulted in a few isolated and poorly implemented bicycle projects: a timeline is presented in FIGURE 7.

Public Participation

Beirut exemplifies the traditional view of transport planning as instrumental, top down, based on maximising efficiency with pre-identified problems (Collins and Ison, 2006), implying the room for CP is already limited. Formal PP in many cities including Beirut does not necessarily improve service delivery or democracy (Piper and Lieres, 2008; Allam, 2011). The government’s relationship with citizens and NGOs is submissive, with limited chances to participate (OMSAR, 2005), and weak institutions mean reduced government transparency (Madbouly, 2009). AbouAssi et al., (2013) (some of the few extensively exploring PP in Lebanon), highlight the rhetorical use of the PP paradigm, an information tool to reduce resistance to government strategies, supporting concerns about co-optation and placation (Young; 2003).

No studies have specifically focused on participation in transport planning, whose fragmented governance increases the PP challenge. The little research on co-production or collaborative planning appears in grey literature and grassroots organisations’ accounts. Evidence of PP in the few bicycle

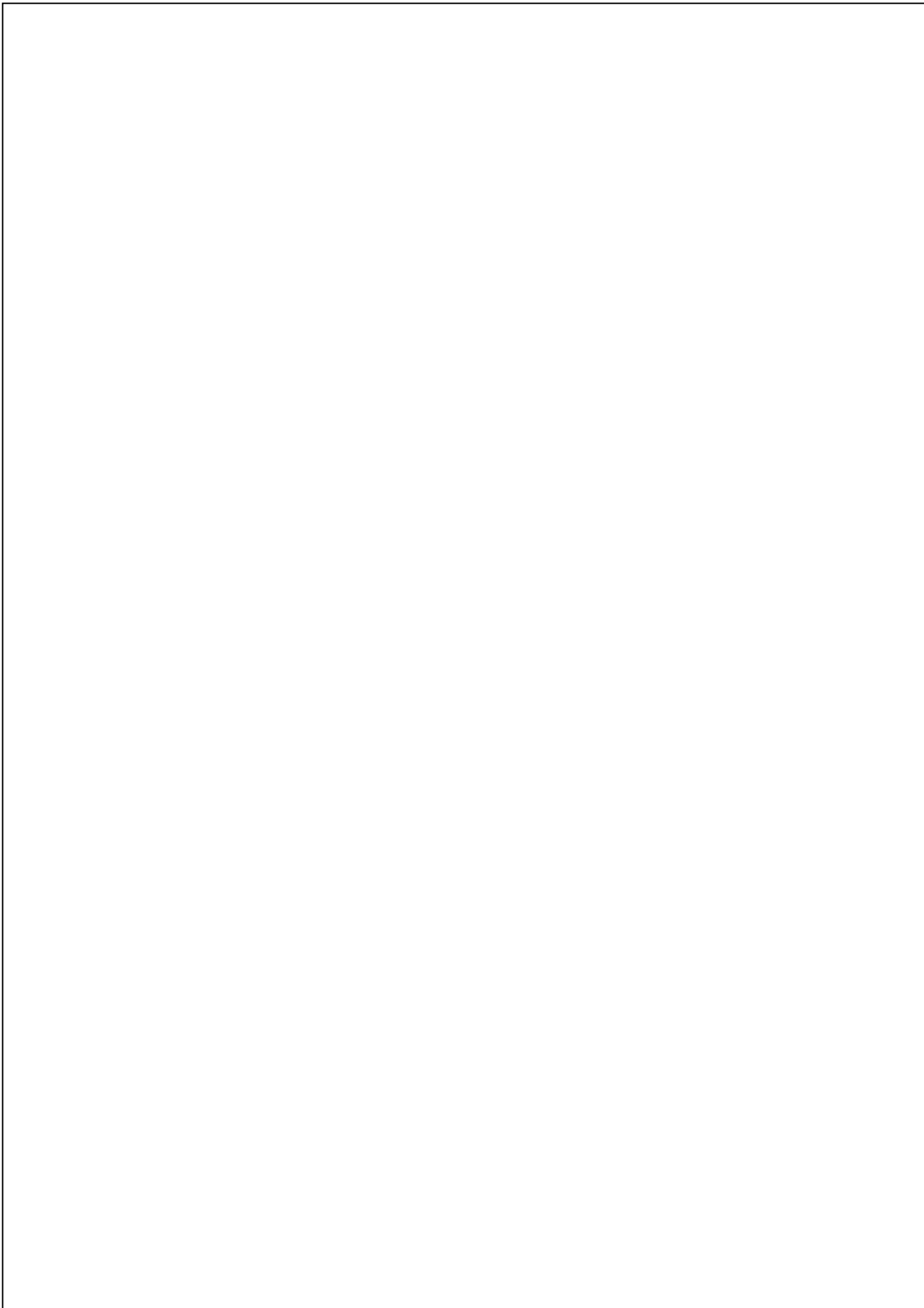
related projects is rudimentary: The 2012 bike network included 1000 surveys with 'the public' (EGIS, 2012), but no questions engage on strategic or design issues. Current bike lane plans involve pre-defined loops, 'validated' by engineers, discussed with two sponsor-affiliated NGOs and cyclists (Sabri, 2019) (FIGURE 6); questions surrounding decision-making remain.



FIGURE 6: PLANS FOR FIRST SEGREGATED BIKE LANE IN A CIRCULAR LOOP. (SOURCE: BEIRUT MUNICIPALITY)

Barriers to greater participation

The absent participation culture requires deep, long term change to instill it (Allam,2011). Challenges include PP's lack of institutionalisation, restricted knowledge on municipal management, and vague mechanisms for public interaction with government (Madbouly, 2009). A lack of understanding of PP, and insufficient resources allocated to developing participatory processes reduce interest in PP (AbouAssi, 2006). Public officials raise concern over its cost, usefulness, and the public's capacity to engage in complex issues, though they are well versed in reform rhetoric (Allam, 2011). Participation requiring receding decision-making capability is a threat to power holders (de Lancer Julmes and Johnson,2011). Struggles with day-to-day problems hinder greater CP (Andonoska et al., 2009). Government agencies are regarded as corrupt, incompetent, and unjust, increasing citizens' lack of trust, and decreasing interest to bring together citizens and government (ibid). Lebanon's dynamic CSOs are marginalised from policy-making despite their numbers (AbouAssi et al, 2013), but some can also monopolise development, considering themselves "experts" and agenda setters (ibid). Higher level organisations are the focus of engagement rather than average citizens (AbouAssi, 2006).



3. Methods

The literature highlights diverse dimensions of participation that affect its impact on the planning process. It also highlights rhetoric-practicalities discrepancies (Bickerstaff and Walker, 2005; Carpentier,2016), hence the need for a concrete application of, and more than just a discussion on PP and its impact on the planning process.

The research relied on mixed qualitative methods: a participatory workshop and qualitative group administered questionnaires with participants, as well as interviews with 11 key figures extracted perspectives from stakeholders, supplemented by desk research and personal observations.

3.1 Participatory Workshop

A participatory planning exercise was designed to explore the experience of cycling and simulate collaborative planning with the 'public'. Beirut's context provides a clean slate to explore the potential of participatory planning in action through bicycle planning. The choice of a workshop reflects strong motivations to 'do' participation and 'produce' outcomes under real conditions, using these as a basis for further interviews, rather than examining hypothetical scenarios in a nascent field. A participatory process was therefore simulated over three two-hour sessions, which brought out some issues and nuances in a PP process (related to stakeholder choice, outreach, goals, framing, etc.) and diverse opinions in a seemingly homogeneous group (Sittig, 2013).

The workshop is a type of case study based ethnographic research "experiment" (observer as participant) (LeCompte and Schensul, 2010) where the case study is created and examined on the spot. It simulated what involving users in decisions would actually produce in terms of a configuration for a bicycle network, as a way to study the process. A clear advantage is that it allows the investigation of processes in a specific context, which can generate new knowledge that puts the broader social context into perspective (Richards, 2009), though there is some subjectivity in analysis (Flyvbjerg, 2006).

The workshop's target audience was early cycling adopters: those who cycle occasionally, or have recently started cycling as a means of travel. Less comfortable and experienced with utility cycling, their preferences are better suited and more representative for cycle planning, which as previously discussed, lacks inclusivity (especially in Beirut's case with a cycling modal share close to zero).

Participants were recruited in two ways: through taking part in Bike to Work 2019 (those indicating that they do not regularly cycle, or that they cycle for leisure or sport when they registered), and through social media platforms of The Chain Effect, a local cycling organisation I am part of. Attempts to ensure



Outputs included (more in Appendix C: Workshop Contents and flow): Barriers to cycling, emotional and journey mapping, bicycle network objectives, criteria for developing segregated routes, and a preliminary bicycle network map (severance lines, dangerous intersections, needed crossing points, needed segregation).

Limitations

The brevity of the study means that the workshop is a one off simulation that cannot encompass several important aspects of participation (continuity, feedback loops, diversity). Ideally, ongoing sessions can involve samples of people from different parts of the city. Further iterations of the workshop can also incorporate learnings on PP. The workshop is too brief to allow for real 'outcomes' to be developed, which may affect stakeholders' assessment of this process. Though discussions were flexible, my views as a workshop facilitator inherently affect the focus and framing of bicycle planning.

Group Administered Interactive Questionnaires

Participants' perceptions of the workshop as a process were gauged through pre and post-workshop group questionnaires (Appendix D: Pre-Workshop Questionnaire and E) covering four broad topics:

1. Desirable bicycle planning outcomes.
2. How PP happens today and how they think it should happen (using FIGURE 4).
3. Their perceptions of the outcomes of the workshop.
4. Their perceptions of the process of the workshop as a participation exercise, and how it can contribute to better planning.

In the pre-workshop questionnaires, participants addressed points 1 and 2: reflecting on the current planning process in bicycle development in Beirut, and how PP should take place. In the post-workshop questionnaires, participants addressed points 3 and 4. A group-administered questionnaire was chosen because of time, efficiency and interactivity. It still allows the flexibility of an interview through interaction, clarifying concepts, discussions, and the possibility of open-ended replies and further questions on the spot (Yerushalmi et al, 2012). This approach worked well since participants preferred a group conversation to only writing. The post-questionnaire began as a discussion and culminated in an online form, advantageously giving participants distance to reflect.

Having taken part in a workshop and given their input, participants are in a better position to understand, experience, and articulate their perspectives on participatory decision making. The approach, combined with the opinions of other types of stakeholders, could give useful insight on future collaborative planning exercises, and can also inform non-bicycle related projects.

3.2 Semi-Structured Interviews with Practitioners, Decision-makers, and Academics

After the workshop, semi-structured interviews were conducted with 11 key transport planning stakeholders: one municipality official, one central

An abductive approach to qualitative analysis was employed, and observed findings were compared to existing theory, practice and issues in PP through loose pattern matching (relying on Campbell, 1966). Ideas were categorised by theme to identify patterns in interviews and workshops (Elon and Kyngas, 2007). Where relevant, comparisons were made between stakeholder responses.

3.4 Ethics

The methodology did not pose any real ethical risk (a risk assessment was conducted and approved prior to research). Topics are not sensitive. Information sheets with study objectives were provided to all workshop participants and interviewees, and consent forms were signed, with the opportunity to withdraw at any time. Workshop participants were anonymised and all interviewees agreed to use their name and affiliation. See Appendix for forms and assessment.

4. Results and Discussion

FIGURE 9 clarifies diagrams used in this section.

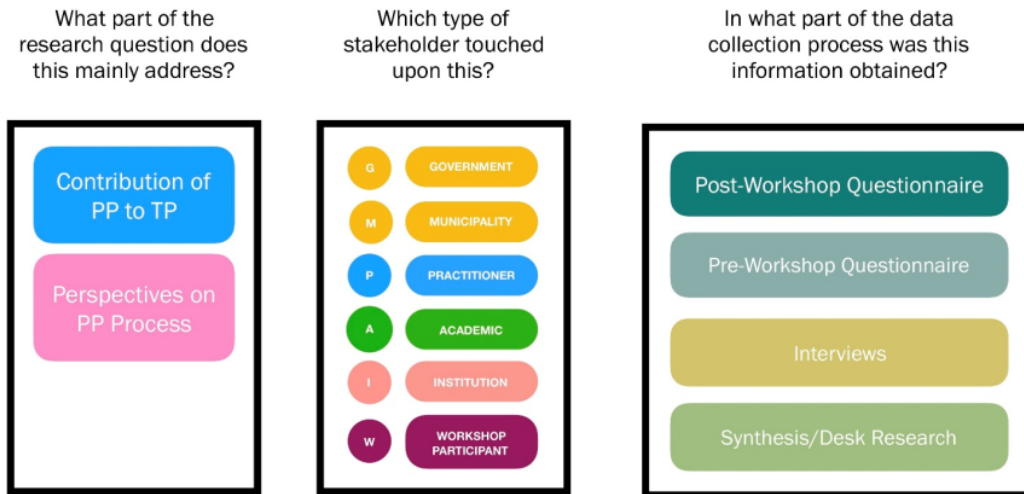


FIGURE 9: LEGEND OF FUTURE DIAGRAMS

4.1 Current planning and PP processes and their barriers

Beirut's planning context creates additional PP barriers (FIGURE 12). Understanding them is a primer to evaluating PP's contribution to planning. Difficulties discussing PP beyond 'involving the public' reflect the convoluted debate around its meanings and objectives and its weakness as a concept (Rowe and Frewer, 2005; AbouAssi et al, 2013). Workshop participants also had trouble commenting on the dimensions of participation, which required discussion.

