The creation of the WASH space

The role and perception of women on the changes in water, sanitation and hygiene (WASH) in Za'atari refugee camp, Jordan



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Water Systems and Global Change Group



Frontpage image: A private water storage tank in Za'atari refugee camp, picture made by author

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The creation of the WASH space
Master Thesis Water Systems and Global Change Group in partial fulfillment of the degree of Master of Science in International Land and Water Management at Wageningen University, the Netherlands
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June 2019
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Preface and acknowledgements

After months of preparation and multiple tries to receive official permission to conduct my research in Za'atari, I was finally granted access for one month from January 15th, 2019. When I arrived in Jordan and visited the UNICEF country Office in Amman I was told that 99.9% of all requests to conduct a MSc or PhD research with fieldwork in Za'atari are declined. Many researchers want to go to Za'atari since the camp is one of the most famous refugee camps in the world, especially interesting because of the high level of facilities and particularly recognised as a safe place. The camp management is very strict in who they let in: they don't want the people living in Za'atari to be seen as objects to be researched but as human beings trying to make most of their life while having fled from horrible circumstances.

Za'atari refugee camp is often portrayed by humanitarian workers as 'the five-star camp'. Yes, the camp has extensive facilities and when walking through the camp daily life seems relatively normal. However, I doubt whether all these researchers who want to conduct a research in Za'atari or the humanitarians working in the camp are able to live in this 'five-star' entity. Listening to the stories of the women about their lives in Za'atari taught me that it is not easy to keep their heads up and continue to provide their families with the best care. Women told me: We women won't give up! [interview 1, 3, 6, 7]. And although it is incomparable, I am happy I did not give up to get access to Za'atari. The women I met in the camp inspired me and I will try my best to communicate their stories to the humanitarian organizations and the scientific discussion on how to look at refugee camps. I hope the insights I gained from doing this research will indeed be relevant for UNICEF and other humanitarian organizations. Maybe these insights can even improve future programming and thereby somehow positively influence the life of (female) Syrian refugees living in Za'atari. I want to thank the humanitarian organizations for providing the inhabitants of Za'atari with the assistance.

I am extremely grateful I was one of the lucky researchers who gained access to Za'atari. This research including fieldwork could not have been conducted without the help and support of many people, notably Jessica Chaix, Abrassac Kamara, Benjamin Smith, Roelof Wentzel, Mohamed El Amin, Tamam Khalil Adi, Fatema Nabhani, Mohammad Abu Quty and Mohannad Abu Siam. I want to thank my friends and family for supporting me in the process, notably Lilian, Brian, Trude, Hilde, Wilco, Roland and David. Furthermore, I want to thank Erik van Slobbe for supervising, Bram Jansen for advising me and Bert Bruins and Didi Stoltenborg for allowing me to conduct this research and Ingrid Hijman and Esther Heemskerk for allowing me to temporary leave my job for my fieldwork.

Moreover, I want to thank all experts (both in the Netherlands and Jordan) who took time for me and all humanitarian staff who helped me with the logistics of getting into Za'atari on a daily base.

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I want to give a special thanks to Saskia Werners for supervising and believing in me, Raina Zantout for inspiring and encouraging me, and all the women living in Za'atari who told me their stories to trust me.

And most of all, I want to thank all the women who are taking care of their families in Za'atari. I admire you for your perseverance and your ability to cope. Thank you for inspiring me.

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Abstract

Since Za'atari refugee camp was established in 2012 in Jordan, the living environment changed from a small collection of tents (basically an empty 'space') into an urban-like settlement. However, as Dalal (2015, p. 267) states: 'The emergence of structures and connections through which empty spaces such as camps develop into cities is mostly neglected'. The water, sanitation and hygiene (WASH) facilities also changed tremendously over the years from communal to private and from trucking water and wastewater to being connected to networks. These changes are influenced by (female) refugees. And women living in Za'atari refugee camp are influenced by the changes. Therefore the research question of this thesis is 'How do women interact with WASH as part of the living environment in Za'atari refugee camp, Jordan, which is formally managed by the host country and humanitarian organizations?', which is answered from the perspective of women living in Za'atari by using the concept 'the creation of space' to analyse interviews conducted with women living in Za'atari. The concept suggests that space is more than just a place; it is a combination of spatial practices (perceived space), the planned or imagined ideas of how the place should be according to the managers and planners (conceived space) and how inhabitants make sense or symbolic use of a place (lived space).

Firstly the perceived space: How did women's daily routines related to WASH develop? The daily tasks changed from making considerate decisions on the usage of water due to the difficulties of getting the water (including carrying the water from the communal water distribution point and fights between neighbours) to being able to just open the tap when water is needed. Although the maintenance is now a personal responsibility, the women safe time and can make decisions on how to use the water with more certainty about the availability. Furthermore, there is no need to accompany each other and kids anymore when walking to the public facilities since the toilet and bathrooms are inside the caravans and are connected to the network. Also the wastewater is not collected in pits outside anymore meaning the nuisance decreased. All interviewed women are satisfied with the current status of the facilities. It is a huge improvement and compared to the 'critical situation' related to WASH before.

Secondly the conceived space: What agency do women have when it comes to changing WASH? Besides the complaints of women about the issues they faced with the communal facilities to the humanitarian organizations through clubs and community mobilizers, women informed their husbands and other male family members about their needs to have private facilities. Make-shift facilities were made by men living in the camp, but also truck drivers were bribed, directly changing

the maps and planning of the humanitarian organizations. These organizations responded by installing networks and help refugees making private facilities, influenced by the negotiations in clubs and the input of community mobilizers (both male and female).

And thirdly the lived space: How do women make symbolic use of WASH? Foremost, cultural sensibilities, unequal access to facilities and gender-differentiated power relations influenced the dignity and identity of women living in Za'atari. From being forced into practices to having possibilities to make decisions about the usage of WASH facilities improved the sense of dignity and strength of women's identity while living in Za'atari. Women themselves are aware they play an important role in the camp and in creating their living environment, but they see it as their normal task as mothers.

So, Za'atari refugee camps is as a place where rights and obligations of women are adjusted, neglected and negotiated through their everyday interactions related to WASH. The WASH space is created in interaction with the women using WASH: the women influenced WASH by their daily routines, the changes made in the WASH facilities and the negotiations with the humanitarian organizations. Because of the changes in WASH again the daily routines related to WASH changed. The sense of identity and dignity of women improved due to the changes and their agency to change the WASH facilities. All aspects mentioned before influence again how women relate to WASH: the WASH space is continuously shaped in interaction with women.

Keywords: Za'atari, refugee camp, WASH, water, sanitation, women, gender, creation of space, Jordan

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List of abbreviations and terms

ACTED – Agency for Technical Cooperation and Development

Camp management – Humanitarian organizations responsible for Za'atari and Jordanian government

REACH – Joint initiative of IMPACT Initiatives, ACTED and UNOSAT

SRAD – Syrian Refugees Affairs Dictorate (Camp Police, representing Jordanian interests)

UNHCR – United Nations High Commissioner for Refugees

UNICEF - United Nations Children's Fund

WASH – Water, Sanitation & Hygiene

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1. Introduction

The United Nations High Commissioner for Refugees (UNHCR) estimates that 60 million people worldwide are displaced (Dhesi et al., 2017), mainly situated in the global south(Cuellar, 2006). Many people live in refugee- or internally displaced people camps, see box 1 (Cuellar, 2006; Dhesi et al., 2017; Kagan, 2011). Camps represent a compromise that limits the rights and freedoms of refugees (UNHCR 2014). Nevertheless, as the average time a refugee camp exists is over 15 years (Dalal, 2015; Ledwith, 2014), the inhabitants of the camps often try to make most of their situation by transforming the camps to fit their lifestyles and the settlements ascend to be with a more permanent character and similar to fully fledged cities (Buonocore & Cutini, 2017). As Jansen states (Jansen, 2016, p. 163): 'Although presented as seclusion sites, [refugee camps] started as functional infrastructure for refuge, over time, protracted refugee camps gain a socio-economic life of their own'. Refugee camps are meant to be a temporary solution (UNHCR, 2014) and host-countries are often not in favour of improving the (living conditions in the) camps as they do not want the camps to become a permanent settlement (B. Jansen, personal communication, August 18th 2018). This inevitably leads to conflicts between inhabitants and formal camp management about the environment and infrastructure in the camp. One important aspect of both basic emergency aid and daily life in more self-reliant city-like settings, is access to clean (drinking) water and sanitation (in development programs named Water, Sanitation and Hygiene (WASH)) (The Sphere Project, 2011).

Za'atari refugee camp is located on Jordanian armed forces-owned land in the Mafraq Governate in the Hashemite Kingdom of Jordan, close to the northern border with Syria (see figure 1 & 2). It is one of the most notorious camps, due to the anger and hostility habitants expressed towards the authoritarian nature of the camp. The people felt like they were inmates with poor living conditions (little available food, poor water quality and floods)(Buonocore et al., 2017; Ledwith, 2014). However, officially the minimum basic service provision standards were constantly met in Za'atari (Tran, 2013). The camp is officially established in July



Figure 1. Location of Za'atari refugee camp. Map made by Hassan (2017)

2012 (ACTED et al., 2013) and since then Za'atari camp has changed from a small collection of tents into an urban-like settlement, see figure 2, induced by the coping mechanism, resilience and the

active pursuit of autonomy of the refugees, including the market economy (Buonocore et al., 2017). Still 77.003 people reside in Za'atari refugee camp, divided over 12 districts, see figure 2 (UNHCR, 2019). In Za'atari some streets are paved, there is working electricity infrastructure, there are green areas and some self-governance (Jansen, 2016; Ledwith, 2014). Moreover, the WASH facilities have changed tremendously over the years. Information is openly available on the infrastructural and managerial changes in WASH and in reports of NGO's governing Za'atari several mentions are made about refugees changing WASH facilities (ACTED et al., 2014; REACH; UNICEF, 2014b). However, the



Figure 2. Map of Za'atari refugee camp. Size of area: 3 km x 1.85 km. Picture adapted from Google Maps Imagenary 2019 DigitalGlobe ORION-ME

methods used by refugees to induce changes in WASH are not clear.

Inhabitants of refugee camps are usually portrayed as bodies which need to be protected by the (host) state and humanitarian organizations. However, refugees have strategies and tactics incorporated in their everyday lives to claim rights (Sigona, 2015) and herewith also influence their living environment in the camp. The ideas, norms and values about how the camp should be may differ between the formal camp management and the refugees inhabiting the camp. As Dalal (2015, p. 267) states: 'The emergence of structures and connections through which empty spaces such as camps develop into cities is mostly neglected.' So, we lack knowledge on the emergence of social

Box 1. Refugee camps

A camp is a site with a spatially defined location with sturdy boundaries and detailed planning and control where 'inmates' are supposed to stay temporary (Minca, 2015; Turner, 2015). UNHCR (United Nations High Commissioner for Refugees) is the main humanitarian organization in refugee responses and reports about 6 million people live in refugee camps (UNHCR, 2018). UNHCR considers protracted camps (which exist over 5 years and people have no sight on going back home) as a last resort when no other options are feasible (UNHCR, 2014). In refugee camps refugees are provided with humanitarian aid until durable solutions are made possible (Dalal, 2015, p. 263). Basic humanitarian aid in a refugee camp, according to the website of UNHCR (UNHCR, n.d.-a) consist of the following:

'A properly-laid-out camp protects the environment and helps prevent fires and outbreak of disease. In a well-designed camp, displaced people do not have to walk too far to get food, water or medical care. Water points and latrines are well-lit and close to homes so that girls and women, especially, will not be exposed to danger'

The core legal principles that have most bearing on the welfare of those affected by disaster or conflict are the right to life with dignity, the right to receive humanitarian assistance and the right to protection and security, which are part of the Humanitarian Charter (The Sphere Project, 2011), are incorporated in the basic humanitarian aid in the camps as well. In the above stated definition of basic humanitarian aid in camps by UNHCR a big focus is on water, sanitation and

structures and connections (power relations) and the influence on the living environment in camps. In other words: how is the living environment negotiated by refugees living in a camp which is formally managed by the host country and humanitarian organizations?

Both in research on and governance of the refugee camps, women are often portrayed as vulnerable and placed in the same category as children (Hilhorst & Jansen, 2010). Women in Za'atari are generally responsible for caretaking and cleaning and therefore highly influenced by the availability of water (UNWomen, 2018). Moreover, women and girls experience sanitation needs differently from men and powerful taboos and stigmas connected to defecation and urination create secrecy, shame and disgust and women are unequally affected, especially in patriarchal societies (Sweetman & Medland, 2017).



Figure 3. Za'atari refugee camp. Picture made by author

1.1 Knowledge gap, research objectives and research questions

The goal of this thesis is to understand the role of women in the negotiation process of shaping the living environment in refugee camps through WASH. This includes both their perception on their role in the process of change in WASH and how the changes are influencing their experience of living in the camp. A lack of appropriate water and sanitation facilities leads to health concerns and influences the dignity of people, especially of women (UNICEF, 2016). In WASH the programmes are in general relatively gender sensitive: women and men have different practices related to using WASH facilities and are often not allowed, by culture, to share facilities. However, in the evaluation of WASH projects the surveys are often conducted with predominately men or, if the response is 50-50 male-female, often there is no segregation in the answers in the analysis (e.g. REACH; UNICEF, 2014a; REACH & UNICEF, 2017).

So, to summarize: the objective of the research is to understand how female Syrian refugees living in Za'atari camp influenced the WASH facilities which were initially implemented by formal camp management and how the changes which occurred in WASH influenced the perception of women on WASH. The research question I aim to answer in this thesis therefore is

'How do women interact with WASH as part of the living environment in Za'atari refugee camp, Jordan, which is formally managed by the host country and humanitarian organizations?'

I used the concept of the creation of space by Lefebvre (Lefebvre, 1991; Lefebvre & Enders, 1977) to understand how WASH as part of the living environment of refugee camp Za'atari is shaped: it suggests that space is more than just a place, it is a combination of the physical constructions and usage (perceived space), the planned or imagined ideas of how the place should be according to the managers and planners (conceived space) and the sense or symbolic use the users or inhabitants make of a place (lived space)(Lefebvre, 1991). All these aspects are interrelated (Lefebvre, 1991).

Box 2. Gender and space

Gender is of significance to constructions of space (Massey, 1994), especially in cultures where gender role divisions are apparent like in Za'atari where Syrians came with their patriarchal livelihoods (OXFAM, 2018). Men and women are treated differently as refugees and men and women have different perspectives on how women are and should be treated (Humanitarian Academy, 2019). In Za'atari women are for example traditionally responsible to manage the household's WASH needs (Inter-Agency Task Force, 2016; UNWomen, 2018). This role division influences the role on the creation of space. On the other hand, space is important in the construction of gender relations and gender relations vary over space (Massey, 1994). Understanding how space is created therefore helps to understand gender relations, which is one of the concerns of UNHCR (Jabbar et al., 2015), especially since the Syrian civil war left many women without their husbands: one out of four families is female-headed with the women being the sole responsible for the care of their children (Jabbar et al., 2015).

In all the aspects of space mentioned above, negotiation processes take place. For example, people do not use the place how the planners and managers imagined, physical constructions can be demolished (or adapted) and the sense the users make of a space can change. Hence, the sub-research questions of this thesis are:

- 1: What infrastructural and planning related changes occurred in WASH in Za'atari?
- 2: How did female's daily routines related to WASH develop?
- 3: What agency do women have when it comes to changing WASH?
- 4: How do women make symbolic use of WASH?

The role of the female inhabitants in the changes in WASH gives insight in how they like the WASH facilities to be and expose a part of gender roles in the camp, see box 2.

1.2 How to read this thesis?

This thesis is constructed in line with the guidelines of a MSc International Land and Water Management thesis at Wageningen University & Research at the Water Systems and Global Change Group (WSG). The thesis started off with an introduction in which I introduced both the scientific context and the case study area (Za'atari refugee camp in Jordan), including the knowledge gap and the research question. In the chapter 2 I elaborate on the theoretical framework and the concepts I used. Moreover, the interpretation of the concepts and theories used are explained in relation to the topic of this thesis. In chapter 3 (methods) I describe how I conducted the research, including scoping and literature study, fieldwork and the data analysis. In chapter 4, I give a summary on the changes which occurred in WASH in Za'atari which helps clarifying the research contexts. Chapter 5 is the actual analysis, divided over the three aspects of the creation of space: the perceived, conceived space, and the lived space. In this chapter I dive into the specific aspects of the three parts of the creation of space and synthesize the three different aspects. In chapter 6 I present my discussion. This consists of two parts: a critical analysis of my results, especially in relation to other scientific literature and a description of the main decisions I made influencing the outcomes of my research. After I state the conclusions and recommendations in chapter 7. In the Annex I present a summary of my interview guide.

2. Theoretical and conceptual framework

2.1 Refugee camp as space

The living environment of the refugees living in Za'atari refugee camp is, like any other place, more than just a physical place: activities are undertaken, life is governed and interactions between the environment and people occur. Therefore, in this research I approach the camp as a 'space' instead of a 'place'. Space is the dimension of multiplicity and is fundamental of social and political questions as space influences how we are going to live together (Massey, 2013). According to Lefebvre 'space does not exist in itself, but is produced' and stands for the synchronic order of social reality (Goonewardena et al., 2008, p. 28). Space is not merely a natural or material factor, but a social product and thus space is both a result and a precondition of the production of society (Goonewardena et al., 2008; Zieleniec, 2018). Space is the product of our relations with each other. And all those relations are filled with power: the distribution of relations mirrors the power relations within society (Massey, 2013). Space is not just a reflection of those social relations, but also a constitutive and formative force (Grbac, 2013) within the structures and hierarchy of societies (Zieleniec, 2018). Since space is socially produced, it can also be socially modified. Thus, the spatial and the social are mutually shaping forces (Soja, 2009). Space influences how we are living together (Goonewardena et al., 2008; Massey, 2013), including how men and women are living together, see box 2.

2.2 Theoretical framework: The creation of space

Lefebvre (1991) introduced the triad of space. This triad can be used to understand the interplay between the geographical and the social concerning the living environment. Space can be divided in three interconnected dimensions having dynamic relationships: the 'perceived', 'lived' and 'conceived' space (Lefebvre, 1991)(see figure 4).

- The 'perceived space', or 'spatial practices' is the physical space. The routes, networks and patterns. How to be in space, how to navigate in space, how to negotiate relations in space. We need to know space to make sense and function in the world (Zieleniec, 2018). Also the routines of using the space are included in the perceived space, continuously mediating between the bounds of the conceived abstract space of planners and managers and the perceptions of the use of space of the users itself (McCann, 1999).
- The 'conceived' space', or 'representations of space', the planned space. Lefebvre calls this the 'space of scientist, planners, urbanists, technocratic sub-dividers and the social engineers'

(Lefebvre, 1991, p. 38). 'Conceptions of space tend ... towards a system of verbal (and therefore intellectually worked out) signs' (Lefebvre, 1991, p. 39). This space is represented in maps, models and plans and reflects how power creates the space (Zieleniec, 2018). It shapes how we conceptualize ordered space (McCann, 1999) and consequently ideology is inseparable from practice (Lefebvre et al., 1977).

• The 'lived space', or 'spaces of representations', the 'mental' space. This is the space of the users, the inhabitants. It overlays the physical space by making symbolic use of its objects (Lefebvre, 1991). This means we live in and through space made and controlled by others (those in power, able to shape, form and show how to appropriately use space). In this space we have to navigate to make 'sense' and function (Zieleniec, 2018). So, how we experience space, embodying complex symbolisms (Bhimji, 2016).

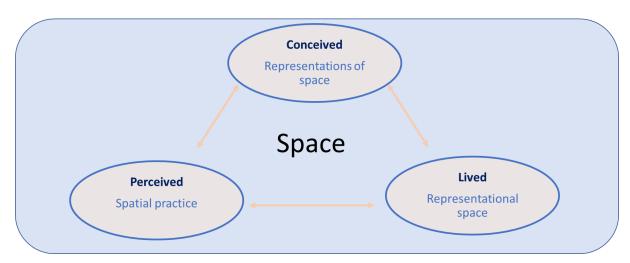


Figure 3. The creation of space. Figure adapted from McCann (1999)

2.3 Conceptual framework

Lefebvre's work can be used to critically focus on how space is made and how it can be remade by and through social practice (Zieleniec, 2018). Since in this thesis the focus is on how women influenced WASH in Za'atari refugee camp, I elaborate on the different aspects of the model which occur particularly in WASH from the perspective of women, see figure 5:

 As part of the 'perceived space' I analyse the daily routines related to WASH by women and how the usage of WASH influenced the changes in WASH. Furthermore, I elaborate on influence of WASH on the relations between neighbours living in Za'atari and the satisfaction of women on the WASH facilities.

- As part of the 'conceived' space', I analyse the negotiations between (female) refugees and
 the humanitarian organizations related to WASH. Also, how these negotiations influenced
 the planning and governance of WASH in Za'atari, including the agency of refugees to adapt
 the infrastructure and communicate their ideas in clubs and through community mobilizers.
- In the 'lived space' I analyse how as part of the symbolic use of WASH female refugees' identity and dignity is influenced. Also I elaborate on what how the interviewed women see their own role in the changes which occurred in WASH in Za'atari refugee camp.

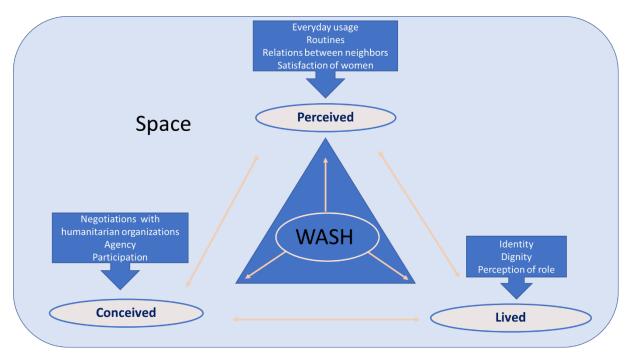


Figure 4. Conceptual framework of this thesis

3. Methods

This chapter offers the methods of both the data collection prior to the fieldwork, including the scoping and literature review and during the fieldwork of one month in Za'atari refugee camp in Jordan. Moreover, how the data is analysed is described. The research is conducted solely with qualitative methods. Throughout the research I used the triadic model of Lefebvre (see chapter 2) on the creation of space. The three pillars (conceived, lived and perceived) are at the basis of the interview questions and helped me defining which available data from NGOs reports was relevant to understand the WASH situation and the role of women in the changes. The chapters of this thesis are structured according to the model as well.

3.1 Scoping and literature review

To understand how I could contribute to the knowledge on gender and WASH in Za'atari refugee camp I first read a lot of reports of humanitarian organizations about the camp available at the UNHCR data portal (https://data2.unhcr.org/en/situations/syria). Next to this I had conversations with experts who worked in Za'atari with WASH (both the facilities itself, the planning and the governance). These expert interviews were only used for my personal general understanding of the situation in the camp and to help me decide which reports are useful for this research. Experts I spoke to are Wilko Koning of Waternet, Bram Janssen of WUR, Hedzer Roodenburg Vermaat and Robert Kruijt who both conducted their MSc thesis in Za'atari, the environmental health consultant Niall Roche, the consultant Raina Zantout of WASH of Life who conducted a gender and WASH analysis in the beginning of 2018 and Ronald van Warmerdam of LogoRep Amsterdam who did many field visits and advised the Jordan government and the partners governing Za'atari about the planning of the camp. Furthermore, I had contact through e-mail with Abrassac Kamara (UNICEF Water, Sanitation and Hygiene Specialist, Jessica Chaix (UNICEF Camps manager and Field Support Specialist), Benjamin Smith (UNICEF WASH Specialist Project Coordinator) and Roelof Wentzel (UNHCR WASH Officer) who informed me about the situation in Za'atari.

With this information I was able to develop a proposal, which was good enough to receive technical assistance from UNICEF, meaning I could start with analysis part 1 while Jessica Chaix (UNICEF Camps manager and Field Support Specialist) and Mohamad El Amin (UNCHR Associate Field Officer) prepared the documents (which are compulsory by the Syrian Refugees Affairs Dictorate (SRAD)) to get access to Za'atari refugee camp.