Apart from a few exceptions, interviewees exhibited an inability to be specific about PP (procedures, those consulted, excluded, stages, methods, advertising and impacts on planning). Probing at statements like 'we should consult the public' (municipality representative) received little clarification. Haddad (TRACS representative - coalition of transport NGOs – see Appendix G) prioritised lobbying for a PP law, but could not comment on what this law looked like.

Weak accountability, institutional hindrances (Atallah, 2015), weak legal requirements (Fadel et al, 2000; Ibrahim and Mounajjed, 2013), and lack of capacity were seen as barriers for meaningful PP (FIGURE 13).

Interviewees criticised the absent strategic planning and sidelined cycling debate, hindering the formulation of a bicycle strategy in isolation if no transport plans are established. Strong rhetoric on strategic planning, however, was followed with weak examples of their further work, perpetuating the pattern of isolated projects. Participants echoed practitioners' concerns (FIGURE 10), with mystery around existing bicycle plans (FIGURE 11).

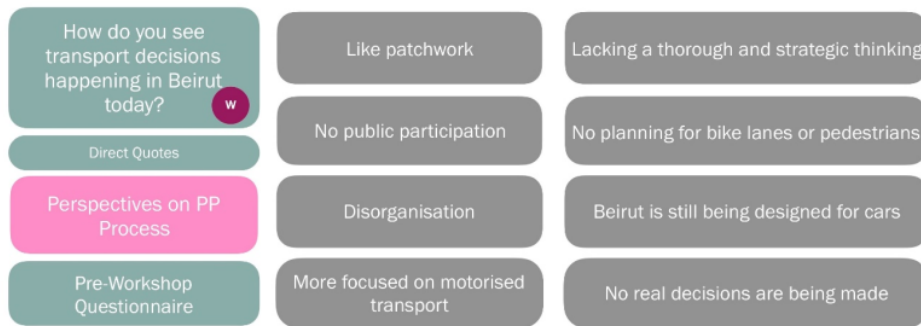


FIGURE 10: PERSPECTIVES OF PARTICIPANTS ON CURRENT TRANSPORT PLANNING

Bicycle projects are oriented towards visibility and ribbon-cutting. Public meetings serve as a manipulation tool in the absence of a strategic framework: speech is emotional, loaded, party-oriented, without scientific backing, echoing MirafTAB's (2003) warnings of false empowerment and Arnstein's (1969) model's lower rungs. The language employed inherently assigns power to PP sponsors, who used statements like 'we provide an explanation for them' 'if the idea is valid we take it into consideration'. A recognition of power dynamics in decision-making is a pre-requisite for healthy PP.

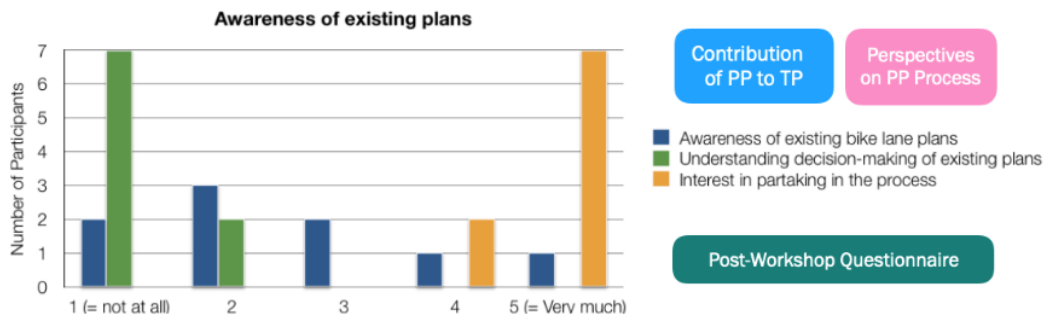


FIGURE 11: ATTITUDES TOWARDS CURRENT BICYCLE PROJECTS

A lack of insight on the diversity of participatory approaches and how they affect planning facilitates negative views of PP and disinterest in pursuing it. Public meetings were criticised for attracting a poor cross-section of citizens, without a recognition that alternative formats may entice different audiences and input.



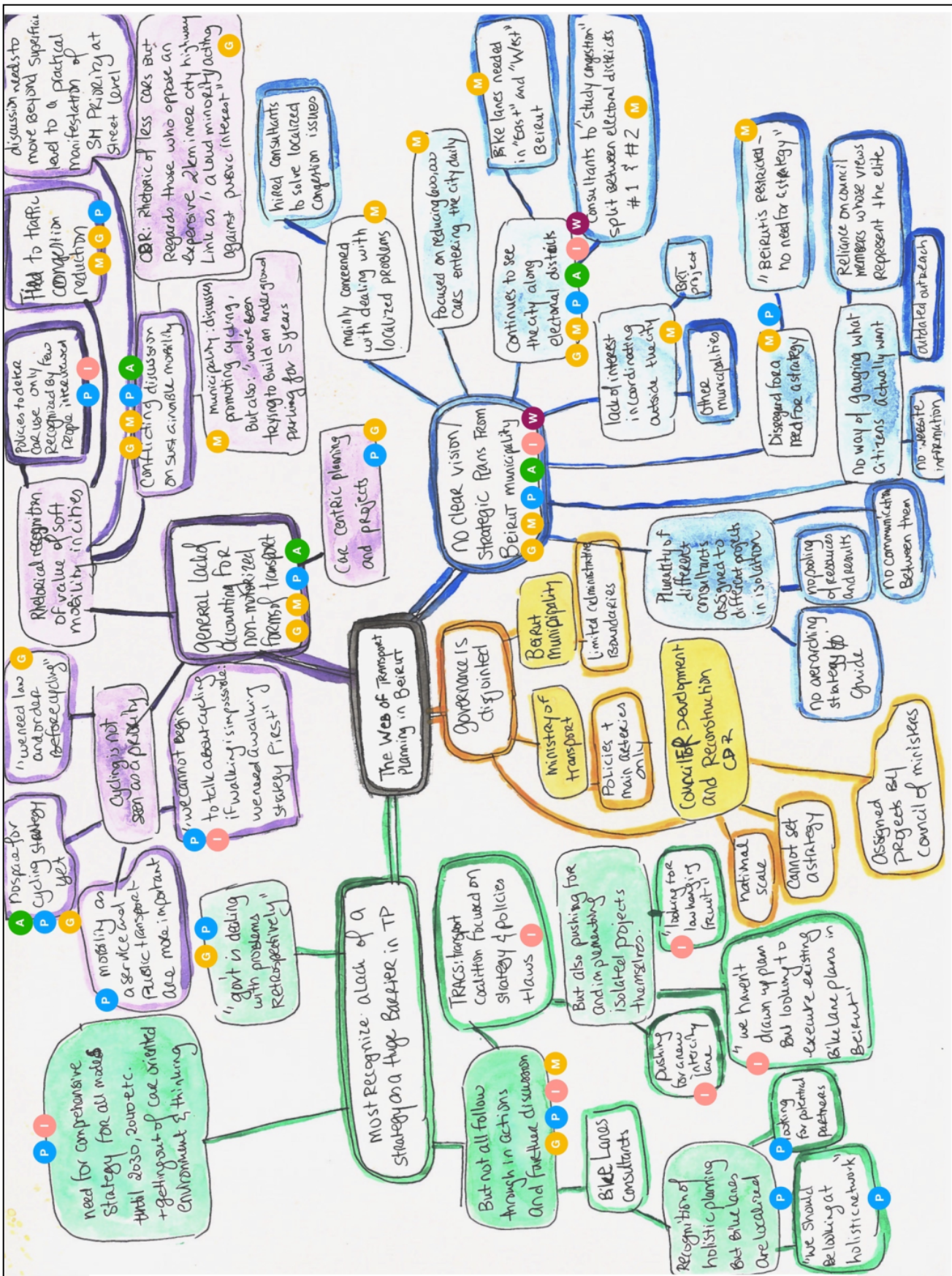


FIGURE 13: PP BARRIERS IN BEIRUT

Dimensions of participation

Planning follows a decide-announce-defend approach, decisions are made behind the scenes, consultation is project specific, and strong instrumentative rationality permeates planning thought, where PP is prescribed to the fine-tuning stages. Reluctance to publicise projects stems from the fear of added transparency, constraints, dealing with opinions and public scrutiny. Rushed project planning is a barrier for considering PP.

Most PP is government-led with support from consultants. Preferences to limit citizen control and eliminate early participation stem from a view that the public is not well-educated and will propose shortsighted, self-serving ideas, or permeate party politics (ex. more car parking instead of trees). Grassroots-initiated PP is sidelined from larger political conversations. Viewed as politically and financially problematic and technically weak, the role of NGOs and institutions in participation and planning is consistently undermined.

Methods were largely limited to public meetings (presentation then Q&A). Exceptions in the Liaison Douce project (a soft mobility link) saw a variety of stakeholders engaged through physical surveys and creative approaches like photo-montages and a catalogue of alternatives, building trust and dialogue, highlighting the value of diverse, audience-specific approaches.

The government's lack of information provision, ambiguity, narrow stakeholder selection, sometimes deliberate exclusion, and poor advertising through outdated methods affects citizens as well as other planners who often find out about projects through social media and have little feedback on decision-making after submitting reports.

High-level consultation with interest groups and government outstrips direct CP, and the public is used to not being involved: "People wake up to a bulldozer one day, ask, and are told what is happening". The difficulty of public engagement for non-localised projects is recognised, and so is the lack of trust in the government and its ability to conduct legitimate PP: "People don't believe that they are honestly being asked to participate" (Nakkash).

4.2 How Should PP Take Place?

Comparing views of participants on ideal PP to perceptions of practitioners and government officials reveals some of the tensions and mismatch: Users' views are more idealised, giving greater value to citizens, early stage participation, transparency, and knowledge exchange, whereas not all planners and officials see this as feasible or desirable. Good planning requires different groups to be aligned on the objectives of participation and the transport (or non-transport-related) aims being achieved (discussed in Khisty, 2000).

TABLE 1: PARTICIPANTS' VIEWS ON IDEAL PARTICIPATION IN BICYCLE PLANNING

Dimension	
Objective	Creating groups of interest, inclusion, empowerment, community engagement, involved citizens in planning, public domain.
Type	Citizen control, citizens as partners, and co-design learning from participation, two way, sharing ideas
Initiation	(Mixed views): Initiated by government (more credibility) but with organisations and experts to support and facilitate. Should be people led but integration is better. Scaling needs government involvement.
Stage	Initial stages, all stages with clear guidelines
Length and Continuity	Deep regular active engagement all along the planning process with clear feedback.
Stakeholders	Citizens, special interest organisations, experts, residents, users, non-users, tourists, government officials.
Information Provision	Wide audience targeted and wide access to project information through campaigns. Engagement through grassroots initiatives, requires active participation.
Methods	Inclusive and interactive
Feedback and Outputs	Transparent process and access to updates

Interviewees' Perceptions

Overall, experienced practitioners highlighted a need for a mechanism through which public participation is institutionalised early on, with current participatory approaches not structured enough.

Objective

Interviewees highlighted diverse objectives for PP in planning: obtaining feedback, addressing concerns and preferences (framed as input to designers), and providing information and clarification to gaining public acceptance, especially for novel things (paid street parking). Modest diversion from current practices was seen: participation is valued for its practical and planner centred outcomes (Michener



knowledge about the ability to pay NGOs, and mistrust about their technical capabilities, was visible (linking to AbouAssi's discussion about CSO's marginalisation). However, the politics of NGOs (AbouAssi et al, 2013) can mean it is hard for those not involved in the

Methods and Information

Interviewees proposed various participation methods: a dedicated phone and email with parallel local community focus groups for those without internet access, and physical surveying. Those who had experience with diverse forms of participation (Debs) recognised the importance of mixed, audience-tailored methods, and more collaborative methods in promoting better understanding, dialogue and consensus; his experiences with the Liason Douce project showed door to door discussions were time consuming but overall enormously helpful in understanding perceptions and proposing plans. Renders of imaginations of certain locations transformed, along with produced visual catalogues were helpful to get citizens' thoughts and preferences, highlighting the importance of how questions are asked, and what type of information and imagination people are provided with, as a primer for PP (echoing Cohen, 2019).

One planner described the workshop as 'crowd planning' more than PP, reflecting again the narrow understanding of PP's diversity. Many discussed the importance of good information dissemination and organised groups on social media, with potential for creating a platform to exchange information. While this sounds delightful in theory, there was no discussion as to who would be responsible for this: practically, it requires oversight and continuous resources. In the absence of government input, CSOs take years to build. There was also no discussion of the need for an interested audience that is not apathetic about its government in a situation with such mistrust (AbouAssi et al., 2013). Haddad (TRACS) viewed the workshop as a good format for the audience, and stressed that people need guidance to provide good feedback, following a systematic process that they feel is given by a professional.

The ideal bicycle network

The aim of soliciting interviewees' and participants' perceptions of an ideal bicycle network plan and its objectives was twofold:

- (1) To illustrate the multitude of perspectives on the shape, objectives and priorities of a bicycle network strategy (FIGURE 14), and that it is important for this conversation to be had in any planning exercise (whether participatory or not, and including in the workshop), to make sure people are aligned, and that it rarely really happens.
- (2) To illustrate that there is decent overlap between planners, agencies and users on some objectives, but the diversity of user perspectives on the specifics of what this network can look like and should achieve is greater (FIGURE 15): participants discussed elements like shade, trees, lighting, contra-sense lanes, quiet paths, the importance of navigation and maps etc., whereas most interviewees discussed segregation, safety and connectivity of the network.

**FIGURE 14: PERSPECTIVES ON OBJECTIVES AND IDEALS OF A BICYCLE NETWORK:
PARTICIPANTS & INTERVIEWEES**

FIGURE 15: PERSPECTIVES ON AN IDEAL BICYCLE NETWORK

4.3 The Workshop as a participatory process and contributions to planning

The workshop was designed with key PP issues raised in the literature in mind. Some aspects like continuity could not be controlled due to context (lack of future visibility, resource constraints, research setting), but deliberate choices determined other dimensions of PP: its type and overall approach, exchange of knowledge, stage, methods employed, information provision and feedback loops (Appendix B: Workshop Framing as a Participatory Exercise).

The introduction and pre-workshop questionnaire took significantly more time: Personal introductions were important. Participants preferred discussing the pre-workshop questionnaire, exchanging ideas about participation and bicycle planning. This highlights the importance of social capital and building relationships in participatory exercises - generally unaccounted for (Tritter and McCallum, 2006). It resonates with Perkins' (2007) assertion that community mapping is a social and network building tool vital for further participation through better organised groups and knowledge. An empowering process rather than outcome, mapping plays a key role in capacity development, growing social groups around shared interests and events (ibid).



FIGURE 16: WORKSHOP MAPPING EXERCISE

Workshops were planned to closely guide participants, culminating with network development criteria and a mapped introductory network (Appendix C). Diversions and anecdote-sharing prompted new discussions: pro-cycling approaches outside network development (social programs incentives, cycling groups) and other network interventions (ex. pedestrian streets, creating leisure connections first). Participants' strong interaction indicated a clear need for platforms facilitating idea exchange and group building – highlighting PP's positive impact. It showed the value of user flexibility in shaping involvement and setting agendas (raised by Tritter and McCallum, 2006), and in communicative rationality in PP

(Willson, 2001; Collins and Ison, 2006) allowing the discussion to start earlier than pre-identified problems and assumptions.

Exploring dimensions of PP and their implications (on PP and TP)

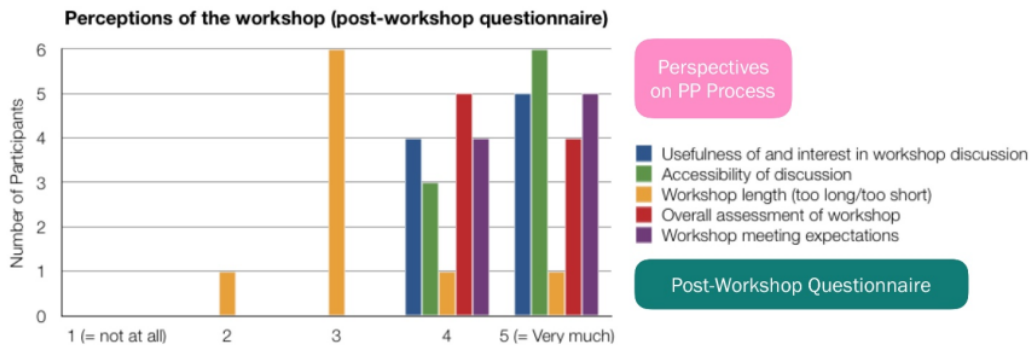


FIGURE 17: PARTICIPANTS' PERCEPTIONS OF THE WORKSHOP

Objectives

Responses (FIGURE 17) on participants' expectations of the workshop highlight PP's multifaceted objectives: achieving better TP outcomes, improved TP and PP processes, social capital, and knowledge exchange.

Discussing PP in all its practicalities, rather than as a blanket concept, was extremely fruitful (though dimensions had to be dissected as a group). Though PP related questions weren't workshop related, people had interesting insight on realising participation, and felt more at ease with the exercise by actively contemplating its manifestation. This builds on Khisty's (2000) argument on stressing participants' awareness about PP objectives, and goes further to say that participation should be actively discussed, with participants involved in defining objectives and other PP dimensions.

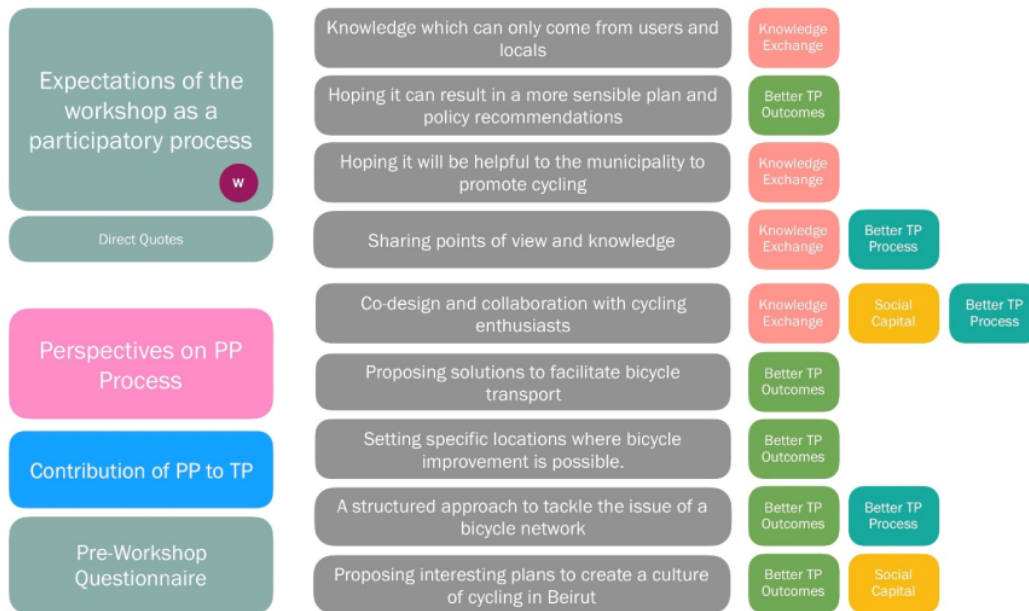


FIGURE 18: PARTICIPANTS' EXPECTATIONS OF THE WORKSHOP

Type and Initiators

The workshop highlighted Gil's argument that people feel more committed to a process when they have the opportunity to participate (2011) (participants wanted to stay involved and engage the municipality). People appreciated the workshop's structured nature, suggesting the importance of 'facilitators' (Friedman; 1989) and somewhat refuting arguments evaluating PP based on citizen control.

A grassroots organisation-led co-production process may furthermore lead to a more inclusive and active engagement (though not necessarily). Working outside formal planning mechanisms could eventually unlock institutionalised co-production and hybrid PP models (Joshi and Moore, 2004; Watson, 2014).

Methods

Few people felt confident contributing to areas beyond their cycling experience: the map exhibited more weaknesses in lesser-frequented neighbourhoods (FIGURE 19). Those with citywide knowledge had an architectural/engineering background or broader cycling experience, suggesting that user outputs should not be romanticised but supplemented with other knowledge.

FIGURE 19: MAPPED AREAS VERSUS LIVING AREAS

The initial activity planned for several working groups marking maps following similar criteria. People preferred collective decision-making and a unified map. In societies with low map literacy and little constructive online engagement, mapping exercises can have clear advantages over online mapping platforms. To better locate physical streets, intersections, and less familiar areas, participants proposed a test ride on mapped streets, suggesting a more visual or physical exchange of knowledge could add to the process. Further alternative ideas (FIGURE 20) included working with a university, direct digitisation, and i



FIGURE 20: PARTICIPANTS' PERCEPTIONS OF THE MAPPING PROCESS

Information Provision

Providing context and a learning component was important to the workshop's success. Learning sessions were deliberately scheduled to later parts, ensuring only experience-based discussion preceded. People enjoyed case studies, examples of collaborative planning, and understanding the breath of bicycle planning possibilities; these inspired suggestions for Beirut's network, validating Gelders' (2005) argument that meaningful PP requires citizens to be armed with relevant information. Participants requested links to presentation slides and further information.

Length and Continuity

All participants indicated further sessions were needed for better outcome generation, despite a third unplanned session being requested and added. Longer sessions would have allowed more in depth examination of the street network focusing on different streets, areas and stages of planning. Comments about keeping the workshops regular and maps updated even as projects are being implemented suggest a recognition of the value of participation throughout monitoring (in Bickerstaff et al, 2002).

Stakeholders

Focusing on less experienced cyclists offered a particular view on network needs, fears and sensitivities (see literature) that I as a more experienced bicycle user would have dismissed (e.g. preference of cycling against traffic). The audience's diversity (FIGURE 8) generated a more critical discussion.

Four outcomes indicated good engagement: (1) Participants requesting a third session and involving more people. (2) One dropout but three add-ons to sessions. (3) Participants suggesting and creating a WhatsApp group for information exchange and continued map development. (4) All participants leaving contact details to stay informed.

Subsequent stages would have involved agreements, prioritisation and more users, potentially where tensions begin appearing. Highlighting Parker's (2006) argument on the trade-off between deepening and widening participation, participants recognised the value of diversifying stakeholders, without acknowledgement of challenges (FIGURE 21). The potential tensions in PP processes through this 'user' layer's interaction with other technical, political, social layers, (ex. a proposed route passing through technically difficult areas, political will to implement a certain route) could not be tested.

My researcher agenda and perceptions of bicycle planning were apparent. For example, someone suggested a street classification that I deemed senseless (dividing between 'leisure' and 'commuting' areas), but discussions clarified reasoning. Initiators' preconceptions (Perkins, 2007) and overcoming structural biases require deliberate exercise design, seeking to listen before applying preconceived procedures - balanced, however, with setting restrictions. In his participatory bicycle mapping work in Manchester, Deegan emphasised firm guidance in mapping as a necessity (2019).

What types of people do you think should be involved in exercises such as these?

Perspectives on PP Process

Post-Workshop Questionnaire

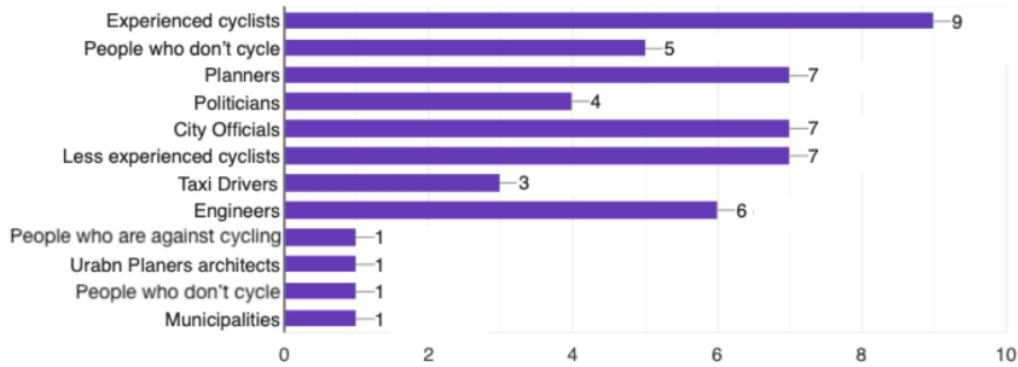


FIGURE 21: PARTICIPANTS' PERSPECTIVES ON STAKEHOLDERS

Contributions to the planning process

Participants' narratives stemmed directly from cycling experience. They concentrated on social barriers more than infrastructure barriers, highlighting the value of user expertise (Berke and Conroy, 2004; Wasser 2019). Some discussions (contra-sense lanes, connections across severance lines) were completely new in Beirut.