3.2 Analysis part one

To answer sub research question 1 (What infrastructural and planning related changes occurred in WASH in Za'atari?) I mainly used reports of humanitarian organizations available at the UNHCR data portal and some information from the interviews I had with experts who worked in Za'atari refugee camp which I mentioned in the previous section and conversations I had with humanitarian staff while I was in Za'atari refugee camp, including:

UNICEF:

- Benjamin Smith, WASH Specialist Project Coordinator
- Tamam Khalil Adi, WASH Monitoring Officer
- Fatema Nabhani, Water and Sanitation Project Officer
- Hani Yaghi, Senior WASH engineer
- Aya Kasasbeh, Senior WASH Project Engineer

UNOPS (working for UNICEF):

- Hala Al-Hamawi, Water and Wastewater Networks Engineer
- Shahira, WASH hotline manager

OXFAM:

- Mohammad Abu Quty, Senior Public Health Engineer Officer
- Mohannad Abu Siam, Community Mobilization Officer Water Specialist

UNHCR:

- Roelof Wentzel, WASH Officer
- Anas Abu Khalaf, WASH Associate
- Dareen Al Qaseer, Senior Field Assistant
- Haneen Wahbeh, Senior Field Assistant
- Mohamad El Amin, Associate Field Officer

Also, I attended the Monthly WASH Coordination meeting in Za'atari Basecamp on the 27th of January 2019, the monthly WASH Coordination Group meeting on 19th of February at the UNICEF country office in Amman and the 'After-WASH social event' organised by Ralph Bland, Regional Programme Manager for Water and Sanitation of the Swiss Embassy on the 6th of February 2019. At all these events current aspects of WASH in Za'atari were discussed. Furthermore, I had several informal meetings with WASH, gender and Za'atari experts in Amman including:

- Raina Zantout (Relief & Development Practitioner at WASH for Life)
- Khaled Abdel-Fadil (Protection Adviser at World Food Programme)

The information from the reports and the expert interviewed is triangulated (where possible) by the interviews in the field and my own observation during the fieldwork.

3.3 Fieldwork

To answer the other sub research questions (How did female's daily routines related to WASH develop? What agency do women have when it comes to changing WASH? How do women make symbolic use of WASH?) I did fieldwork in Za'atari refugee camp between the 15th of January and the 14th of February 2019. I combined the methods adapted 'life history interviews' with female camp inhabitants with observations and home visits. I worked with female translators: Ala'a Mohammed Al Zamel from Mafraq (MA student English Literature with a BA in translating) attended most interviews and came along to some home-visits. I also took some interviews with Eman¹ (27-year-old Syrian mother of four kids living in Za'atari). Furthermore, at some home visits and tours through the camp I went with UNICEF, UNHCR or OXFAM staff who translated for me. Voluntary participation, anonymity, and on-going consent were discussed with all interviewed and visited women.

3.3.1 (Adapted) life history interviews

To understand the process of change of the WASH facilities in the camp, I tried to conduct life history interviews with female inhabitants of Za'atari. Life history interviews are in-depth interviews, a qualitative method of data collection that makes it possible to draw narratives of people's lives through questions and answers (Davies et al., 2018). The interviewees can provide a subjective account of their lives in a certain period, described in their own words and across their own personal timelines. In these life stories important events (which can be turning points) will be identified and can give insights in behaviour and why certain decisions were made (Davies et al., 2018).

However, due to the restrictions I had because of both the security of the interviewees and my own safety I had to adapt my strategy. I decided to mix semi-structured interviews with life history interviews. I tried to see my interviewees as least two times. I started the first interviews with most of my interviewees with general talk about their life (history). Their families, their marriages, their education and their flee to Jordan were often mentioned. In the second meeting I did semi structured interviews with open-ended questions and I allowed for discussions to happen. Rather than asking all questions separately by a formalized list of questions, I made use an interview guideline (see annex 1) which I used to 'tick off' all the questions I already had the answer on.

I did 13 full interviews with refugee women living in Za'atari and I spoke with 7 other ladies about parts of the research (the live history part, a house visit or only the interview part related to their WASH facilities). Most of them are female headed households. Some came with their husbands but they either left or passed away in the past few years, the others came without their husband. All of them have children, but in different age categories from 4-year olds till 30-year olds. They all came in

¹ I will not mention her last name to ensure her privacy

Za'atari between 2012 and 2014 and experienced the changes first-hand. I was not allowed due to cultural considerations to record the interviews. Therefore, I made extensive notes and immediately after the interviews I typed out the full interview together with my translators, aiming to get most of the details.

3.3.2 Observations

I visited 6 houses with the main purpose of observing the facilities (both of women I interviewed and women I did not interview). Next to this I visited 4 houses to 'triangulate' my data. On these house visits I joined field staff of UNCHR and participated in their conversation with the refugees, both men and women, about their issues. In all these cases I could ask a few questions about the current WASH situation to the women and the process of change and these answers were similar to the answers in my interviews. Moreover, I went on 5 field trips in which I came along with the WASH field staff to 'inspect' the complaints which came in through the hotline and walked for several hours through the camp to observe the facilities.

3.4 Analysis part two

I started with structuring the data gained from the interviews and observations, including elaborate field notes, according to the aspects of the creation of space: infrastructural changes, formal camp management planning and experience of the interviewed refugees. Since I adopted the concept of space as a perspective to the interaction of women and the WASH facilities in Za'atari, I hereafter identified key characteristics of the life of women living in the camp in relation to WASH. By combining these 'groupings' I was able to identify which facets of the different aspects of the creation of space were relevant for this research based on the experience of women living in Za'atari. The decision on which facets I was going to analyse to get insight in the interaction between women and WASH in Za'atari was mainly based on how often certain aspects were mentioned by different interviewees, combined with the facets which came with relative intense emotions by the interviewees. Hereby I want to note I did not structure my interviews in such a way I would get the most emotional facets out. I tried to keep the questions as broad as possible (see annex 1) and as elaborated on in section 3.3.1 I for example asked: 'Can you tell me something about water in Za'atari?'. The facets I continued with were: power relations both between neighbours and between refugees and humanitarian staff, the sense of safety, security issues, identity, dignity and daily routines related to WASH.

After, I analysed the differences in how and what women say about these facets and I realized that the most mentioned facets were also the facets with a consensus: there were hardly any contradicting ideas on these facets. In this thesis those facets are presented in a more general way,

sometimes underlined with an example quote. The more emotional facets are presented based on the quotes. Hereby I decrease the influence of my own framing of the facet, enabling the reader to put the quote in perspective of the situation and ensuring the morality and purity of the interviewee. By using quotes to underpin what the interviewed women said about the facets I defined earlier as main facets of the interaction between women and WASH as part of the creation of space it is possible to look at the data from a perspective of women instead of from the perspective of humanitarian organizations.

By combining the answers on the sub research questions, the main research question of this thesis is answered: 'How do women interact with WASH as part of the living environment in Za'atari refugee camp, Jordan, which is formally managed by the host country and humanitarian organizations?'.

4. Changes in WASH in Za'atari

To be able to understand the different aspects of the creation of space in WASH in Za'atari it is important to know what the physical characteristics of WASH look like. Therefore, I will give an introduction on the physical changes which occurred in WASH facilities in Za'atari refugee camp and related governance in this chapter. In box 3 I introduce the objectives of the humanitarian response in Jordan related to WASH.

Box 3. WASH in humanitarian response in Jordan

Being able to access sufficient and satisfactory water, sanitation and hygiene is essential for maintaining life, health and dignity. In emergencies when adequate and appropriate WASH services are not available, major health hazards and protection related risks can easily arise (Inter-Agency Task Force, 2016; UNWomen, 2018).

As stated in the inter-agency coordination briefing kit for the Jordan refugee crisis (ISWG, 2014, p. 11) the key objectives of the sector are to:

- 'Ensure safe, equitable and sustainable access to sufficient water for drinking, cooking, personal and domestic hygiene practices;
- Provide safe and appropriate sanitation facilities;
- Minimize risk of WASH related diseases through access to the improved hygienic practices, hygiene promotion and delivery of hygienic products and services on a sustainable and equitable basis and

4.1 Water for household purposes

In the beginning of Za'atari operation, most of the water supply came from the two internal boreholes which were installed in 2013 and together provided 2340 m³/day (ACTED et al., 2014; UNICEF, 2014). Next to these, external private owned boreholes were used to reach the total 3800 m³ of safe (chlorinated) water which was distributed in the camp per day (UNICEF et al., 2015). The water was trucked to the communal water tanks at the WASH blocks and public water collection facilities, see figure 6 (UNHCR, 2017)(H. Al-Hawami, personal communication, January 20th 2019). From there people collected water and stored it at their tents or caravans. Many households kept additional private water next to the communal water storage: private tanks which got filled by trucks



Figure 5. Water truck filling water storage tank. Picture is a screenshot from a KFW movie (2018)

or bottled water bought at the market (ACTED et al., 2013, 2014; REACH; UNICEF, 2013b). In July 2014 the construction of the Water Supply System started (UNICEF, 2014) and by 2017 they started connecting all households to the water supply network (OXFAM, 2018). All households received a personal storage tank, which is filled regularly in the rotation system. Since January 2019 all households are connected (H. Al-Hawami, personal communication, January 20th 2019). The Water Supply System delivers the amount of water all refugees are entitled to of 35L per day. Moreover, the water quality is checked (REACH et al., 2017) and is conform the Sphere standards, the WHO standards and the Jordanian indicators (Monthly WASH coordination meeting, personal communication, 27th of January 2019) (The Sphere Project, 2011, 2018; World Health Organisation, 2017).

4.2 Sanitation

In Za'atari communal **WASH** blocks/centres were installed, including public toilet cubicles/pit latrines and showers. In July 2013 in total 2340 public toilet cubicles were in place (meaning one toilet cubicle per 51 individuals, in line with the standards established by the working groups stating one toilet cubicle per 50 individuals) (REACH; UNICEF, 2013b; van der Helm et al., 2017). The wastewater was collected by vacuum trucks from the septic tanks at the



Figure 6. Wastewater storage pit (ACTED, JEN, OXFAM, UNICEF, et al., 2014)

communal WASH blocks (Melloni et al., 2016; UNICEF, 2014). Next to the communal facilities provided by humanitarian organizations, refugees also installed private facilities in or next to their tents and caravans. The 'private' wastewater was often stored in outside pits (see figure 7)(REACH; UNICEF, 2014a)(F. Nahbani, personal communication, January 16th 2019; D. AlQaseer, personal communication, January 23rd 2019).

In 2016 the first phase of the wastewater² system was constructed by WASH implementing partners: it was made sure all households had private toilet and bathing facilities and all households were connected to a communal sewage interceptor tank which was shared with several households at the same streets or block (REACH et al., 2017). These tanks were emptied by desludging trucks (A. Kassabeh, communication, January 22nd & February 12th 2019). Later, in phase two, all households which lacked (parts of) suitable facilities were provided with all vital Figure 7. Wastewater pumping station in Za'atari, aspects of suitable toilet and bathing facilities like



picture made by author

doors, ceilings and hand-wash facilities (A. Kassabeh, personal communication, February 12th 2019). Furthermore, all sewage tanks were connected to the wastewater facility and all wastewater is now pumped to the wastewater facility, see figure 8 (A. Kassabeh, personal communication, January 22nd 2019)(OXFAM, 2018; REACH et al., 2017). The communal shower and toilet facilities were destroyed by implementing partners after it was made sure all household had access to private toilets and showers and nowadays there are no communal facilities anymore (A. Kassabeh, personal communication, January 22nd 2019).

4.3 Hygiene

In the first period hygiene products were distributed through the humanitarian organizations at the distribution points. According to the refugees many personal hygiene items were not distributed enough: washing powder, shampoo, washing cloths, sanitary napkin towels, sponges, diapers, toothpaste, towels, ear swabs, brushes, toothbrush, wet wipes, nail clippers and combs (ACTED et al., 2013). The hygiene infrastructure changed from the distribution of sanitary items to a market system in which people buy what they need (with cash provided as part as the humanitarian assistance topped up with cash income from work or 'volunteering'). Also, refugees have sinks next to their toilet facilities in their caravans nowadays, see figure 9.



Figure 8. Sink in a household. Picture made by author

² Considering the complexity of the sanitation situation in Za'atari and the dynamic situation across households and the camp itself, I use the term wastewater both for grey and black water.

Besides personal hygiene also cleaning the house and washing clothes is important. Some of the wastewater used for personal hygiene or for example washing dishes has been reused to for example

clean the floor or irrigate the plants in the small gardens. Sessions were organised for 'clubs' by humanitarian organizations to inform people about the possibilities of reusing water (M. Abu Siam, personal communication, January 23rd 2019). With the improved access to water the women say they put less attention on reusing water because it is no longer that hard to get water and therefore water used for cleaning now is often fresh water straight from the tap.

People are using washing machines, see figure 10 (REACH; UNICEF, 2014a) even though electricity is only available between 4.30 pm and 5 am. The laundry is wet till the next day, when the sunlight can dry them.



Figure 9. Laundry machine. Picture made by author

5. The creation of space through WASH: perceived, conceived and lived

In this chapter I elaborate on different aspects of the creation of space in Za'atari by women in the changes in WASH and their perception on the changes and how the changes in WASH influenced the women living in Za'atari. It covers aspects of the perceived space, the conceived space and the lived space (see chapter 2 for theoretical and conceptual framework). In the perceived space I explore women's every activities and routines related to the use of WASH facilities (section 5.1.1), how the relations between neighbours are influenced by WASH (section 5.1.2) and the satisfaction of women on the changes in the WASH facilities (section 5.1.3). In the conceived space I focus on the different aspects of the agency women have related to the changes in WASH, including the struggles to get water for household purposes and the physical adaptations made by refugees to get easier access to sufficient water (section 5.2.1), the adaptations made to the WASH blocks and the installation of make-shift facilities at household level (section 5.2.2) and the negotiations between (female) refugees with the camp management both by hostile uprising, in clubs and through community mobilizers (sections 5.2.3). In the lived space I elaborate on the symbolic use of WASH as part of the dignity (section 5.3.1) and identity (section 5.3.2) of women and how the women see their own role in the changes which happened in WASH in Za'atari (section 5.3.3). Box 4, 5 and 6 portray parts of the narratives of women living in Za'atari and their opinion on WASH.

The three aspects of the creation of space in the case of WASH in Za'atari refugee camp are highly interconnected. It should be kept in mind that all aspects of the creation of space are influenced by all other aspects and depending on how the different aspects are framed; they could also be elaborated on as part of a different part of the creation of space. As Mahmoud & Abd Elrahman (2016) state: the relations between the perceived, conceived and lived aspects of space are never either simple or stable and whether the spatial triad (described in chapter 2) constitutes a coherent whole or not is another matter.

5.1 Perceived space: the use of WASH facilities by women

In this chapter I elaborate on aspects of the perceived space, including the everyday activities of women related to WASH, the influence of WASH on relations between neighbours and the perception of women on the WASH facilities both before and now.

5.1.1 Everyday activities and routines related to the use of WASH facilities

5.1.1.1 Getting and using water for household purposes

Getting water at the distribution points was a daily struggle for all inhabitants of Za'atari [all interviews]. Interview 6: 'The first thing in the morning when you wake up was to think about how to

get water. Only after you think: am I going to use it to wash my kid or clean my house or anything else?'

Interview 5: 'All of us were looking for water, men, women, kids, in all seasons.' Interview 7: 'It was very hard to get every litre of water.' Interview 6: 'How many hours I have been waiting for water...'. If the tanks were empty, refugees could call the hotline and they would come to fill the tank [interview 2, 5]. Some households bought private water storage tanks and got them filled by either water truck companies who came into the camp or bribed truck drivers of the public trucks to fill their private tank (ACTED et al., 2013, 2014; REACH et al., 2017; UNICEF & Save The Children,



Figure 10. Water filter. Picture made by author

2014). Other people put tubes in the tank to get water. Interview 8: 'If you put a tube in the water tank there is always water for you. That is much better, because when I went to get a gallon and brought it home to empty it and went back to get another one, the big communal tank was sometimes already empty. People did tubes, but it was not fair.' Interview 9: There was not enough water for some people because some people put a tube to their house.' Furthermore, bottled water was (and still is) bought at the market for drinking water purposes by some families, but most families made (or still make) use of filters, see figure 11, to make sure the water quality for drinking was good because they did not have enough money to buy the bottled water at the market (called 'healthy water')[interview 1, 3, 4, 11, 12] (ACTED et al., 2013; REACH; UNICEF, 2013a). Interview 10: 'But now because of the network the tanks are very clean. Families drink from the tanks because it is clean now.' And, there is no need to walk to the water distribution points anymore to collect water since all households can just open the tap whenever they want to use water [all interviews].

Furthermore, many women re-used water in the household or for gardening, see figure 12 [interview 2, 5, 7], but now they are connected to the water distribution system, they experience less need to re-use the water. Interview 2: 'To safe water I for example used the water I already used for the dishes to clean the floor after. I was not the only one who did this, everybody did. Now I have enough water for cleaning and I clean with 'fresh' water, not water which I already used for something else anymore'. Also, the practices related to washing clothes changed: first women had to wash the



by author

clothes certain days a week, by hand. Nowadays most Figure 11. A garden in Za'atari. Picture made households have washing machines [interview 10, 11].

5.1.1.2 (Non-) Usage of WASH blocks

When it comes to the usage of the WASH blocks for sanitation purposes, women said there were many issues related to the usage. First of all, they felt they had to walk very far (sometimes even crossing districts) [interview 1, 3, 8, 12, 13]. Interview 1 'Therefore I would only go once in the morning and once in the afternoon. It was a tragedy with the kids'. Moreover, the waiting lines could be long, sometimes women had to wait 10 to 15 minutes before they could go [interview 1, 2]. Furthermore, many women did not feel safe to walk to and use the communal WASH blocks: in the early days, 60% of the refugees living in Za'atari where afraid of using a WASH

Box 4. Part of the story of interviewee 1

'In the beginning there were five shower places in the middle of the block, these were separated for men and women, happily, otherwise I would have never used it! The women's facilities were not built next to the male's facilities, so it was anonymous to go in.

After, I made a small corner in the caravan where my family showered. We would stand in a big 'dish' to catch the water and throw the water outside when it is full. We could throw it anywhere as Za'atari is a big desert. After, many people started making a whole in the caravan to let the water out. However, neighbours were annoyed and complained because the water would go into their caravans. That's why people started making pits in the back of the caravan so they would keep their own water nuisance'.

blocks at night (REACH; UNICEF, 2013a). It was considered too dangerous for predominantly women to go to the public WASH facilities during the night (Ledwith, 2014; REACH; UNICEF, 2013a; van der Helm et al., 2017), therefore they would never go alone and always take either a neighbour or their children or other family members and they could not let their kids go by themselves either [interview 1, 2, 5, 6, 7, 12, 13]. Interview 6: 'In the first days daughters could not go alone to the bathroom, especially in the dark they were scared. When it is late, all my daughters went with me to go together and we would go in two by two. The others would wait outside.' There were several reasons for the fear and safety issues, including the lack of lights at the facilities and at the streets [interview 1, 5, 6, 13]. Also the distance to the facilities made the refugees feeling unsafe (ACTED et al., 2013)[interview 2, 3, 7, 8, 12, 13]. Interview 12: 'I was not feeling safe, especially not at night. Not all the public bathrooms had lights... At night I used a plastic thing for the children and I took it to the public bathroom in the morning to clean it. Lots of people did this, especially with small kids.' Also interviewee 1 mentioned 'many people used bags for peeing and pooing and they would throw it away with the garbage'. People started making make-shift facilities in or next to their caravans, often with water storage pits outside. The consequences of making these facilities are described in chapter 5.2 (conceived space). Furthermore, female communal showers were often 'dry' because women did not use the communal facilities [interview 1].

When people made use of their make-shift facilities, they could call the wastewater trucks to get the pits emptied [interview 1]. When the first phase of the construction of the wastewater system was

done, people could call the hotline to get the wastewater storage tanks of the streets or blocks emptied.

Nowadays all households have private bathroom facilities, see figure 13. All family members make use of this, whenever they want. There is no need to wait till other are done or to make sure men cannot see them, there is no need to ask a family member of neighbour to join the women to the facilities for safety reasons and women do not have to walk with their kids anymore [all interviews]. Also, they are responsible themselves for cleaning and maintenance, but when big issues occur they can still call the hotline [interview 5, 7] (S., personal communication, January 2019).



Figure 12. A toilet at a household in Za'atari refugee camp. Picture made by author

5.1.2 The influence of WASH on relations between neighbours in Za'atari

Because of the perceived water shortage fights between neighbours occurred frequently and everybody was fighting with everybody, men and women [interview 1, 2, 8, 10, 13]. Interview 8: 'We are women and thus we need more water and did not have enough from this [the available amount at the collection point]. It was an abnormal problem, people were fighting. We would hit each other with our flat hands or pull hair to get water.' Furthermore, if the wastewater was not collected by the wastewater trucks in time, the neighbours would experience nuisance from the flooding pits. Interview 9: 'The wastewater came inside the caravans sometimes'.

Luckily, the fights related to getting water and using sanitary facilities are over now [interview 1, 2, 8, 10, 13] according to interview 2: 'The security related to WASH is much better now. I feel secure and rest. The relations with neighbours are good and I feel home. But, if the situation with water and sanitation was not this good, it would not have felt like home'.

5.1.3 Satisfaction of women on changes in WASH

The WASH situation in the early days of the camp was perceived by women as 'critical' and 'terrible' [interview 1, 3, 4, 5, 8]. Carrying the water was very heavy [interview 1, 10, 12], interview 12 said: 'Getting the water was very heavy, I had pain from getting it'. Nowadays they can just open the tap. Interview 2 said: 'The best part of the current situation is the fact that water is available in the houses: this is the biggest benefit and time saving! I have the freedom to use water whenever I want now and I do not have to fight with my neighbours

anymore.' This also improved the options to make decisions by the women, as interviewee 8 stated when elaborating on why she was happy about



Figure 13. Private water storage tank with an open lit, which is the responsibility of the household. Picture made by author

the water network: 'Because of the network you know how much water you have because you have your own tank and knowing how much water you have left influences the decisions you make.'

Furthermore, many women did not trust the quality of the drinking water and as described above either bought clean water or used filters. Interview 8: 'They did not clean the big tanks often enough and kids often put dirt in the tanks like rocks or even chickens'. Now they can control the cleanliness of the water storage tank because they are responsible for it themselves, see figure 14 [interview 1, 11]. All women are satisfied with the water distribution system now [all interviews]. However, there

are fears about the availability of water in the summer [interview 8, 9, 10], interview 9 said: 'Up till now we have enough water, but in summer we don't know.' And interview 8: 'We need more water, because we live in the desert. We need more showers in the summer because every time we go out we get dirty'.

The satisfaction on the sanitation improved by the connection to the wastewater system. When women were still forced to make use of the communal facilities due to the lack of private facilities, the communal facilities were perceived to be dirty [interview 1, 8, 11], as interviewee 8 said: 'It was not clean at all. People peed all over the ground and the latrine instead of in the pit.' Also after, as interviewee 1 said: 'when they dug in the floor everything was very dirty. The floor drinks the first pee' and as interview 8 stated: 'There were many diseases because of the wastewater everywhere and in the pits and also by the smell people got sick. We could not walk inside the camp and the districts because of the smell.' Now 'everybody got a bathroom and even sewerage is taking all sludge outside which is great for us because the smell is gone' [quote by interviewee 1]. Nowadays women are satisfied with the sanitation situation and interviewee 1 even said 'There is no need to dream about improvements in WASH as the situation now is more than excellent.' Moreover, women are happy that there is less water and wastewater trucks driving around in the camp since kids were regularly caught in accidents with the trucks and some kids died [interview 8, 12].

The overall satisfaction on WASH in Za'atari by women improved tremendously, as interviewee 4 said: 'All the developments that happened are great, when we first came it was terrible.' And interview 5: 'Thanks to God, the situation is much better than the days before. The most important thing is to have a bathroom in your home... And the water tank: I have a tube going into my house. It feels like home, sure I have no problems with other women anymore about water.' Interviewee 1 even said: 'The changes are very good, it is such a big thing I cannot mentioned how big'.

But, there are still dreams for the future, all related to electricity [interview 4, 5, 6, 7]. As interviewee 5 said: 'All of us like the developments, for sure. But nowadays circumstances force us to keep it like this. I hope to have a tube on the wall, that is better than take water from the bucket to clean myself. Therefore I am hoping electricity will be available during the day as well. The reason I cannot make a tube on the wall is budget. It only costs a little bit of money when you make water warm inside the oven with a bucket, this is impossible with a shower with a tube on the wall.' Furthermore they hope to be able to make use of the washing machines (which need electricity) during the day as well [interview 4, 5, 6, 7], as interviewee 4 said: 'Now we wash our clothes in the machine, before we did this by hand, but we only have electricity in the night and now I have to let the laundry wet till the morning before it can see some sun to dry.'

5.2 Conceived space: different aspects of agency of women related to the changes in WASH

The Syrian refugees in Za'atari were not satisfied with the WASH facilities installed by the humanitarian organizations and started to use their capacity to influence the situation by adapting the facilities and negotiating about the governance of WASH. Different mechanisms were used by refugees (both intended and not intended) to (directly) influence the plans and maps of the WASH related humanitarian organizations. In the following subchapters I describe these mechanisms: first the fights to get water for household purposes, after the adaptations made in sanitation and I finish with other negotiation strategies of women with the humanitarian organizations.