The mapping exercise involved three stages: first, mapping preferences for cycling routes (and those less preferred) drawing on Panek and Benediktsson's (2016) emotional mapping exercise. Part two identified cyclable areas, existing crossings, conflict points and gaps. Later came severance roads and proposing key segregated routes, contra-sense lanes, intersection treatments, and connection points.

Though far from finalised, the resultant map is a rich resource of notes, preferences, and suggestions. Comparing it to the proposed network (PDD), major segregated routes are similar, but the co-produced layer offers a larger diversity of information and interventions (FIGURE 22).

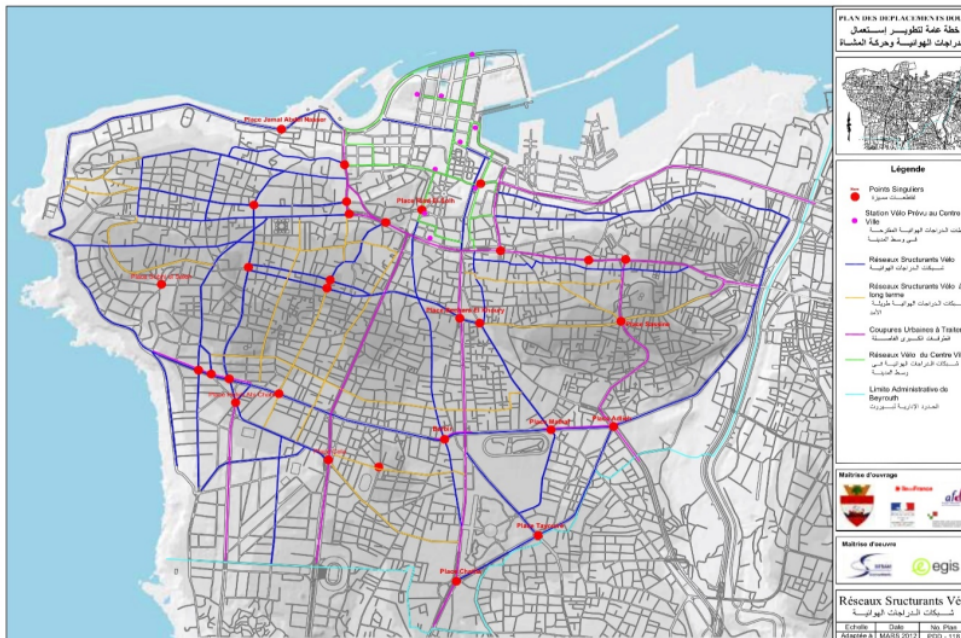


FIGURE 22: THE PRELIMINARY WORKSHOP NETWORK (TOP) AND THE PROPOSED STRATEGIC NETWORK IN THE PDD (BOTTOM).

Interviewees' Perceptions

The workshop added a dimension of participation - notably methods and level of engagement - that several decision-makers and planners hadn't properly considered. Interest was expressed for workshop results, with some concerned about the potential uptake of idealised networks.

Semaan, (PDD) dismissed the exercise as a repetition of existing studies, pointing to political will to push existing plans as the real obstacle. He viewed public input as insubstantial and incomplete. His testimony assigns a transcendent quality to planners and questions how holistically current plans have considered PP. In contrast, Debs, who faced the challenges of an unresponsive municipality, stressed the importance of such workshops in constituting a pressure group and highlighting demand for soft mobility alternatives. Indeed PP has the potential to create momentum and develop awareness around cycling. Engaging residents (even non-cyclists) could indirectly get on them board.

Overall, the workshop helped practitioners consider cycling in integrated planning, especially that most are not involved in bicycle projects. Nakkash discussed how cycling is a component which planners do not see, a 'non-issue' rarely taught in universities. Helou saw potential synergies with the BRT, where cycling is currently not being considered, though an absent cycling strategy complicates understanding which corridors have bicycle traffic or might eventually include bicycle infrastructure. The lack of cooperation between entities prevents uptake of such PP processes at larger scale: while interested in the process and outcomes, Helou did not know where he could use them. Ayoub mentioned its usefulness to designers, but that suggestions should tie in with existing infrastructure constraints. Haddad (TRACs) and others added that the types of infrastructure and interventions considered broaden the scope of possibilities in bicycle network planning for planners.

Most were in agreement on the importance of understanding user behavior and gaining a sense of hurdles and localised problems reflected on the map. Workshops were highlighted as a good PP tool in prioritising a network, picking easy itineraries and routes with higher success probabilities, and identifying quick win projects that could get support from sponsors, planners and NGOs, without waiting for a strategy or confronting bureaucracy. A platform where users can be heard and experts can provide input was highlighted as important for two way communication (Cascetta and Pagliara, 2013) and face to face understanding.

Limitations

The workshops required interested and committed people, validating Krek's rational ignorance theory (2005) - exacerbated in places with low government trust. The limited sample and representativeness was discussed as a barrier to holistic debate. Though a simulation, scaling up becomes a time and resource intensive process. Outreach is also biased: participants are 'primed' to have a favorable view of cycling by virtue of how they were reached (through a cycling organisation). This illustrates the challenge in reaching out to a diverse 'sample' (Rowe and Frewer, 2005). The need for a good understanding of demand and road characteristics to guide thinking was mentioned though defeats the purpose of non-expert CP; good facilitation can overcome this (Baker et al, 2005).

Semaan, thought the workshops are more useful and achievable for specific neighbourhoods or corridors, and overcome the sometimes 'unrealistic' and 'incomplete' nature of citizen proposals. Arguably, good facilitation and conversation between planners and users can address both issues.

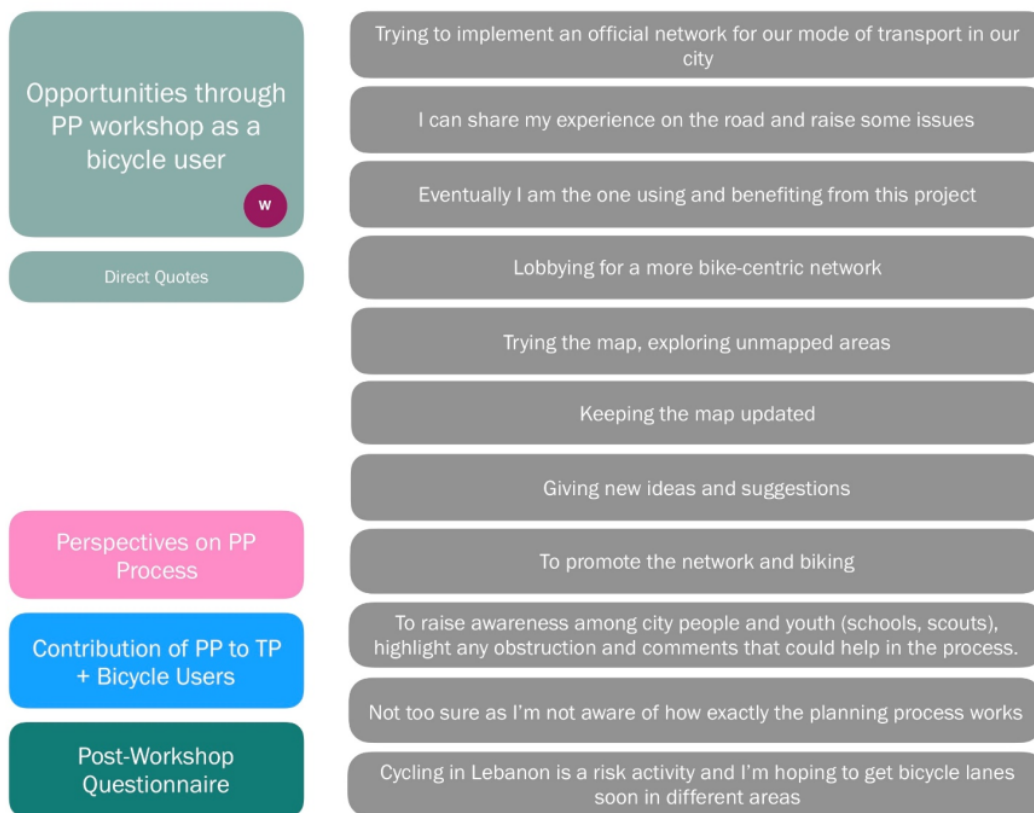


FIGURE 23: VALUE OF WORKSHOP TO PARTICIPANTS AS USERS

Taking the workshops further

Participants had various thoughts on the value of this workshop for them (FIGURE 23) and various ideas on next steps: more sessions, more audiences, strengthening the map, a dialogue with the municipality, and choosing potential pilot projects (FIGURE 24). Participants also had proposals on practical approaches to pushing the work forward with the municipality.

Opportunities in integrating this in planning included involving cycling NGOs in advocacy building, suggesting the need for more grassroots-led (replacing top-down) participation. The municipality representative had a 'why not' and 'will see' attitude with little comment on the desirability or integration of such practices. In the absence of formal PP mechanisms, credible coalitions can help bridge the gap between government and NGOs. Some stressed the importance of giving this workshop a 'certain official umbrella' to ensure decision-makers adopt the process (also discussed throughout the workshop).



FIGURE 24: PERCEPTIONS FROM PARTICIPANTS ON TAKING WORKSHOPS FURTHER



Challenges with integrating public involvement into planning remain, more so on an institutional, capacity and political will level than a technical one, and especially outside of a clear transport strategy. Some pointed out the real need is in implementing existing plans, not recreating them with the public, somewhat dismissing PP. In the long run, to properly reap PP's contributions in bicycle planning requires political leadership and a regulatory framework that fosters participatory processes (as raised by AbouAssi et al., 2013). In the medium term, the workshop shed light on non-state actors' potential contributions in delivering collaborative planning exercises. Synergies between NGOs and government through institutionalised co-production or other flexible models can bridge gaps, improve targeted outreach, introduce creative methods and alter dimensions of participation that currently create deadlock in formal public meetings. Space for new liaison roles like the "co-production development officer" (Bovaird, 2007) give weight to participatory exercises and help integrate practice in government or large institutions.

Tailoring future PP processes to tackle salient barriers in Beirut - limited PP knowledge, institutional disinterest, weak capacity - is important for future work. Without political sponsors, the workshops will likely remain sidelined activities outside decision-making spheres. Rethinking this slightly idealised process from a practical perspective of making it part of the politics of planning is important. Looking into mixed-stakeholder workshops and how stakeholder dynamics affect PP processes would be interesting. Workshops directed at practitioners, or decision-makers, or forming mixed user-planner groups to penetrate institutional planning and municipality decisions could be potential explorations. Moreover, workshops at neighbourhood scale with local champions can enhance contributions from local experience and facilitate demands for specific interventions.

A more focused study on a specific dimension, and how it can best be utilised could take this basic experiment further as a direction for future research. As a small simulation, several factors could not be accounted for, like wider stakeholder involvement, continuity, and decisions. With more time and resources, action research could incorporate findings into a next round of workshops that refines issues. Such PP processes can be repeated with diverse groups, giving a more holistic overview of preferences. However, this requires commitments from participants, and more serious deliberation from planners and authorities on their practical applications and whether the rigidity of power dynamics between state, experts and citizens is healthiest today.

Another reason for the ambivalence of some may relate to too many 'new' concepts at once: neither bicycle planning, nor interactive public participation, nor early strategic citizen participation are high on the agendas of planners or decision-makers today, and each of these have particular barriers. Exploring them separately might yield more concrete results or more favorable views. Discussions pointing to a need for an overarching strategy before delving into the topic of cycling open up opportunities to explore participation in setting mobility strategies.

Bibliography

Abou Assi, K (2006) An Assessment of Lebanese Civil Society. Country Report. Lebanese Civil Society. CIVICUS Civil Society Index Report for the Republic of Lebanon. International Management and Training Institute (IMTI)

Abou Assi, K., Nabatchi, T., & Antoun, R. (2013). Citizen Participation in Public Administration: Views from Lebanon, *International Journal of Public Administration*, 36:14, 1029-1043.