5.2.1 Struggling to get water for household purposes

The water for household purposes was collected by refugees at the communal water storage tanks (ACTED et al., 2014; UNHCR, 2017; UNICEF, 2014; UNICEF et al., 2015) (H. Al-Hawami, personal communication, January 20th 2019). In July 2013 162 individuals shared one water collection facility and all refugees in Za'atari resided within the established camp standard of 250 metres to the closest water collection facility (REACH; UNICEF, 2013b). The interviewed women mainly stressed the difficulties for the families without grown-up men: in these cases the women had to go to take the water. Besides the heaviness of carrying gallons [interview 1, 7, 10, 12], there were cultural barriers including women not being allowed to stand in front of a man (F. Nahbani, personal communication, January 16th 2019).



Figure 14. Waiting in line to get water from a water distribution point in Za'atari refugee camp. Picture derived from the National (2019), date of picture taken is unknown

Refugees made modifications to the existing water distribution system to ease their access to water [interview 7, 8, 10], directly changing the maps and plans of the camp management. The camp management refers to these changes as 'vandalization', 'damage' and 'illegal' (ACTED et al., 2014; REACH; UNICEF, 2014b). For example, tap stands were relocated, tubes were installed from the communal tanks to private tanks or to taps at households [interview 7, 8, 10] (see figure 16) which lead to failure of the water distribution system (Za'atari Water Network Technical Working Group, 2014) and water tanks from public collection points have been relocated by and are controlled by individuals, reported as 'the establishment of household water storage by stealing tanks at communal WASH blocks' (REACH; UNICEF, 2013b; Za'atari Water Network Technical Working Group, 2014). This was both done by men and women [interview 8]. Furthermore, water truck drivers were sometimes forced to fill private tanks due to blockage of access to public facilities and because of threats to the drivers (Za'atari Water Network Technical Working Group, 2014). The failure of the water distribution system influenced other refugees in the camp negatively as the availability of water decreased and the access to water was made more difficult. In general the less privileged households faced negative consequences from this failure in the distribution system as they often have less

authority and less means to cope with more difficult circumstances (T. Adi, personal communication, January 15th 2019). Since all refugees are entitled to have safe access to water according to the



Figure 15. Private hoses connected to public water storage facilities. Picture derived from ACTED et al. (2014)

Sphere standards, and the costs of the water supply by trucks and the repairs to the constantly 'damaged' water distribution system were fairly high for the humanitarian organizations (Inter-Agency Task Force, 2016; Jordan Times, 2019; The Sphere Project, 2011, 2018; UNICEF, 2014), something needed to be changed. The humanitarian organizations installed a water distribution system with the financial support of the German Government through the KfW Bankengruppe and other donors (Jordan Times, 2017). Hereby the maps and plans of the camp changed tremendously: the communal water collection points are relocated or made private, a full network is installed, delivering water to each household and water trucks only run when issues occur in the water distribution system (H. Al-Hawami, personal communication, January 20th 2019).

5.2.2 Adapting sanitation to private facilities

At the start UNHCR, UNICEF and its implementing WASH partners (ACTED, OXFAM and JEN) planned and installed time and economy efficient communal WASH blocks, including pit latrines and showers (Melloni et al., 2016). In July 2013 in total 2340 public toilet cubicles were in place (meaning one toilet cubicle per 51 individuals, in line with the standards established by the working groups stating one toilet cubicle per 50 individuals), divided over 417 WASH blocks (REACH; UNICEF, 2013b; van der Helm et al., 2017).

Interview 1: 'The situation with the bathrooms was critical at the first days in the camp. I had to walk very far to go to the toilet. It was a tragedy with the kids. Can you imagine the situation: even the simplest thing like a toilet was not available'. Besides coming up with different strategies to be able to make use of the facilities during the night (which are described in chapter 5.1.1), more structural changes to the facilities were made. Adjacent to their shelter refugees constructed toilets and showers (make-shift bathrooms) with pits in the ground where the wastewater was stored, either at or outside the household boundaries (ACTED et al., 2013; Melloni et al., 2016; REACH; UNICEF,

2014a; van der Helm et al., 2017). Although other storage facilities were used (including plastic tanks, petrol drums and connections to the communal WASH blocks), the pits were most common, see figure 17 (REACH; UNICEF, 2014a)(F. Nahbani, personal communication, January 16th 2019; D. AlQaseer, personal communication, January 23rd 2019)[interview 1, 2, 3, 6, 8, 10, 11, 13]. Mainly the husbands and Figure 16. Ditches connected to a wastewater pit. brothers of the interviewed women built the facilities,



Picture from (REACH; UNICEF, 2014a)

because 'we women don't get close to this stuff' [interview 1]. However, often the women told them what their preferences are for example the location of the latrine and taps [interview 3, 4]. The rise in make-shift private bathrooms lead to largely uncontrolled wastewater management and an increased risk in disease proliferation and water contamination (Melloni et al., 2016; REACH; UNICEF, 2014a; van der Helm et al., 2017). Although there was no formal system in place for the disposal of wastewater from individual households in Al Za'atari, the refugees had created systems themselves. This was often a highly functioning underground system of pipes which tapped into the 'storm water' network or to the WASH block storage tanks for wastewater, meaning the communal wastewater storage facilities were damaged (REACH; UNICEF, 2014a)(REACH; UNICEF, 2014a). The refugees who did not connect their pits to an existing wastewater storage facility, still needed to get their wastewater removed to be able to use it. The vacuum trucks which also took the wastewater from the communal facilities emptied the private pits as well, preventing from potential public health risks emerging from standing wastewater and the possibility of floods spreading the wastewater over the camp (van der Helm et al., 2017) [interview 1, 13].

The communal WASH blocks were often not functioning well because they were prone to vandalization, parts were privatized or repurposed and blockages of toilets occurred due to disposal of garbage, nappies and stones in the

Box 5. Part of the story of interviewee 3

'I am one of the women who made a bathroom for my family in the caravan myself. It used to be a shower and toilet at the same time. My husband made it (before he left). The reason was not only because the available facilities were public, but also because the distance was too big. Especially for the children. It happened often that it was too far for them to hold and they peed on themselves. Also, there was a big problem because the kids needed to go in the night as well! Of course we as mothers had to join. But, we had to ask our neighbours or male relatives to come with us. Especially in winter: women do not feel safe during the night. Why? Because we are women, not men. Most of the time I asked my uncles son. He would not enter with me, just walk with me till we reached. As the children do not accept to go without their mother, I always had to come even though a male family member went as well. As this was too often I made a bathroom in my caravan myself. We paid it ourselves as well, but it did not cost a lot. We covered the place with a tent and we made a tube and a hole in the ground. We covered the hole so the smell would not annoy

latrines (REACH; UNICEF, 2013a, 2014b; REACH et al., 2017). Notably, my interviewees said this damaging was predominantly done by kids who were playing and not by adults [interviews 7, 8], only some sinks and toilets were taken by adults from the still unused public WASH blocks at the districts were there were no people living yet [interview 8]. However, although I could not figure out who did it, the fact was that a significant amount of WASH blocks was damaged meaning there was a continuous need of resources to make sure the all refugees had access to WASH facilities. Especially those living in households which are denoted as vulnerable by humanitarian organizations (ACTED et al., 2013; Ledwith, 2014; van der Helm et al., 2017). Furthermore, the Sphere standards require the environment to be free from human faeces, especially the habitat, the food production areas, the public centres and the surroundings of the water sources (The Sphere Project, 2011). With the high usage of pits for private wastewater storage, the environment was not guaranteed to be free from human faeces.

Wastewater system phase one was implemented: the implementing WASH partners visited all houses to identify who lacked private toilet and bathing facilities [interview 3, 4, 5, 7, 10, 11] (A. Kassabeh, personal communication, January 22nd & February 12th 2019). Although many households had private facilities by then, 352 communal WASH blocks which were still present by October 2017 (UNHCR, 2017) and especially the most marginalised families still made use of these communal

facilities. Those families got the help of the implementing WASH partners with installing private toilet and shower facilities.

Interview 1: 'Almost all houses in District 6 started making these holes (and pits in the ground), only the poorest people still had to use the public facilities. OXFAM searched for these issues and helped the poor people making bathrooms and toilets for them. The facilities OXFAM made for the poor people are much better, including for example granite floors and sinks, compared to the self-made facilities'.

Depending on the case the organizations only provided suitable materials, connected them to the underground wastewater tanks or installed the facilities completely [interview 3, 4, 5, 7, 10, 11] (A. Kassabeh, personal communication, January 22nd 2019). Also, in this phase all households were connected to a communal underground container. Desludging trucks, paid by the camp management, took the wastewater from the communal underground containers and brought it to the wastewater facility (A. Kassabeh, personal communication, January 22nd 2019). Later, in phase two, the communal underground containers are connected to pump stations, pumping the wastewater to the wastewater facility (Jordan Times, 2017; REACH et al., 2017) (A. Kassabeh, personal communication, January 22nd 2019). By that time all households got another



Figure 17. Former communal WASH block. Picture made by author

visit from the WASH implementing partner. The WASH partners determined which households lacked (parts of) suitable facilities and they were provided with all vital aspects of suitable toilet and bathing facilities like doors, ceilings and hand-wash facilities [interview 1, 2, 6, 12] (A. Kassabeh, personal communication, February 12th 2019). Interview 6: 'When I first made the bathroom I had not everything completed yet. First I used a blanket as a curtain, but when OXFAM came and saw that they gave me a door.' And interview 12: 'I made the toilet. Not in a caravan, but outside. Like another room. I made it myself, but OXFAM came to make a door and a ceiling. Before I was without a roof and sometimes I was in the rain'. The communal shower and toilet facilities which were still functioning by that time were destroyed by implementing partners, see figure 18, only after it was made sure all household had access to private toilets and showers [interviews 3, 4, 5,6, 7, 8, 10, 11] (A. Kassabeh, personal communication, January 22nd 2019).

Interview 7: 'They [OXFAM] took in the opinions of us and they asked if we still wanted to use the public ones or not. After all the meetings and house visit checks they destroyed the public facilities because little kids used to break it they want to play. They let the water run on the street or damaged other things. Thanks to God I have a toilet in my home now. A lot of problems are gone, you cannot go to the bathroom with your daughter all the time.'

By now all the private bathing and toilet facilities are suitable according the standards and the system is completely operational since January 2019, for examples see figure 19, 11 & 12 (A. Kassabeh, personal communication, January 22nd 2019 & February 12th 2019). All interviewed women are very happy with the current facilities, and when I

asked women what could be better in WASH the only thing they would like to have are electricity to



Figure 18. Current private toilet facilities. All pictures made by author

warm up water to be able to shower during the night or 'tubes on the wall to shower'. But to properly use this they also need electricity to warm up the water instead of warming it on the stove [interview 5, 7].

5.2.3 Negotiation: hostile uprisings and peaceful participation through committees and clubs, community mobilizers

Besides the infrastructural changes refugees made, directly influencing the maps and plans of the camp management, there were other methods of negotiation inducing changes in the conceived space: hostile uprisings, WASH committees, the active participation on 'clubs' and the work of community mobilizers.

When the camp started, the community, including women, was not or limited consulted (Melloni et al., 2016): the camp management tried to implement facilities as efficient as possible to ensure the best possible conditions for the large influx of Syrian refugees. However, several hostile demonstrations took place: refugees demanded better circumstances from the camp management. Although several references are made to these hostile events in the available literature (Buonocore et al., 2017; Ledwith, 2014), it is very hard to find more information about these events. Furthermore, when I asked women in Za'atari about these uprising they said they do not know what exactly happened. Since it is not the main part of my research I decided to not further research these events and their influence on WASH or the perspective and/or role of women on these events. However, I do want to mention hostility occurred in the beginning of the camp, probably influencing the relationship between refugees and the camp management and WASH governance.

In 2014 WASH committees were established to give the refugees more 'ownership' over the facilities which were constantly damaged(ACTED et al., 2014; Melloni et al., 2016; UNHCR et al., 2014). The WASH committees were taking care of the cleaning, security and small-maintenance related to the WASH blocks (Melloni et al., 2016; UNHCR et al., 2014). The implementing partners (OXFAM, JEN and ACTED) were continuously reinforcing the above mentioned governance structure and encourages it to function well (UNHCR et al., 2014). The committees had a budget depending on the blocks they had to manage (up to JD400/month) to manage the cleaning. They were monitored and supported by the different implementing partners (ACTED in district 1,2,9,10, 11 & 12, JEN in district 3,4 & 5 and Oxfam in district 6,7 & 8). Maintenance issues that could not be resolved by the committees themselves were referred to the WASH implementing partners (Melloni et al., 2016; UNHCR et al., 2014). Basically, the simplest repairs (tier 1) were done by the WASH committees, the repairs exceeding the capacities of the WASH committees which did not require heavy machinery (tier 2) were taken care of by the NGO's working in WASH. The repairs which required heavy machinery (tier 3) were done by ACTED, because they had the heavy equipment (Melloni et al., 2016). The WASH committees consisted both of men and women (UNWomen, 2018).

Since the communal WASH facilities are no longer in place, the committees stopped functioning. Nowadays households are responsible for the maintenance of their private facilities and when issues arise with the networks refugees can call the hotline. The hotline receives calls both from men and women and there is no differentiation in questions. However, sometimes men are calling but women take over the phone, because they are the ones who know best what is wrong with the WASH facilities (S., personal communication, January 23rd 2019). Additionally, both men and women became WASH focal points for their streets/districts in Za'atari and work as community mobilizers in a Cash for Work programme (UNWomen, 2018)[interview 1, 8, 13]. The community mobilizers (which are the responsibility of OXFAM and ACTED) are trained to inform their fellow refugees about the changes in the WASH systems. Interview 1: 'I told people about personal hygiene and how to clean and prepare food hygienically through the women's clubs where they [OXFAM] would give the women small gifts like soap or sanitary pads. For kids they organized shower day and handwash day to teach them about personal hygiene including hair washing and nails in a fun way. I also warn people about the very cold or very hot temperatures and informed people of all ages about how to deal with the water network and I spread the word about the good water quality'. Furthermore, they function as 'eyes and ears' of the districts and identify where which issues occur after which they inform the implementing WASH partners, so action can be taken to improve the situation [interview 1] (F. Nahbani, personal communication, January 16th 2019).

Moreover, implementing WASH partners regularly organize 'clubs' where refugees (depending on the topic mixed or men or women only) can share their opinion on the needs of the refugees using the WASH facilities provided. In these meetings women stood up for their needs and asked for improved facilities [interview 1, 2, 7, 8, 11, 13]. Interview 11: 'There were meetings [by OXFAM] and every person had the right to talk about things that were annoying to them. When we were scared or for example when we were cleaning, and the water was staying outside, and kids played with it and caused a lot of diseases.' And interview 4: 'ACTED organized meetings in the community centre. They showed the options and gave suggestions. They asked the community what they think they should do to improve the situation.'

5.3 Lived space: Symbolic use of WASH

In this chapter I analyse how Za'atari's women make symbolic use of WASH through their dignity and identity and how these are influenced by those in power. I identify how Za'atari's women experience WASH and how their increased participation (through the above described community mobilization, attendance of clubs and direct adaptations made to WASH facilities) influenced their experience. So, I explore the symbolic meaning of the WASH space and the clearly gendered messages they transmit (Massey, 1994).

5.3.1 Dignity

In the current international humanitarian discourse dignity is a pervasive concept (Holloway & Grandi, 2018) and even in the Humanitarian Charter and Minimum Standards in Humanitarian Response 'the right to life with dignity' is promoted (The Sphere Project, 2018). However, practically no humanitarian organization identifies exactly what 'dignity' entails and how it is promoted in their programmes. The meaning of dignity varies across time and place and between actors (Holloway et al., 2018).

Related to my research in Za'atari I highlight several aspects which come forward in the scientific discussion on the use of the term 'dignity' in the humanitarian context: the sense of self-worth/selfrespect in relation to WASH and the autonomy individuals have on making decisions (Bradley, 2008; Duhaime, n.d.; Holloway et al., 2018). In the case of the creation of a WASH-space in Za'atari this means I elaborate on why the refugee women did not accept the communal use of facilities due to their self-respect and self-worth as part of their culture.

In Za'atari are 'powerful taboos and stigmas related to the normal female bodily functions, creating secrecy, shame and disgust' (UNWomen, 2018, p. 2) and privacy is required, especially since showing body parts can increase the risk of violence (UNWomen, 2018). Interview 5 states: 'When women get their period it is very critical, when you are in your period you need a bathroom every second. I was very shy. Thank God everything is good now. It means a lot. There was no privacy and sometimes we had fear. Especially in the night. We also got shy because people could see us go. Before [OXFAM gave us a bathroom] I got shy when I had to bring my own water to the public bathrooms, as I was walking with a bucket everybody could see I was going for a shower. The whole camp could see me and they would know I was going for a pee [laughing loud].' This quote shows that the self-respect of the interviewed women got impacted by being forced to make use of the public WASH facilities. Privacy is something she believes she deserves when it comes to using WASH facilities. Since we were talking about the changes and how happy she is with the current situation in which she can use her private facilities, she was in the position to make jokes about her previous negative experience. She has a sense of pride which was undermined when being forced to make use of the communal WASH facilities.

Furthermore, being able to make decisions about your own life is part of human dignity (Bradley, 2008; Holloway et al., 2018). The autonomy individuals have on making decisions is undermined when individuals are no longer able to perform their habits or when individuals are forced into certain practices. In Za'atari for example women could not make use of showers when they wanted:

Interview 7: 'I cannot take a shower after sunset because the water is cold and outside it is also cold. Even in summer because we are in a desert. I hate taking showers at night. We were used to take showers late at night in Syria.' Also women in Za'atari were forced into making use of communal WASH facilities or using plastic bags which are thrown away with the garbage or emptied at the WASH blocks. Interview 1: 'I did not like the situation but I had no choice but to use these bags.'

They are delimited by the circumstances to behave and are not able to continue their routine or use the facilities when they want. This decreases their options to make choices about how to take care of her body and health through personal hygiene. Interview 8: 'In the public facilities you had to go and check first if there were no men around. Often you had to wait for other people to finish first. It took an hour. Every time... Women were always checking if there were no men around. Sometimes when we women needed to go at 11pm and there was no man around in her caravan, no husband, no brother, no son, no nothing, we had to wait till the morning light.'

The women's sense of dignity and the believe that they deserve normal life is stressed by interviewee 8 when talking about making tubes to connect the tanks at the water collection point to her own storage tank: 'We knew it was wrong, but we were forced because we wanted to live like other people'.

So, cultural sensibilities, unequal access to facilities and gender-differentiated power relations are influencing the dignity of women living in Za'atari. First the women's dignity was undermined: they could not use facilities in a way they want and are expected to as part of their culture. They were basically forced into certain practices due to the availability of WASH facilities which undermined aspects of dignity influenced by the means people must make decisions based on their personal preferences. This challenged their sense of self-worth. Nowadays they can use facilities how and when they want within their social and cultural boundaries. This not only increased their options to take care of themselves with dignity but also their caretaking activities improved, directly influencing their sense of self-worth.

Box 6: Part of the story of interviewee 13

'I was very weak when I came [to Za'atari] and had 0% of self-confidence. Having no husband, no country, no home, while having many responsibilities for my children. Can you imagine to leave everything and live in a tent? [...]. It was a hard life, without work. No private bathrooms, no markets, no streets, just tents. Just land with tents. Nothing I can mention to call it a human life.'

5.3.2 Identity

Identity is always mobile and processual, partly self-constructed, partly categorized by others. It is a bricolage composed of being a condition, a status, a label, a weapon, a shield, a fund of memories, et cetera (Malkki, 1992). Also refugees are agents of their own identities and lives (Napier-Moore, 2015) and refugee camps are places of identity formation and negotiation (Agier, 2002; Grbac, 2013). In this section I elaborate on several aspects which make up identity in this case: roots, religion, gender and participation in Cash-for-Work.

As Malkki (1992, p. 24) states 'the metaphorical concept of having roots involves intimate linkages between people and place-linkages that are increasingly recognized in anthropology'. People think of themselves, as being rooted in place and derive their identity from that rootedness (Malkki, 1992). However, when being displaced and living in a camp, this part of the identity of individuals is challenged. Interview 6: 'We have no country; our husband is dead and we have lots of kids'. And although it is generally assumed individuals want to return to where they are from, this can be challenged in circumstances like a refugee camp. For example, interviewee 2 said: 'The relations with neighbours are good and I feel home in Za'atari. [...] Only if they [Jordanians] tell us to leave to Syria we will go, but if we go back we will face the same problems as we faced when we just arrived in Za'atari. Now it [Za'atari] is home sweet home!'. And interview 1: 'Syrian people like water! Some people didn't focus, and they thought they were still in Syria and threw water away. Now everyone is used to the water scarcity.'

Furthermore, religion is an important aspect of identity (Oppong, 2013) and in Za'atari Islam is an integral part of the community (Ledwith, 2014). Part of the Islamic law is to practice 'ghusl' (full body cleansing) after having sexual intercourse, ejaculation or completion of the menstrual cycle and before certain prayers and 'wudu' (washing the hands, mouth, nostrils, arms, head and feet with water before praying). When still using communal facilities, it can be imagined it was hard to obey all rules. However, neighbours were helping each other to get enough water to be clean enough to be received by Allah:

Interview 2: 'When I went to get water for wudu had to swear to my neighbours I did not take water from the tank into my home. I was only allowed to use it for wudu.'

Another aspect which became clear from the interviews is that women present themselves as mothers when I asked to tell them about themselves and thus being a mother is part of their identity. Furthermore, being a man or women is of high importance and as Massey (1994, p. 188) states: 'The limitation of women's mobility, in terms both of identity and space, has been in some cultural contexts a crucial means of subordination.' There is an apparent gender divided role division in Za'atari (UNWomen, 2018) and those gender roles are commonly internalized by the Syrians living in Za'atari: Interview 6: 'We are playing both roles, the role of women and men because we have no husband'. Gender differences related to sanitation are pointed out by women often, for example interview 1: The same amount of men as women toilets were present although there are more ladies in the camp and ladies take care of the children as well. It is not fair, also because men can go wherever they want and women cannot'. And interview 8: 'When going to the shared facilities in some families they shame the women. They shame women to go out. They shame women to clean, they shame women to walk. '

Conversely, most interviewed women did not elaborate on gender differences related to the collection of water at the collection points. Both men, women and kids collected the water [interview 5], however in families with grown up men it was preferred they would go to get the water. Next to the heaviness of carrying the water [interview 1, 7, 11] there are cultural benefits for men, Interview 6: 'It was hard to get the water at that time because of the men who go first. When I asked for water they told me to get away as I already got some, but this amount was way less than what I needed.'

Their main message related to collecting water was that it was a constant struggle to get the needed amount. Interview 6: 'The first thing in the morning when you wake up was to think about how to get water. Only after you think: am I going to use it to wash my kid or clean my house or anything else?' However, from the above statement it can be assumed that women had more stress related to getting the available amount of water since they are responsible for taking care of the kids and cleaning the house. Being able to clean well and show that by having a clean house is one of the most important skills of Syrian 'wives' and since it is one of their main goals to be (or become) a good wife, cleaning the house is an important task (D. AlQaseer, personal communication, January 23rd 2019). Interview 8: 'The people did not take enough showers, they preferred to use the water for cleaning the house instead of themselves'.

Interestingly, women point out their own strength and thereby their identity is stronger since they are in Za'atari and went through the harsh circumstances. Interview 11: 'In Syria we women were used to just sit at home with the kids and to cook and to clean. In the camp our responsibilities changed. We have a lot of power now because we have responsibilities. Not like in Syria, here we can work if our husband does not work. And we can go to the market. In Syria this was not possible. Now we have responsibilities and power.' And interview 4: 'When my children are sick I bring them to the hospital myself. My heart became stronger just when I came here, not in Syria. I am not just talking about myself, also about other ladies.' Also interview 1: 'The fights I had about the water made her stronger. Living in hard situations like I did in the beginning when I arrived made me stronger and stronger.' And interview 13: I had to take my own water and therefore I needed to fight to stay alive. I did never fight

just to make problems, I only fought to get the necessary water. So, I needed to do this! I am strong, but I don't like to be like this, but this situation made me strong. I became much stronger in the camp.

Furthermore, the Cash for Work programmes in which women were taking part as cleaners of the communal WASH facilities also strengthened the identity of women, interview 2 about her job: 'I felt safe because I could make sure the bathrooms were clean and I was the responsible one. I felt like I was a leader, I could say: 'Go and clean!'. And interview 3: 'Because of the job we have and the improvements in drinking water and sewerage we feel like Za'atari is home'. But the active participation in Cash for Work made it hard for women because now they have done 'also work outside and inside the house and that is very tiring' [Interview 4]. So, although the roots of the women living in Za'atari are in Syria, the getting private access to WASH facilities made Za'atari their home. They can practice their religion including the importance of personal hygiene and the cultural preferences related to WASH can be practiced nowadays, meaning these aspects of their identity are no longer undermined. Also, the role of being a mother is defined differently after the changes in WASH because the focus is less on getting the required amount of water and the need to walk with the kids to communal facilities is no longer part of the task. Moreover, women strengthened their identity by the harsh circumstances they had to live trough and because of their active participation in decision making (among other related to WASH).