AbouAssi, K., & Trent, D.L. (2013). Understanding local participation amidst challenges: Evidence from Lebanon in the global south. *Voluntas*, 24(4), pp. 1113–1137.

Abraham, J.E., McMillan S., Brownlee, A.T., Hunt, J.D. (2002). Investigation of Cycling Sensitivities. 81st Annual Meeting of the Transportation Research Board, Washington DC.

Albrechts, L. (2013). Reframing strategic spatial planning by using a coproduction perspective. *Planning Theory*, 12, 46–63.

Aldred, R., Elliott, B., Woodcock, J., Goodman, A., 2017. Cycling provision separated from motor traffic: a systematic review exploring whether stated preferences vary by gender and age. *Transport Review* 37, 29–55.

Aldred, R., Woodcock, J., and Goodman, A. (2016). Does More Cycling Mean More Diversity in Cycling?, *Transport Reviews*, 36:1, 28-44.

Allam, M. (2011). Public consultation in the rule-making process in Lebanon. Retrieved from [<http://safadifoundationusa.org/publications/>] [Accessed June 2019]

Allmendinger, P., and Tewdwr-Jones, M. (1998). Deconstructing communicative rationality: a critique of Habermasian collaborative planning. *Environment and Planning*. 30, 1975–1989.

Andonoska, L., Denhardt, J.V., Terry, L., and Delacruz, E.R. (2009). Barriers to Citizen Engagement in Developing Countries.

Archer, D., Almansi, F., DiGregorio, M., Roberts, D., Sharma, D., & Syam, D. (2014). Moving towards inclusive urban adaptation: approaches to integrating community-based adaptation to climate change at city and national scale, *Climate and Development*, 6:4, 345-356,

Arnstein, S., 1969. A ladder of citizen participation. *Journal of the American Institute of Planning* 35, 216–224.

Atallah, S (2015). Accountability: A “National Security Threat” to Lebanon’s Elites. The Lebanese Center for Policy Studies. [Retrieved from <https://www.lcps-lebanon.org/featuredArticle.php?id=54>] Accessed July 2019.

Atallah, S. and Helou, Z (2018) Lebanese Elections: Clientelism as a Strategy to Garner Votes. The Lebanese Center for Policy Studies Accessed: <https://www.lcps-lebanon.org/featuredArticle.php?id=134>

Baker, W., Lon Addams, H. and Davis, B. (2005). Critical Factors for Enhancing Municipal Public Hearings. *Public Administration Review*. 65. 490 - 499.



Collins, K., and Ison, R. (2006). Dare we jump off Arnstein's ladder? Social learning as a new policy paradigm. Proceedings of PATH (Participatory Approaches in Science & Technology) Conference, 4-7 Jun 2006, Edinburgh.

Cornwall, A., and Brock, K. (2005). Beyond Buzzwords "Poverty Reduction", "Participation" and "Empowerment" in Development Policy.

Council for Development and Reconstruction (CDR) (2017). CDR Progress Report 2016/2017 Retrieved from [http://www.cdr.gov.lb/eng/progress_reports/pr102017/Eroad.pdf] [Accessed July 2009]

Creighton, J. (2005). The public participation handbook: Making better decisions through citizen involvement. San Francisco: Jossey-Bass.

de Lancer Julnes, P. and Johnson, D. (2011). Strengthening Efforts to Engage the Hispanic Community in Citizen-Driven Governance: An Assessment of Efforts in Utah. *Public Administration Review* 71(2): 221-231.

Dill, J., (2009). Bicycling for Transportation and Health: The Role of Infrastructure. *Journal of Public Health Policy* 30, S95-S110.

Dill, J., and Carr, T. (2003). Bicycle commuting and facilities in major U.S. cities: if you build them, commuters will use them. *Transp. Res. Rec.* 116-123.

EGIS (2012). Plan des Deplacements Doux de la Municipalite de Beyrouth. Phase 1: Rapport Diagnostic et Premieres Orientations. [Retrieved from Rami Semaan, project consultant]

Elo, S. and Kyngas, H. (2007) The Qualitative Content Analysis Process. *Journal of Advanced Nursing*, 62, 107-115.

EMBARQ (2015) Empowering Citizens to Shape Their City: Brazil's New Approach to Public Participation. Smart Cities Dive. Retrieved from [<https://www.smartcitiesdive.com/ex/sustainablecitiescollective/empowering-citizens-shape-their-city-brazil-s-new-approach-public-participation/1045271/>] [Accessed July 2019]

Fadel, M. Zeinati, M. & Jamali, D. (2000). Framework for environmental impact assessment in Lebanon. *Environmental Impact Assessment Review*, 20(5), 579-604.

Flyvbjerg, B. (2006). Five Misunderstandings About Case-Study Research. *Qualitative Inquiry*. 12. 219-245.

Friedman, P.G. (1989). Upstream facilitation: A proactive approach to managing problemsolving groups. *Management Communication Quarterly*, 3:33-50.

Fung, A. (2006). Varieties of Public Participation in Complex Governance. *Public Administration Review*. 66. 66-75.

Gelders, D. (2005). Public information provision about policy intentions: The Dutch and Belgian experience. *Government Information Quarterly*. 22:1. 75-95.

Gil, A., Calado, H., Bentz, J. (2011) Public participation in municipal transport planning processes – the case of the sustainable mobility plan of Ponta Delgada, Azores, Portugal. *Journal of Transport Geography* 19 (2011) 1309–1319



Irvin, R., & Stansbury, J. (2004). Citizen Participation in Decision Making: Is It Worth the Effort?. *Public Administration Review*. 64: 55 - 65.

Jennings, G. (2015). A bicycle renaissance in South Africa? Policies, Programs and Trends in Cape Town. Proceedings of the 34th Southern African Transport Conference (SATC). Retrieved from [<http://cocreatesa.nl/wp-content/uploads/2016/09/A-bicycling-renaissance-in-South-Africa-Policies-programmes-trends-in-Cape-Town.pdf>] Accessed June 2009

Jones, P. and Thoreau, R. (2014). Involving the Public in redesigning urban street layouts in the UK. *Civitas EU*. Accessed https://civitas.eu/sites/default/files/background_paper_public_involvement_jones_thoreau.pdf

Joshi, A., & Moore, M. (2004). "Institutionalised Co-production: Unorthodox Public Service Delivery in Challenging Environments," *Journal of Development Studies*. 40(4), 31-49.

Jotin, K (2000). Citizen Involvement in the Transportation Planning Process: What Is and What Ought to Be. *Journal of Advanced Transportation*. 34(1) 125-42.

Judith E. Innes & David E. Booher (2004) Reframing public participation: strategies for the 21st century, *Planning Theory & Practice*, 5:4, 419-436,

Jukuda, N. (2010). Understanding the role of collaborative planning in resolving the conflict between the three fundamental goals of planning for the purpose of contributing to the achievement of sustainable development in contested areas: the South Durban Basin (SDB).

Kang, L., and Fricker, J. (2013). Bicyclist commuters' choice of on-street versus off-street route segments, *Transportation*, 40(5): 887-902.

Kessler, F. (2011). Volunteered geographic information: A bicycling enthusiast perspective. *Cartography and Geographic Information Science*, 38(3), 258–268.

Khisty, C. J. (2000), Citizen involvement in the transportation planning process: What is and what ought to be. *J. Adv. Transp.*, 34: 125-142.

Krek, A. (2005). Rational ignorance of the citizens in public participatory planning. CORP, 2005, Vienna.

Krizek, K., and Roland, R. (2005). What is at the end of the road? Understanding discontinuities of on-street bicycle lanes in urban settings. *Transportation Research Part D: Transport and Environment*. 10. 55-68.

Kyriakou, M (2014), Perceptions of the influence of bottom-up cycling initiatives as a path to achieve mobility transition-a case study of Nicosia, Cyprus. University of Amsterdam. Retrieved from [<http://www.scriptiesonline.uba.uva.nl/document/557469>] [Accessed May 2019]

LeCompte, M., & Schensul, J. (2010). Designing and conducting ethnographic research : An introduction/Margaret D. LeCompte and Jean J. Schensul (2nd ed., *Ethnographer's toolkit ; 1*). Lanham, Md.; Plymouth: AltaMira Press.

Legacy, C. (2017). Is there a crisis of participatory planning? *Planning Theory*, 16(4), 425–442.

Litman, T., Blair, R., Demopoulos, W., Eddy, N., Fritzel, A., Laidlaw, D., and Maddox, H. (2006). *Pedestrian and bicycle planning: a guide to best practices*. Victoria Transport Policy Institute. Victoria, BC, Canada

Lugo, A. (2013). CicLAvia and human infrastructure in Los Angeles: Ethnographic experiments in equitable bike planning. *Journal of Transport Geography*, 30(C), 202-207.

Lukes, S. (1974). *Power: A Radical View* (Basingstoke: McMillan).

Madbouly, M. (2009). *Revisiting Urban Planning in the Middle East North Africa Region*. Regional study prepared for: *Revisiting Urban Planning: Global Report on Human Settlements*. UN Habitat.

Manheim, M.L. (1979). *Fundamentals of Transportation Systems Analysis, Vol. 1: Basic Concepts*. Cambridge, MA: MIT Press.

Manum, B. Nordstrom, T. (2013). Integrating Bicycle Network Analysis in Urban Design: Improving bikeability in Trondheim by combining space syntax and GIS-methods using the place syntax tool. Retrieved from [http://sss9sejong.or.kr/paperpdf/gusd/SSS9_2013_REF028_P.pdf] [Accessed August 2019]

Marshall, T. (2016). Learning from France: using public deliberation to tackle infrastructure planning issues, *International Planning Studies*. 21(4): 329-347

Meyer, M., and Miller, E. (2001) *Urban Transportation Planning: A Decision-oriented Approach*. McGraw-Hill.

Michener, V.J. (1998) The participatory approach: Contradiction and co-option in Burkina Faso. *World Development* 26, 2105-2118.

Ministry of Environment (MoE), Republic of Lebanon (2015). Lebanon's Intended Nationally Determined Contribution under the United Nations Framework Convention on Climate Change [<http://climatechange.moe.gov.lb/viewfile.aspx?id=232>] [Accessed July 2019]

Miraftab, F. (2003). The perils of participatory discourse: Housing policy in postapartheid South Africa. *Journal of Planning Education and Research*. 22(3), 226-239.

Miraftab, F. (2004). Making neo-liberal governance: the disempowering work of empowerment. *International Planning Studies*, 9(4), 239-259.

Moudon, A.V, Lee, C., Cheadle, A.D., Collier, C.W., Johnson, D., Schmid, T.L., and Weather R.D., (2005). Cycling and the built environment: a US perspective, *Transportation Research Part D*, 10, 245-26

Nabatchi, T. (2012). *A manager's guide to evaluating citizen participation*. Washington, DC: IBM Center for the Business of Government.

OECD, (2001). *Citizens as Partners - OECD handbook on information, consultation and public participation in policy-making*. OECD, Paris.

O'Faircheallaigh, C. (2010). Public Participation and Environmental Impact Assessment: Purposes, Implications, and Lessons for Public Policy Making. *Environmental Impact Assessment Review*. 30. 19-27.

OMSAR (2005). *Democracy in CSOs workshop- organised by Social and Economic Council- Beirut*, 8 June 2005.

Ortúzar, J., & Willumsen, L. (2011). *Modelling Transport, Fourth Edition*.