5.3.3 How do women see their own role in the changes in WASH in Za'atari

Not all women contribute in the same way to the changes and not all women value their role in the changes equally. However, in general the interviewed women said it was just their task as mothers to take care of their families and did not want to take credits for their efforts [interview 1, 2, 13]. For example interviewee 1: 'The only thing I thought when making the facilities myself was to solve my problems. [...]. I believe making it by myself was the only way to solve the problems related to the facilities: the darkness, the distance, the safety, the impossibleness to take my husband along because he could get in trouble if neighbours would see him close to the facilities.' And interviewee 13: 'I just want to make sure my children are in good life situation when they are older.' Interview 2 said when I said it seemed like she played a huge role in the changes due to her efforts in making private facilities and attending the clubs and telling the humanitarian organizations about her needs: 'It was not only the women who influenced the change of course, we do not want to ignore men, they have a big role in the camp.' However, also several women said that women do have agency when it comes to improving their living environment in the camp, for example interviewee 5: 'We women play a big role in the camp. By asking: I need privacy! I need a bathroom for myself! After, they [OXFAM] said yes and all is good now.' And also interviewee 11: Without women the camp would not have been developed like

this. Women are stronger than men. Men always get disappointed from any situation. My husband is, until this moment, not happy with the situation but I tell him that our life in the camp is OK.'

Some interviewed women said their personal influence in the clubs about WASH were crucial for the changes [1, 2, 5, 7, 8], while others said they only attended meetings where they learned new practices or were informed about new regulations, but did not take the opportunity to inform the organizations about their personal ideas and needs [interview 3, 4, 9, 11, 13] or did not even attend meetings [interview 6]. Interview 8: 'The women were behind the development of the camp. We were looking for this all to improve. I was looking for my caravan to get better, for my bathroom to get better. And I want everything to be clean. Because people who work for the organizations live outside the camp and do not live here and cannot see everything it was our role as women to stand up against the smell [of the pits]. We did this in the meetings which were organized. Most time of women is spent in the bathroom. We had to go with all the kids.' Furthermore, women went straight to the organizations to ask for better circumstances and facilities [interview 1, 5, 13], especially women and girls asked for private facilities (UNHCR, 2016). Interviewee 1, who is a community mobilizer said: 'I spoke a lot about the WASH situation with neighbours. We even wrote down ideas to solve the problems and gave this to OXFAM. When OXFAM distributed the tanks for 5 families, we said: why don't you give us a tank for every family? OXFAM told us they will try to make this in the future and now it happened!' She is positive about the role of the refugees (not specifically about women) and thinks 'if the people in the camp would not have changed the sanitation themselves, they would still need to use the communal facilities. But we did not give up!'. Also interviewee 12 did not make a distinction between men and women: 'A lot of people asked to make the situation better. If the organization came they saw the difficulties and wanted to help. We thank them very very very much for making it. It is helping people very very very much. I have seen people making a group, I don't know how or why, but they went to the organizations and then the organizations made the water and sludge problems to go away.'

6. Discussion

This chapter is separated in two sections: a discussion of how my research related is to other scientific research and a discussion of methods including the use of my conceptual framework.

6.1 Discussion of results in relation to existing literature

As described before, the aim of this research is to contribute to the understanding how the living environment in negotiated by refugees living in a camp which is formally managed by the host country and humanitarian organizations. This is done by researching how women interact with WASH as part of the creation of space. In this part of the discussion I put the results of my research in a wider perspective. Below, I start with a short synthesis on the results derived from the analysis in chapter 5. After, I relate my research to the existing sociological debate on the nature of refugee camps and the options of agency for those who live in camps (Sigona, 2015). Following on this, I come back to the use of the concept of the 'creation of space' and I compare what other scientist say about the agency of Syrian women in humanitarian situations. Then, I touch upon some of the external factors which influenced the changes in WASH in Za'atari which are beyond the scope of this research and I describe how my research can be relevant for other refugee camps.

6.1.1 Synthesis of analysis

Based on the interviews conducted with women in Za'atari refugee camp I depicted which facets of the different aspects of the creation space (perceived, conceived and lived) were relevant to understand how the WASH space was created and thereby how women interacted with WASH in Za'atari. Those facets were elaborated on in the different subsections in chapter 5.

All those different facets are highly interlinked with other facets. For example: the everyday activities and routines, the relation between neighbours and the satisfaction of women changed because of the adaptations made in infrastructure. Those changes are induced both by the daily activities and the feedback through community mobilizers but also through the participation of women in clubs. The participation of women in clubs and community mobilization influenced their identity since their role as mothers changed due to the active participation in changing WASH. And, their identity and daily activities related to WASH influence their relations with neighbours. And those relations influenced, especially before the existence of private facilities, the everyday activities. The participation in clubs and community mobilization influenced how women see their own impact on the changes because through these activities their role became more apparent. And the satisfaction of women on WASH is influenced by their everyday activities, their participation in clubs and community mobilization, but also by how their identity changed and their dignity is ensured. Hence, the interlinkedness of the different facets (and consequently the different aspects namely perceived,

conceived and lived) of the creation of the WASH space by women in Za'atari refugee camp is important when aiming to understand how women and WASH interact as part of the living environment in Za'atari refugee camp, which is formally managed by the host country and humanitarian organizations. Figure 20 visualized the interlinkedness.

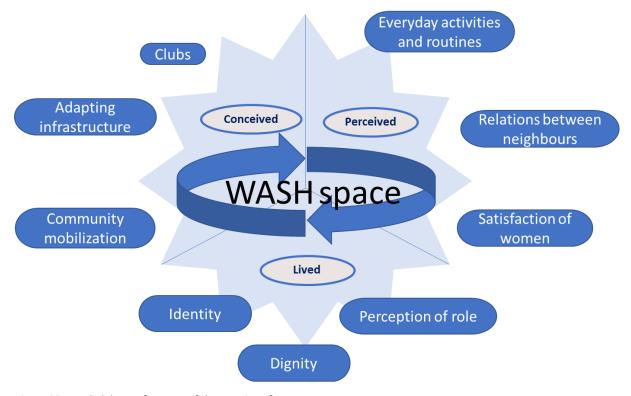


Figure 20. Interlinkdness of aspects of the creation of space

6.1.2 The nature of refugee camps and the options for agency for those who live in camps

As mentioned in box 1 and the introduction, camps are supposed to be temporary (UNHCR, 2014) and host-countries and host-countries are often not in favour of improving the (living conditions in the) camps as they do not want the camps to become a permanent settlement (B. Jansen, personal communication, August 18th 2018). There is a constant struggle to balance between just providing basic human needs to refugees and allowing them to make a living in the host country or camp. In practice camps exists for many years. Scholars try to understand the nature of refugee camps and the space of human agency for inhabitants and engage in a sociological debate on how to conceptualize camps (Sigona, 2015). 'Spaces of exception' is often used but delimits the options to grasp the complexity of camps. Internal and external social relations and the agency of inhabitants to organize their lives how they want to are hard to grasp (Sigona, 2015). Also portraying camps as 'extreme spaces' with its security threats have limitations, including the similar difficulties individuals would have faced if they stayed in their place of origin (Stevenson & Sutton, 2011). Nowadays refugee camps are often depicted as 'urban like settlements' (Agier, 2002; Buonocore et al., 2017;

Dalal, 2015; Grbac, 2013; Jansen, 2016). Although camps and urban settlements have some overlapping properties (the amount of people inhabiting, the spatial boundaries), some aspects are completely different. For example, the impermanence of its existence and the political constraints put on them by the host government, including the lack to vote for representation (Stevenson et al., 2011). The results of the research presented in this thesis show that there have been contestations about WASH between the formal camp management and the (female) refugees residing in the camp. It is not surprising there is a gap between what the formal camp management sees as good solutions to provide WASH and what the refugees themselves accept as suitable solutions since the formal camp management is formed by people with completely different background (Jordanian plus the international community working for humanitarian organizations) than the people residing in the camp (Syrian refugees). However, since the camp management is not a public representation there are less direct consequences for the camp management if the 'public' is not satisfied with the camp management (e.g. mismanagement in the eyes of the refugees will not lead to less votes at the new election). This should be taken into account when conceptualizing refugee camps as urban settlements. Nevertheless, looking at camps as urban areas offers opportunities to understand how the living environment is shaped, for example in the way I researched the camp by using the concept of the creation of space, which is often used to understand how cities develop.

6.1.3 The creation of space, useful as a concept?

Based on the assumption refugee camps and urban settlements have overlapping properties I took a concept from urban studies (the creation of space) to get a better understanding of how WASH in the camp is formed and how women influenced this process. This allowed me to unravel different aspects of the creation of the current situation (the perceived, conceived and lived aspects) and give valuable insights in the interaction between women living in Za'atari and WASH. Especially since Za'atari is a place where meaning is gained and where (female) refugees found ways to cope and adjust their daily rituals, routines and patterns to the camp setting (Stevenson et al., 2011). Because all aspects of the creation of space are highly interlinked, the specific way how I analysed the different practices could have been done differently. This is inherent in using this specific concept since it assumes the different aspects of the creation of space are all influencing the actual creation of space.

For example, the installation of private facilities: I described these practices as part of the contestations between the formal camp management and the refugees which directly influenced the plans and maps. I could also have described it as part of the perceived space since it was accepted by refugees as normal behaviour related to WASH. However, a different categorization would not have

led to different outcomes of this thesis: the different aspects of the creation of space are interlinked and are influenced by women and women are influenced by WASH, which is independent from the actual categorization in how I described the daily practices, agency and symbolic use related to WASH.

6.1.4 Empowering women in Za'atari

Humanitarian organizations are strongly concerned with the well-being of women in camps and multiple programmes exist to empower refugee women (UNHCR, n.d.-b). As Jabbar and Zaza (2015) show these programmes have a positive influence on the women's confidence and self-esteem, which is in line with the findings in my research that the identity of women became stronger in the camp. However, there are many factors that influence why and how they became stronger. Both my research and Jabbar and Zaza (2015) only highlight parts of the situation and did a research specially on women. Riach and James (2016) however researched the rule of law in Za'atari and found gender differences in access to legal representation, especially in the 'informal' methods which are in line with customary legal traditions of the refugees. Although it was not their goal to understand these differences, it can be concluded that although women increased their agency in the camp there are still huge gender differences. However, it might be possible that this will also change in the future since in refugee committees 'patterns are deconstructed and gender roles may be changed' (Jabbar et al., 2015, p. 304). Especially since some changes already occurred in Za'atari which became apparent in my research on the role of women in the changes in WASH. Moreover, active agency of people is providing dignity (Griffin, 2008). This is underlined by the outcomes of my research which shows that by actively participating in the creation of the WASH space, women contributed to the improvement of their own dignity.

Although humanitarian organization are focussed on providing gender sensitive programming, I found it striking to notice that in the reports of the WASH partners about the WASH programmes, hardly any segregation was made between the perspectives of men and women and the different dimensions of the creation of space were not considered. As can be derived from my research, gender is an important aspect influencing the experience of WASH facilities. Moreover, without understanding the perspective of women separately from the perspective of men, vital aspects for WASH might be overlooked. Furthermore, although women are able to steer the governance of WASH in such a way that they can make use of the facilities with dignity, they do not perceive themselves and their actions as important in the process of change related to WASH. They perceive their role as normal since it is their task as mothers to make sure the situation of their families is as

good as possible and to live a normal life under abnormal circumstances. Humanitarian organizations could contribute to making women aware of their agency through acknowledging the power of women to change their living conditions. This is in line with the recommendations by UNWomen (2018, p. 38) to improve 'gender-transformative participatory approaches that consider existing power relations and work directly with existing local women and community-based organizations' to benefit future programmes. Though, it should be kept in mind that although humanitarian organizations might want to enable the inhabitants of camps to form their own living environment, including WASH, they face constraints like being in an 'emergency action' mode pressure from donors, resource scarcity and time limits (Stevenson et al., 2011) and political influences. Therefore, the role of women in negotiating their living environment in camps should be researched further so we know more about their role. By having a better understanding it will be easier to take it into account under pressure. Furthermore, I want to stress the importance of not only make gender sensitive programmes but also conduct gender and space sensitive evaluation to ensure the gender sensitivity in programmes can be evaluated and with the insight they can be improved.