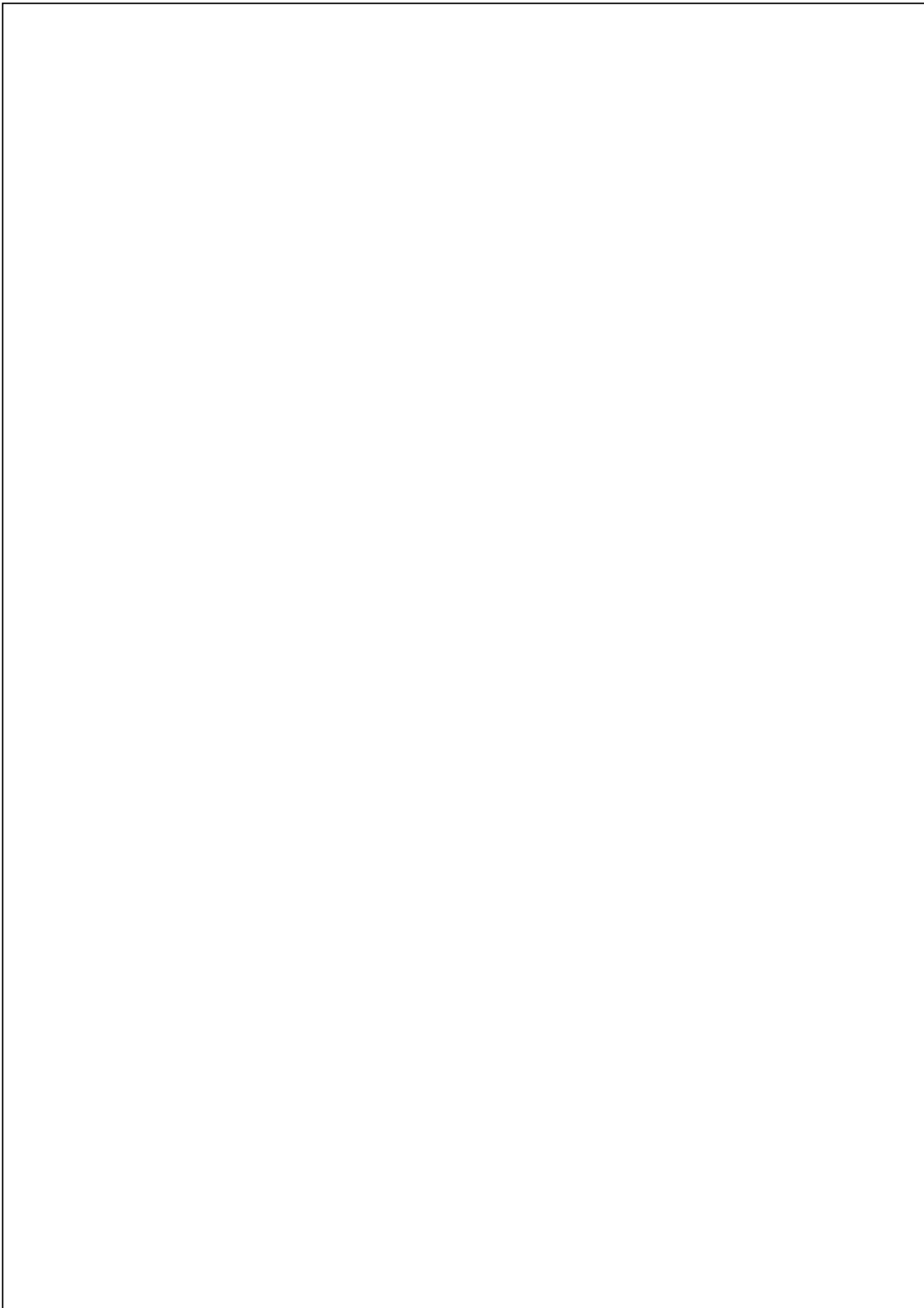
- Ostrom, E. (1996). Crossing the great divide: Coproduction, synergy, and development.
- Pánek, J, Benediktsson, K. (2016). Emotional mapping and its participatory potential: Opinions about cycling conditions in Reykjavík, Iceland. *Cities* 61 (2017) 65–73.
- Parker, B. (2006). Constructing Community Through Maps? Power and Praxis in Community Mapping *. *Professional Geographer*, 58(4), 470-484.
- Perkins, C. (2007). Community mapping. *The Cartographic Journal*, 44(2), 127–137.
- Piper, L., and Lieres, B. (2008). Inviting Failure: Citizen Participation and Local Governance in South Africa.
- Pomeroy, H.R. (1953). The planning process and public participation. In: *An Approach to Urban Planning*, edited by Gerald Breese and Dorothy Whiteman. Princeton University Press:9-37.
- Potapchuk, W.R., & Crocker, J.P. (1999). Exploring the Elements of Civic Capital.
- Potapchuk, William. (2007). Building sustainable community politics: Synergizing participatory, institutional, and representative democracy. *National Civic Review*. 85. 54 - 59.
- Pucher, J. and Buehler, R. (2012) *City Cycling*. MIT Press.
- Pucher, J., Buehler, R., Bassett, D. & Dannenberg, A.va (2010). Walking and Cycling to Health: A Comparative Analysis of City, State, and International Data. *American journal of public health*. 100. 1986-92.
- Pucher, J., Dill, J. & Handy, S. (2009). Infrastructure, Programs, and Policies to Increase Bicycling: An International Review. *Preventive medicine*. 50 Suppl 1. S106-25.
- Quigley R, Cavanagh S, Harrison D, Taylor L. (2004). Clarifying health impact assessment, integrated impact assessment and health needs assessment. London: Health Development Agency.
- Rajé, F., and Saffrey, A. (2016). The value of cycling. Department for Transport. [Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/509587/value-of-cycling.pdf] [Accessed June 2019]
- Renn, O., Webler, T., Wiedemann, P. (1995). *Fairness and Competence in Citizen Participation: Evaluating Models for Environmental Discourse*. Kluwer Academic Publishers, London.
- Roberts, N.C., (2008) *The Age of Direct Citizen Participation*. M.E Sharpe.
- Rosenhead, J. (1989). *Rational Analysis for a Problematic World: Problem Structuring Methods for Complexity, Uncertainty and Conflict*. John Wiley & Sons: Chichester.
- Rowe, G., & Frewer, L. (2004). Evaluating Public-Participation Exercises: A Research Agenda. *Science, Technology, & Human Values*, 29(4), 512-556.
- Rowe, G., & Frewer, L. (2005). A Typology of Public Engagement Mechanisms. *Science, Technology, & Human Values*, 30(2), 251-290.
- Rydin, Y., & Pennington, M. (2000) Public Participation and Local Environmental Planning: The collective action problem and the potential of social capital, *Local Environment*, 5:2, 153-169





Appendix A: Bicycle Network Planning in Selected Cities

City	Bicycle Network Planning Process and Public Participation
London	<p>Bicycle network planning is undertaken by TfL, which largely relies on aggregate data for at a strategic level. Not much public consultation occurs early, but with specific scheme proposals there is a discussion with local boroughs and bike organisations and extensive online and offline public consultation (Longdon, 2019). The Mayor is a lot more data-driven than his predecessor is. Much of the discussion beforehand happens more behind the scenes. Sustrans and similar organisations do more collaborative planning work. TfL conducts 'strategic cycling analysis' to inform future cycling development at a city level. The criteria are based on a broad range of factors, namely: routes currently used, cycling potential that can be unlocked in different areas. It relies on a variety of data sets including travel surveys, bikeshare system data, census data, cycle counts, and the London travel demand survey. These are then used to create a network of strategic cycling roads and required connections. Limitations with this method is the reliance on the existing road network to route cyclable trips with potential (TfL, 2017).</p>
Manchester	<p>An ambitious £1.5 billion Beeline network (cycling and walking proposal) was put forward by the Greater Manchester Transport Authority. Public opinion and community ownership were extremely important. To ensure it was taken forward, collaborative planning and mapping took place in all 10 local authorities who took charge of their routes, with councilors, cyclists and planners. Practical cycling and walking network planning sessions were held by Brian Deegan of Urban Movement over months, with the aim of gathering a local perspective of potential routes, yielding detailed knowledge through an informal approach. Further consultation seems to be positioned as a way of engaging people who will be negatively affected by travel network changes. An extensive online map is also available for people to make suggestions and comments stay up to date with changes. The approach was to develop a very rough first draft that can then be updated and improved with public input. (Greater Manchester's cycling and walking infrastructure proposal, 2018; Deegan, 2019)</p>
Seville	<p>The city council built an average of 500 m of cycle lanes over four years, which has halted for a while due to change of leadership but will resume. The focus was mainly on creating a connected network connecting the city centre to neighbouring areas. Not much emphasis was placed on quality, width, curves or way finding, but there are little feelings of non-safety or not knowing where to be and go on the street. Because of consistent identity and design and segregation all the way, there is no confusion. The network was built as part of a political commitment within a four year term, and the next stages are improvement in quality and getting feedback from residents and users.</p>





Appendix B: Workshop Framing as a Participatory Exercise

Public Participation Framework			
Dimension	Description	Relevant Literature	The Bicycle Planning Workshop
Objective	What goals is the participation aiming to achieve?	Khisty (2000)	Inform a strategy for a bicycle network in Beirut that is based on user need, user experience and user desire, representing a wider diversity of users than experienced cyclists. Create better outcomes for bicycle planning, ensuring that built infrastructure serves users. Keep people informed about bicycle planning. Create a sense of ownership, involvement.
Type/ Degree of Power	What type of public participation is this? How much power does the 'public' have?	Amstein (1969) (Allmendinger & Tewdwr-Jones, 1998) (Parker, 2002) Ostrom, 1996 (Gil et al, 2011)	Difficult to define since the participation is not continuous and power dynamic shows later on in decision making. Closest to collaborative planning. Two way discussion where agenda is set but flexible, and participants have a degree of power to be able to make their own decisions and create their own criteria for interventions. Expectations of what we are doing and how the workshop will be used were discussed and jointly set from the start.
Initiation	Who is the initiator of the public participation?	Watson, 2014, Ostrom, 1996	Grassroots led through local organisations. Operating outside of formal planning. Potential for synergies but too early to tell.
Stage	At what stage of the planning process is PP happening? What are the assumptions?	Wilson 2001 McGuirk 2001 Bovaird (2007)	Taking place early on in the planning process. This approach lies somewhere in between instrumental and communicative rationality. Some assumptions exist in the exercise but were discussed: the need for cycling in the city, the need for a network to get more people to cycle, How this is done and what this network could look like is largely left to the workshop participants to decide.
Length and Continuity	How long is PP taking place for? How many opportunities for engagement and monitoring?	Bickerstaff et al. (2002)	A few sessions for early involvement. Since the next stages after the workshops are not known, and since the PP exercise is not driven/endorsed by the municipality or another government entity, it is difficult to tell whether people can or will be involved at later stages and how outcomes can be monitored.
Stakeholders	Who is involved? Are groups homogeneous? Role of the ordinary citizen? Are stakeholders	Amstein (1969)	Focused on users (less experienced). No mixing and no hierarchy of knowledge/power. Largely homogeneous group.

	mixed or segregated?		
Conditions and Information Provision	How are participants being educated about the topic? Is anyone able to participate regardless of knowledge?	Khisty (2000), SLIM (2004), Collins et al, (2006), Gelders, (2005)	Participants are provided background information about cycling, the possibilities for bicycle planning, and some examples from other cities as well as PP examples.
Methods	Do methods allow for deep engagement, reflect a medium people can understand? Is there active outreach or expectation of voluntary participation?	(Rowe and Frewer, 2013) (Parker, 2002) (Nabatchi, 2012) (IHT, 1996), (Bickerstaff et al. 2002)	Exercises, mapping, physical mapping and marking, emotional mapping, secret ballots, collective brainstorming, criteria setting. Outreach targeted to bicycle users but participants are primed to be interested and must show initiative to register.
Feedback and Outputs	How are PP outputs used? Are participants aware of how stakeholders' input is incorporated, kept up to date about the process, changes, decisions?	(Collins et al, 2006),	No visibility on how the workshop outcomes will be used, therefore no opportunities for feedback currently exist. A Whatsapp group and email thread were created to keep all participants involved and updated in case of news.

Appendix C: Workshop Contents and flow

Workshop Framing

- Placing the participants somewhere in between 'citizens as strategic planners' and 'citizens as local experts'
- Combining two approaches:
 - Focusing on the strategic network level because it is less explored
 - Treating the workshop like a pilot or simulation that would serve as an example to be repeated in different areas, with different user groups, and slowly fill in the city map
- Focusing on 'early' bicycle adopters, their experience and their needs. If and when a shift towards cycling starts to happen, most people will fall in that category.

Workshop Contents

Session 1 - 2 hours

1. **KNOWLEDGE** Introduce researcher- The Chain Effect - The study + summary of workshop (5 minutes)
2. **EXERCISE** Introduction of participants - why did you choose to participate? What are your expectations from the workshop? (5 minutes)
3. **PRE WORKSHOP GROUP QUESTIONNAIRE** (20 minutes)
4. **KNOWLEDGE** Brief discussion of Cycling as transport + its contribution to cities: (5 minutes)
Social, Public Health, personal health and wellbeing, mental health, space saving, time saving, giving cities back to people, environmental benefits (CO2 saving, noise, air pollution), economic benefits (creating an industry, new jobs, new services), equity.
5. **EXERCISE (BRAINSTORMING)** When do you cycle? (10 minutes)
 1. Brainstorm a list of conditions for when people use the bike for their day to day movements. Do this first in pairs or small groups - discuss when you don't cycle and why
 2. Conditions could include aspects related to: Geography and terrain, Distance, Weather, Time of year, Neighbourhood, Perceptions of danger, Time of day, Personal Mood, Ease of Route, Company on the way, Trip purpose.
6. **EXERCISE (BRAINSTORMING)** Experiences of cycling (10 minutes)
 1. Following the previous exercise, we will try to come up with a list of barriers - what prevents you from cycling?
 2. Brainstorm a common list of barriers to cycling together (physical, psychological, financial, capabilities based)
 3. Focus mainly on physical road related barriers
 4. Make a tally of who feels which barriers
7. **EXERCISE (MAPPING)** Emotional Mapping + Route mapping (25 minutes)

1. Where do you live, work, study? (Point)
2. Which areas do you frequent? (Polygons)
3. What are routes you normally cycle on? (Lines)
4. What would you consider as 'your neighbourhood'? (Polygons)
5. What are areas and routes that you avoid or don't make you feel comfortable? (Polygon/Lines)
6. What are difficult intersections or points of conflict you don't enjoy? (Points)
7. What are areas of the city that you enjoy? (Polygon/Line)
8. What are smooth route connectors that allow you to easily link between one area and another? (Points)

8. KNOWLEDGE What is network planning? (10 minutes)

Data collection that can be useful for network planning: road Network, travel demand, land use traffic flows, cycling levels, projected growth (income, residential and work clusters, GDP, economic zones, urbanisation of suburbs)

9. KNOWLEDGE Examples of bicycle network planning in other cities (10 minutes)

1. Cities: Manchester, London, Seville
2. Discuss the thinking and reasoning behind the three cases and show how the objectives and approach were different.

10. GROUP EXERCISE The Bicycle Network Plan (15 minutes)

1. Why do we need a bicycle network strategy? Why the focus of cycling?
2. What other alternatives exist?
3. What could the purposes of a bicycle network be? (Brainstorm potential objectives)
4. What should the agreed purpose of this bicycle network planning exercise be?
5. What would the ideal outcomes of a bicycle network be?

End of Session 1

Amend proposed exercises from session 2 according to discussion of session 1 if needed

Session 2 - 2 hours

11. EXERCISE Criteria for route selection/how do you choose routes to cycle on?

Collecting exercise (create a set of criteria) (15 minutes) (Building on Exercise 7: What makes a route or an area cyclable)

12. KNOWLEDGE Types of roads, lanes and interventions (10 minutes)

Crossing points, Intersections, Arterial roads, Contraflow lanes, Types of bike lanes + types of segregation, bad lanes, bicycle parking

13. **EXERCISE** criteria for route selection/ how do you choose routes to intervene on? Create a set of criteria for a good route to have a bicycle network (15 minutes)

14. **KNOWLEDGE** Current Proposals (approved and not approved) (10 minutes)

1. Liaisons Douces (2010) URBI Architects
2. Sustainable Urban Mobility Plan for Beirut (PDD) (2013) TMS Consult
3. Downtown short bike lane (2017) Municipality
4. New bike lanes approved by municipality (2019) SETS

15. **EXERCISE** Mapping initial network (30 minutes)

1. Identifying arterial roads
2. Identify 'cycle able' areas (from emotional mapping exercise)
3. Identifying severance roads (from previous exercise)
4. Identifying conflict points and gaps
5. Use criteria to propose:
 1. segregated routes
 2. contra-sense routes
 3. intersection treatments
 4. connection points between cyclable areas

16. **EXERCISE** Prioritisation of bicycle links (10 minutes)

POST WORKSHOP GROUP QUESTIONNAIRE (20 minutes)

Appendix D: Pre-Workshop Questionnaire

Questionnaire: Public Participation and Bicycle Planning

Session 1 – Part 1 / 2

1. What are your expectations of this workshop?

2. Have you ever participated in a collaborative planning exercise in the past?

Yes: _____ No

3. How do you see transport related decisions in Beirut taking place today? Is there anything you would change?

4. Consider the participation framework (attached):

1. How do you see participation in bicycle or transport projects in Beirut taking place today? (Column 1)

2. How do you see participation in bicycle or transport projects in Beirut taking place an ideal process? (Column 2)

(You can think about your responses through examples and counter examples. You can use the questions below to help you with answering question 4.2)

Guiding questions:

1. Objectives: What should participation aim to achieve? Why should participation take place?

2. Power: Where should ultimate decision-making lie and how should power be distributed between different stakeholders? Which stage of Arnstein's ladder does this most resemble?

3. Stakeholders & Homogeneity: Which stakeholders should be involved in planning and public participation?

4. Initiation: Who should be leading the participatory process?

5. Continuity: How should people be involved in the process and for how long?

6. Stage: At what stage or stages should people be involved in the planning process?

7. Information: Would you want to receive information about the planning process throughout a process like this workshop?

8. Methods: What participation methods are most useful to achieve its objectives?

9. Feedback and Outputs: How should input from stakeholders shape the decision-making process? Should/how should different stakeholders remain up to date throughout the planning process?





Appendix F: Interview Template

How public participation is usually done in their experience

1. Describe the process of a project or plan you have put together and how public participation took place (bicycle related or not).

The role of public participation in their work – what is its value?

2. Public participation: how do you see it as currently done?
3. Public participation: how do you think it should be done?

Desirable planning outcomes

4. What are desirable outcomes from a bicycle planning process?
5. Why do we need a bicycle network strategy? Why the focus of cycling?
6. What other alternatives exist?
7. What could the purposes of a bicycle network be? (brainstorm potential objectives)

Perceptions of the outcomes of the workshop

8. Which parts of the workshop do you think are valuable?
9. What bicycle planning knowledge does this bring
10. Is this feedback and information useful to you as a planner?
11. Do you think this could be scaled up and repeated to produce more valuable information
12. What are the limitations of this method? And of public participation with people

Perceptions of the process of the workshop and its value in the transport planning process

13. **Objectives:** What objectives of public participation do you think this workshop meets?
14. **Information:** Do you think the discussion and topics were accessible, easy to understand?
15. **Methods:** Do you think that the process of the workshop is suitable for the topic? What other ways of generating ideas for bicycle network planning would you have liked to see? What other format for the workshop would have been useful?
16. **Stakeholders:** Who do you think should be involved in such an exercise?
17. **Purpose:** What, if any, new possibilities or opportunities do you see in your role as a planner in integrating this kind of feedback and information planning process? V IMP
18. What are the workshop's limitations?
19. How can a workshop like this be developed to be more useful? What are the next steps for such an exercise?

Appendix G: Interviewees, Affiliations and Relevance

Name	Position	Relevance
Practitioners		
(1) Tammam Nakkash	Managing Partner and Transport Systems Expert at TEAM International	Veteran transport planner respected by many. Worked on the Beirut Urban Transport Development Project (UTDP) up to 2000, co-funded by the World Bank and underwent mild public consultation. A strong advocate for public transport and sustainable mobility.
(2) Rami Semaan	Senior Transport Expert, TMS Consult	Developed the soft mobility plan for Beirut in 2013: (PDD) Plan des Déplacements Doux, funded by Ile de France Municipality. The plan contains a proposal for a strategic bicycle network. The plan has not been adopted and there is disagreement over whether it has been approved by the municipality (Seeman says it has but other consultants say otherwise).
(3) Habib Debs	Urban Planner and partner at URBI Architects	URBI developed the first soft mobility link in Beirut “Liason Douce” project, working in parallel with the soft mobility plan for Beirut, the PDD. The plan was funded by an external agency in 2010 (Ile de France) but has not yet received the green light in terms of implementation from the municipality.
(4) Antoine Ayoub	Traffic Engineer at SETS	SETS is currently working on the first 16 km of mostly segregated cycleways in Beirut, sponsored by the biggest bike shop in Lebanon, Beirut by Bike and supported by the municipality.
(5) Hanadi Mucharrafiyeh	Senior Environmental Consultant at ELARD	ESIA consultant for BRT north corridor approved in 2018 and financed by the World Bank. Conducted public meetings with various entities.
Decision-makers		
(6) Hassane Hariri	Architect and Advisor to the Mayor at the Municipality of Beirut	Beirut Municipality does not have a strategic plan for transport but has adopted a number of isolated small bicycle (and other transport related) projects in various parts of the city. Hariri is overseeing the latest bike lanes being designed by SETS.

		The municipality is largely responsible for implementing and funding city level projects within its administrative boundaries.
(7) Elie Helou	Director of Project Development for Transport at the Council for Development and reconstruction (CDR)	The CDR is a post-war reconstruction entity tasked with implementing various types of projects at different scales (by the Council of Ministers), including national or localised transport projects. It is currently planning the first BRT line for Greater Beirut.
Academics and Institutions		
(8) Maya Abou Zeid	Associate professor of Civil and Environmental Engineering with a Transport focus at the American University of Beirut	Approaching transport planning from an academic perspective. Consultant and researcher on multiple government led projects
(9) Zaher Massaad	Coordinator at the Association of Transport Engineers at the Order of Engineers and Architects, Traffic Engineer at Team International.	The OEA is the official body representing engineers and architects and plays a role in raising issues, education and furthering the field, as well as the potential to improve policy.
(10) Marc Haddad	Co-Founder of TRACS NGO and associate professor at the Lebanese American University	TRACS is a newly formed coalition of selected transport related NGOs whose aim is to develop a sustainable transport strategy for Lebanon. The coalition is politically connected and advancing select transport projects, and also wants to work on a public participation law.
(11) Vahakn Kabakian	Climate change advisor at the Ministry of Environment and UNDP Lebanon	International Institutions are pushing for more transparency and public involvement in decision-making.

Interviews could not be obtained from Jama Itani, the Mayor of Beirut or from Abdul Hafiz Kayssi, the director General of Land and Maritime Transport at Ministry of Public Works and Transport.

Risk Assessment

RISK ASSESSMENT FORM FIELD / LOCATION WORK



The Approved Code of Practice - Management of Fieldwork should be referred to when completing this form
<http://www.ucl.ac.uk/estates/safetynet/guidance/fieldwork/acop.pdf>

DEPARTMENT/SECTION BARTLETT SCHOOL OF PLANNING

LOCATION(S) BEIRUT

PERSONS COVERED BY THE RISK ASSESSMENT Zeina Hawa

BRIEF DESCRIPTION OF FIELDWORK Conducting a participatory workshop on bicycle planning. Interviewing transport practitioners and municipality representatives.

Consider, in turn, each hazard (white on black). If **NO** hazard exists select **NO** and move to next hazard section. If a hazard does exist select **YES** and assess the risks that could arise from that hazard in the risk assessment box. **Where risks are identified that are not adequately controlled they must be brought to the attention of your Departmental Management who should put temporary control measures in place or stop the work. Detail such risks in the final section.**

ENVIRONMENT

e.g. location, climate, terrain, neighbourhood, in outside organisations, pollution, animals.

The environment always represents a safety hazard. Use space below to identify and assess any risks associated with this hazard

Examples of risk: adverse weather, illness, hypothermia, assault, getting lost.
Is the risk high / medium / low ?

Low

CONTROL MEASURES

Indicate which procedures are in place to control the identified risk

- work abroad incorporates Foreign Office advice
- participants have been trained and given all necessary information
- only accredited centres are used for rural field work
- participants will wear appropriate clothing and footwear for the specified environment
- trained leaders accompany the trip
- refuge is available
- work in outside organisations is subject to their having satisfactory H&S procedures in place
- OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

Being familiar with the context, from the city

EMERGENCIES

e.g. fire, accidents

Where emergencies may arise use space below to identify and assess any risks

Examples of risk: loss of property, loss of life

violence, assault or robbery
Low

CONTROL MEASURES

Indicate which procedures are in place to control the identified risk

- participants have registered with LOCATE at <http://www.fco.gov.uk/en/travel-and-living-abroad/>
- fire fighting equipment is carried on the trip and participants know how to use it
- contact numbers for emergency services are known to all participants
- participants have means of contacting emergency services
- participants have been trained and given all necessary information
- a plan for rescue has been formulated, all parties understand the procedure
- the plan for rescue /emergency has a reciprocal element
- OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

EQUIPMENT

Is equipment used?

No

If 'No' move to next hazard

If 'Yes' use space below to identify and assess any risks

e.g. clothing, outboard motors.

Examples of risk: inappropriate, failure, insufficient training to use or repair, injury. Is the risk high / medium / low ?

CONTROL MEASURES

Indicate which procedures are in place to control the identified risk

- the departmental written Arrangement for equipment is followed
- participants have been provided with any necessary equipment appropriate for the work
- all equipment has been inspected, before issue, by a competent person
- all users have been advised of correct use
- special equipment is only issued to persons trained in its use by a competent person
- OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

N/A

LONE WORKING

Is lone working a possibility?

Yes

If 'No' move to next hazard

If 'Yes' use space below to identify and assess any risks

e.g. alone or in isolation lone interviews.

Examples of risk: difficult to summon help. Is the risk high / medium / low?

difficult to summon help, working in a secluded area

CONTROL MEASURES

Indicate which procedures are in place to control the identified risk

- the departmental written Arrangement for lone/out of hours working for field work is followed
- lone or isolated working is not allowed
- location, route and expected time of return of lone workers is logged daily before work commences
- all workers have the means of raising an alarm in the event of an emergency, e.g. phone, flare, whistle
- all workers are fully familiar with emergency procedures
- OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

working only during the day, avoiding secluded areas, not working alone in difficult areas

ILL HEALTH

The possibility of ill health always represents a safety hazard. Use space below to identify and assess any risks associated with this Hazard.

e.g. accident, illness, personal attack, special personal considerations or vulnerabilities.

Examples of risk: injury, asthma, allergies. Is the risk high / medium / low?

Low

CONTROL MEASURES Indicate which procedures are in place to control the identified risk

- an appropriate number of trained first-aiders and first aid kits are present on the field trip
- all participants have had the necessary inoculations/ carry appropriate prophylactics
- participants have been advised of the physical demands of the trip and are deemed to be physically suited
- participants have been adequate advice on harmful plants, animals and substances they may encounter
- participants who require medication have advised the leader of this and carry sufficient medication for their needs
- OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

TRANSPORT

Will transport be required

NO

YES

Move to next hazard

Use space below to identify and assess any risks

e.g. hired vehicles

Examples of risk: accidents arising from lack of maintenance, suitability or training

Is the risk high / medium / low?

No external transport is required

CONTROL MEASURES Indicate which procedures are in place to control the identified risk

- only public transport will be used
- the vehicle will be hired from a reputable supplier
- transport must be properly maintained in compliance with relevant national regulations
- drivers comply with UCL Policy on Drivers http://www.ucl.ac.uk/hr/docs/college_drivers.php
- drivers have been trained and hold the appropriate licence
- there will be more than one driver to prevent driver/operator fatigue, and there will be adequate rest periods
- sufficient spare parts carried to meet foreseeable emergencies
- OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

own transport arranged (cycling)

DEALING WITH THE PUBLIC

Will people be dealing with public

Yes

If 'No' move to next hazard

If 'Yes' use space below to identify and assess any risks

e.g. interviews, observing

Examples of risk: personal attack, causing offence, being misinterpreted. Is the risk high / medium / low?

CONTROL MEASURES Indicate which procedures are in place to control the identified risk

- all participants are trained in interviewing techniques
- interviews are contracted out to a third party
- advice and support from local groups has been sought
- participants do not wear clothes that might cause offence or attract unwanted attention
- interviews are conducted at neutral locations or where neither party could be at risk
- OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

Participants in the workshop will be recruited through wider personal networks

75

WORKING ON OR NEAR WATER

Will people work on or near water?

No

If 'No' move to next hazard
If 'Yes' use space below to identify and assess any risks*e.g. rivers, marshland, sea.*

Examples of risk: drowning, malaria, hepatitis A, parasites. Is the risk high / medium / low?

CONTROL MEASURES

Indicate which procedures are in place to control the identified risk

- lone working on or near water will not be allowed
- coastguard information is understood; all work takes place outside those times when tides could prove a threat
- all participants are competent swimmers
- participants always wear adequate protective equipment, e.g. buoyancy aids, wellingtons
- boat is operated by a competent person
- all boats are equipped with an alternative means of propulsion e.g. oars
- participants have received any appropriate inoculations
- OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

MANUAL HANDLING (MH)

Do MH activities take place?

No

If 'No' move to next hazard
If 'Yes' use space below to identify and assess any risks*e.g. lifting, carrying, moving large or heavy equipment, physical unsuitability for the task.*

Examples of risk: strain, cuts, broken bones. Is the risk high / medium / low?

CONTROL MEASURES

Indicate which procedures are in place to control the identified risk

- the departmental written Arrangement for MH is followed
- the supervisor has attended a MH risk assessment course
- all tasks are within reasonable limits, persons physically unsuited to the MH task are prohibited from such activities
- all persons performing MH tasks are adequately trained
- equipment components will be assembled on site
- any MH task outside the competence of staff will be done by contractors
- OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

SUBSTANCES

Will participants work with substances

No

If 'No' move to next hazard
If 'Yes' use space below to identify and assess any risks

e.g. plants, chemical, biohazard, waste

Examples of risk: ill health - poisoning, infection, illness, burns, cuts. Is the risk high / medium / low?

CONTROL MEASURES

Indicate which procedures are in place to control the identified risk

- the departmental written Arrangements for dealing with hazardous substances and waste are followed
- all participants are given information, training and protective equipment for hazardous substances they may encounter
- participants who have allergies have advised the leader of this and carry sufficient medication for their needs
- waste is disposed of in a responsible manner
- suitable containers are provided for hazardous waste
- OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

OTHER HAZARDS

Have you identified any other hazards?

No

If 'No' move to next section
If 'Yes' use space below to identify and assess any risks

i.e. any other hazards must be noted and assessed here.

Hazard:

Risk: is the risk

CONTROL MEASURES

Give details of control measures in place to control the identified risks

Have you identified any risks that are not adequately controlled?

NO

Move to Declaration

YES

Use space below to identify the risk and what action was taken

Is this project subject to the UCL requirements on the ethics of Non-NHS Human Research?

Yes

If yes, please state your Project ID Number

For more information, please refer to: <http://ethics.grad.ucl.ac.uk/>

DECLARATION

The work will be reassessed whenever there is a significant change and at least annually. Those participating in the work have read the assessment.

Select the appropriate statement:

- I the undersigned have assessed the activity and associated risks and declare that there is no significant residual risk
- I the undersigned have assessed the activity and associated risks and declare that the risk will be controlled by the method(s) listed above

NAME OF SUPERVISOR

SIGNATURE OF SUPERVISOR

DATE

Blank Consent Form (Interviews)



Participant Consent Form for Adults

YOU WILL BE GIVEN A COPY OF THE INFORMATION SHEET

Title of Study:

Co-designing cycling Networks in Beirut

Department:

The Bartlett School of Planning

Name and Contact Details of the Researcher:

Zeina Hawa
MSc Transport and City Planning
Bartlett School of Planning
University College London
zeina.hawa.10@ucl.ac.uk
+9613477241

Name and Contact Details of the Supervisor:

Dr. Astrid Wood
School of Geography, Politics and Society

School of Geography, Politics and Society
Newcastle University
astrid.wood@ncl.ac.uk

Please tick the box on the left for every numbered item you consent to:

		Tick Box
1	*I confirm that I have read and understood the Information Sheet for the above study. I have had an opportunity to consider the information and what will be expected of me. I have also had the opportunity to ask questions which have been answered to my satisfaction and would like to take part in a personal interview	
2	*I understand that I will be able to withdraw my data up to 2 weeks after the interview.	
3	*I consent to participate in the study. I understand that my interview will be used for the purposes explained to me. I understand that the information I provide will be handled in accordance with all data protection legislation.	
4	Use of the information for this project only I understand that my data gathered in this study will be stored securely. Anonymity is optional for this research. Please select from the following 3 options: a. I agree for my real name and role/affiliation to be used in connection with any words I have said or information I have passed on. b. I request that my comments are presented anonymously but give permission to connect my role/affiliation with my comments (but not the title of my position). c. I request that my comments are presented anonymously with no mention of my role/affiliation.	
5	*I understand that my information may be subject to review by responsible individuals from the University for monitoring and audit purposes.	
6	*I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason. I understand that if I decide to withdraw, any personal data I have provided up to that point will be deleted unless I agree otherwise.	
7	I understand the direct/indirect benefits of participating.	
8	I understand that the data will not be made available to any commercial organisations but is solely the responsibility of the researcher(s) undertaking this study.	
9	I understand that I will not benefit financially from this study or from any possible outcome it may result in in the future.	
10	I understand that the information I have submitted will be used as part of a dissertation and I wish to receive a copy of it. Yes/No	
11	I hereby confirm that I understand the inclusion criteria as detailed in the Information Sheet and explained to me by the researcher.	
12	I have informed the researcher of any other research in which I am currently involved or have been involved in during the past 12 months.	
13	I am aware of who I should contact if I wish to lodge a complaint.	
14	I voluntarily agree to take part in this study.	

Name of participant

Date

Signature

Participant Information Sheet for Adults

YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET

Title of Study:

Co-designing cycling Networks in Beirut

Department:

The Bartlett School of Planning

Name and Contact Details of the Researcher:

Zeina Hawa
MSc Transport and City Planning
Bartlett School of Planning
University College London
zeina.hawa.10@ucl.ac.uk
+9613477241

Name and Contact Details of the Supervisor:

Dr. Astrid Wood
School of Geography, Politics and Sociology
Newcastle University
astrid.wood@ncl.ac.uk

You are being invited to take part in a postgraduate research project for the MSc Transport and City Planning programme at University College London (UCL). This is a voluntary participation and before deciding, it is important to understand why the research is being done and what participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Do ask if there is anything that is not clear or if you would like more information. Take time to decide whether you wish to take part. Thank you.

1. The purpose of the project

This project will explore public participation in transport planning, looking at its role in bicycle network planning in Beirut. By making space for a participatory process for bicycle network planning, relying on the experience and input from less experienced cyclists in Beirut, the

research examines the impact of a collaborative planning process on the outcomes of a strategic cycling network, and whether this approach to public participation can enrich the planning process for different stakeholders. Perspectives of the process and outcomes of public participation will be discussed with a variety of stakeholders.

2. Why have I been chosen?

Your contribution as a practitioner and thinker in the field of transport and urban planning is very valuable, and your perspective will help understand the background around public participation and the transport planning process in Lebanon, as well as how you see collaborative planning for bicycle network design contribute to the outcomes and process of planning from your own experience.

3. Do I have to take part?

Your participation is entirely voluntary. If you do decide to take part, you will be given this information sheet to keep (and a consent form to sign). You can withdraw at any time without giving a reason. If you decide to withdraw, you will be asked by the researcher what actions should be taken regarding the information you have provided.

4. What will happen to me if I take part?

You will be asked to take part in a one-to-one interview with the researcher which will last around 30 minutes. You will be asked a pre-planned set of questions, but additional topics of conversation may arise throughout the interview and be discussed.

5. Will I be recorded and how will the recorded media be used?

With your permission, the researcher would like to obtain an audio recording of the interview. The sole purpose of the recording is to make sure the researcher correctly cites the interviewee and properly conveys their idea and narrative.

If audio recording is undesirable, participation can still take place and the interview will be recorded on a notebook or laptop.

6. What are the possible disadvantages and risks of taking part?

There are no foreseeable disadvantages to your participation. The research conducted is part of a small academic study. No sensitive questions will be asked however, should you feel at any moment uncomfortable please let the researcher know immediately.

7. What are the possible benefits of taking part?

Whilst there are no immediate benefits for those people participating in the project, the hope is that this research will push the discussion around the role of public participation in transport projects in Lebanon.

8. What if something goes wrong?

Should you wish to raise a complaint, you may contact the researcher's supervisor (astrid.wood@ncl.ac.uk). However, if you feel like your complaint has not been handled to your

satisfaction, you can contact the Chair of the UCL Research Ethics Committee – ethics@ucl.ac.uk.

9. Limits to confidentiality

Please note that assurances on confidentiality will be strictly adhered to unless evidence of wrongdoing or potential harm is uncovered. In such cases, the University may be obliged to contact relevant statutory bodies/agencies.

10. What will happen to the results of the research project?

The results will be used for the researcher's dissertation project at University College London (UCL), which can possibly be published in academic journals if the dissertation is selected. Furthermore, the data will be stored and encrypted on the researcher's computer.

11. Data Protection Privacy Notice

The data controller for this project will be University College London (UCL). The UCL Data Protection Office provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk. [UCL's Data Protection Officer is Lee Shailer and he can also be contacted at data-protection@ucl.ac.uk.](#)

Your personal data will be processed for the purposes outlined in this notice. The legal basis that would be used to process your personal data will be the provision of your consent. You can

provide your consent for the use of your personal data in this project by completing the consent form that has been provided to you.

If you are concerned about how your personal data is being processed, please contact UCL in the first instance at data-protection@ucl.ac.uk. [If you remain unsatisfied](#), you may wish to contact the Information Commissioner's Office (ICO). Contact details, and details of data subject rights, are available on the ICO website at: <https://ico.org.uk/for-organisations/data-protection-reform/overview-of-the-gdpr/individuals-rights/>

Thank you for reading this information sheet and for considering taking part in this research study.