6.1.5 External factors influencing changes in WASH in Za'atari

The results of this research are specific for Za'atari and should not be extrapolated immediately to other refugee camps. As other camps, Za'atari is situated on territory different than the place of origin of the inhabitants and is within and constituted by multiple transnational and international networks and relationships (Ramadan, 2013). Meaning: not only what happens in the camp, which I researched a part of by focussing on women and WASH, influences how the camp is. Aspects outside the scope of my research influenced the context in which I did the research. For example, the political context and fear among Jordanian citizens of the impact on the quality of their scarce water due to the practices of Za'atari's inhabitants and the complaints of Jordanian citizens related to the road damages by trucks are aspects which might influenced the decision-making about the changes in WASH. If the situation would have been different, the specific role of women and their perception on the changes and their role in it could have been different. However, the notion that active participation of women in developing WASH should not be underestimated. When trying to satisfy users, the need of active participation of women will remain, even if the circumstances are completely different. Yet, we must consider that this only implies when we assume that the goal is to satisfy inhabitants with the facilities, which is contentious when talking about refugees and refugee camps.

Furthermore, Za'atari gained notorious media attention, including the visits of ambassadors and celebrities from all over the world and financial means were available to implement the changes in WASH. It could have been that the humanitarian organizations active in Za'atari were willing to comply with the requests of the refugees because they use Za'atari as a model camp to demonstrate the exertion of the humanitarian sector to the donors. Or, they made Za'atari as a 'trial' camp in which more agency of refugees was accepted to see where this will lead to. We have to keep these other possible influencing aspects in our mind when valuing the outcomes of this research. Especially since the scope of this research was not to understand the how the camp management made decisions on the changes in WASH, but the aim was to understand the role and perspectives of refugees themselves, and more specifically, the role of women. This research is centred around the interviews with women living in Za'atari, which gave interesting insights in how they see the changes and their role in the changes. However, other outcomes would probably have come up if I interviewed the camp management about their perspective on the role of women or even if we asked male refugees living in Za'atari about how they see the women influenced the changes and are influenced by the changes in WASH.

6.1.6 Relation to other refugee camps

Although I described several reasons why the results of my research should not be extrapolated to other refugee camps in section 6.1.4, some findings of my research are interesting for or relate to other refugee camps. Especially since other scientific research on camps suggests not only Za'atari refugee camp in Jordan is a humanitarian setting in which individuals inhabiting the camp influence how the place is. For example, Bleibleh et al. (2019, p. 4) describe that Jenin camp in Palestine is 'a source of everyday sociality and activity productive of particular identities, community formations, and home'. Also, the camp-society in Palestinian camps in Lebanon 'is not a monolithic body with a single pure identity, but a diverse, dynamic and at times divided assemblage in constant motion' according to Ramadan (2013, p. 70).

As Bleibleh et al (2019) state: 'the meaning of the camp is inseparable from the different ways it is inhabited'. The way a camp is inhabited is related to how the camp space is formed because inhabiting means one has to deal with the situation and by using it makes sense of a space. And the creation of space is inseparable from the meaning individuals give to the camp they live in, which again influences how they behave in the camp and create the camp space. As Ramadan (2013, p. 70) states: 'The camp is much more than a void of law and political life; it is who and what is in the camp, how they interrelate and interact.' If we want to understand how different refugees live in camps in

more depth than just know how they access basic needs, understanding how they make meaning of the space is useful. Taking the results of this thesis about the specific interaction between women and WASH (which is important aspect of living in the camp because it is both a basic need as shown from my research influences the sense of dignity and through gender also to identity) to understand how the camp is inhabited and formed therefore gives valuable insights in the importance of acknowledging the perspective of the end-users of the camp. Although the conclusions of my research are specific for Za'atari refugee camp, the approach I took to understanding how WASH is formed will be useful in other camps as well. Furthermore, the outcomes of my research can contribute to understanding how 'marginalised communities use their power of disruption to achieve durable solutions and change; particular when their self-governance structures are not recognised as legitimate, and dealt with that way, by state and non-state institutions'. (Woroniecka-Krzyzanowska, 2019, p. 43) and eventually also contribute to the acknowledgement of humanitarian actors that the refugees inhabiting a camp play an important role in how the space is created.

6.2 Discussion on methods

The use of my methods influenced the outcomes of my research. In this section I start with the most influencing factor and point out some other factors as well.

6.2.1 Cultural differences between researcher and people living in Za'atari

Different ideas on normality have probably influenced my research. As an outsider it is, I consider, impossible to completely grasp culturally internalized assumptions. Therefore I expect if my research would be redone by a Syrian female living in Za'atari, the outcomes would be different: some aspects which were striking for me and important to consider as influencing factors in the interaction between women and WASH related to the changes in WASH might be ordinary practices for a researcher from a closer cultural environment. On the other hand, outsiders can make visible which assumptions are internalized by end-users. The methods I used during the interviews were supposed to get out the important aspects from the perspective of the women and not from my perspective. As I described in the methods chapter (chapter 3) I kept the conversation as 'open' as possible, meaning I tried to get out which aspects of WASH were most important to the interviewees without steering towards a pre-defined set of facets. Only after the interviews the facets used in the analysis in chapter 5 were chosen.

6.2.2 The use of my framework

It appeared to be complex to attribute quotes into the different aspects of the creation of space as these quotes are often a mix of spaces. This has to do with the nature of the framework, which is based on the interlinkedness of the different aspects of how space is created. By attributing quotes to certain chapters I was still able to convey the message which is relevant for that specific aspect of the creation of WASH in Za'atari. If I would have used a different concept to understand how women interact with WASH in Za'atari, I may have unravelled different aspects of the relation of women on WASH and maybe grouped the outcomes differently. This is inherent to using concepts in research. However, the main outcome of the research with the use of the concept 'the creation of space' is that to understand how WASH is shaped, more aspects than just the physical facilities should be taken into account. I can imagine when using any other concept which offers the possibility to look further than just constructing facilities, similar conclusions would have come out.

6.2.3 Spatial differences unexplored decreasing the extrapolation possibilities

I was able to conduct interviews with 13 women only, living in districts 6, 7, 8 & 10 (for an overview of the districts, see figure 2). Since still almost 80.000 people live in the camp, huge differences may occur between households and districts. I did not research the differences between districts and thus I am unable to extrapolate my findings to all districts of Za'atari. Furthermore, due to the highly politicized context related to the future of Syrian refugees and the Za'atari specifics and the fact that Za'atari refugee camp is the only camp I researched, my results cannot be generalised for other camps. However, keeping the outcomes of this thesis in the back of the mind when researching or implementing programmes in other camps can contribute to understanding WASH in other refugee camps or when implementing WASH in other camps.

6.2.4 Focus on one subgroup, namely women

Different subgroups of inhabitants relate differently to the environment. In my research where I focused only on one subgroup (women) I found there are differences in how people relate to their infrastructure. Also, their influence on the changes differs. If I would have wanted to understand the full creation of space, all subgroups needed to be considered. To understand how space is created it is important to understand all aspects of space (Mahmoud et al., 2016). Limiting the boundaries of who is involved in the creation of space is contested and will always be a limiting factor in research. However, I believe when trying to look at all subgroups, important differences in these subgroups are overlooked. Therefore, focussing on just one subgroup can also deepen the understanding of certain aspects. In this case it deepened the understanding of the role of women, whose perspectives are often overlooked although women are a main focus of humanitarian programming. For future research on the interaction between women and WASH it could be interesting to specifically interview other subgroups, for example men or children, about how they see the interaction between women and WASH. This could enlarge the understanding of the creation of the WASH

space. However, the scope of the research presented in this thesis was to understand the creation of WASH through the perspective of women and by focussing on interviewing women I was able to cover their perspective.

6.2.5 Other circumstances influencing this research

Furthermore, several challenges influenced my research but the consequences for the outcomes are limited, including language barriers and working with a translator, safety and security rules and the control by the Syrian Refugees Affairs Dictorate (SRAD). Also, the fact that I was driven around by OXFAM, UNICEF or UNHCR staff and did most of the interviews in community centres could have influenced the answers of the interviewees, since they might have thought that I was part of these organizations, although I informed them about my independence. For example, the high level of satisfaction with the current WASH situation could have been exaggerated because they might have thought sharing negative opinions could diminish their personal situation. However, when visiting their homes and the way they showed me their facilities made me feel they actually were satisfied with the facilities.

7. Conclusions

This thesis showed how women interacted with water, sanitation and hygiene (WASH) in Za'atari refugee camp and what their role and perception was on changes which occurred since the camp started in 2012. This was done by first identifying what changed in WASH facilities based on a literature review on reports made by humanitarian organization and expert interviews. After, I did fieldwork and interviewed mainly female refugees in Za'atari and humanitarian field staff. I analysed the data based on the interrelated aspects of the 'creation of space': the perceived space, the conceived space and the lived space. In this case the perceived space entails the everyday activities and routines related to WASH, the relations between neighbours influenced by WASH and the satisfaction of women on the changes which occurred in WASH. The conceived space entails the agency female refugees have related to WASH, including the physical changes made to WASH facilities and negotiations between refugees and humanitarian organizations in clubs and through community mobilization. The lived space the symbolic use of WASH: identity, dignity and how women see their own role in the changes of WASH. All aspects together give insight in the role of women in the changes in WASH in Za'atari refugee camp Jordan and how these changes influenced the refugee women.

7.1 WASH Infrastructural and planning related changes

The WASH situation changed over the years in Za'atari. The water supply system changed from trucking water from boreholes (mainly from outside the camp) to communal distribution tanks and multi-purpose water points at WASH blocks. Refugees were supposed to collect the water at those points. Now all households have private facilities and access to the water network which connect the boreholes which are inside the camp with all private storage tanks, meaning all households have at least one tap in their 'homes'. The sanitation was first organized based on communal facilities from where the wastewater was trucked to a wastewater treatment facility outside the camp. After, many refugees made use of self-made facilities with predominantly pits to store wastewater which caused nuisance. Nowadays all households have private facilities and are connected to the wastewater system, which connects the households to a wastewater treatment facility which is located right next to the camp. The hygiene facilities changed from the distribution of sanitary items to a market system where people buy what they need.

7.2 Development of women's daily routines and satisfaction related to WASH – perceived space

Since the water is now delivered to all households and are connected to the wastewater, the routines of women changed tremendously. Now there is no need to walk to the facilities anymore, also not when the kids need to go to the toilet or to take a shower and there is no need of taking an accompanying family member or neighbour for safety. Women and kids can now go whenever they want, without having to wait for others to come out or being unsafe in the dark. Moreover, they stopped using the make-shift facilities from which the wastewater went outside the caravans because they are all connected to the wastewater system, which improved not only the smell but also the relations between neighbours. Furthermore, they are now responsible for the cleanliness of their own facilities (including the sanitation area and the water storage tank). Also, interviewed women said there is no need to worry about the availability of water any longer: now they can just check their own tanks and make decisions based on their own available water instead of being dependent on the usage of neighbours. There are fewer fights between neighbours. But, some women are afraid in summer there will be a lack of water. However, the women decreased the reuse of water for cleaning and gardening since they feel there is less need to re-use due to the easier access to water. Also, the usage of water filters is perceived as less needed due to a higher trust in the water quality.

All interviewed women are satisfied with the current status of the facilities. It is a huge improvement and compared to the 'critical situation' related to WASH before. The only improvements some of them would like to see happening are related to the lack of electricity during big parts of the day: they do not want to do laundry only during the night and they want to have hot showers from 'tubes in the wall' instead of using bucket showers with water which is warmed on the stove.

7.3 Agency of women to change WASH – conceived space

As part of the conceived space physical changes were made to the WASH facilities by refugees. The construction was mostly done by men, but the decision making about this was influenced by women. The physical adaptations directly changed the maps and plans of Za'atari which were made by the camp management. For example, by relocating public facilities to private properties or installing private facilities. Later the changes made by refugees were continued by the humanitarian WASH partners who installed both a wastewater and drinking water system to which all households are connected now. Furthermore, disagreements between different actors influenced the planning and governance, for example by bribing truck drivers to deliver water to private facilities or making use of the desludging trucks to empty private facilities. Negotiations between inhabitants and the camp

management influenced decision making related to the infrastructural planning and governance. Next to the hostile uprisings there was (and still is) active participation in clubs by both men and women and community mobilizers (which are partly women as well) are trained to communicate between the humanitarian organizations and the refugees. Therefore, women living in Za'atari have agency when it comes to the use and governance of WASH facilities through active participation in clubs and their work as community mobilizers.

7.4 Symbolic use of WASH by women – lived space

As part of the lived space, it can be concluded that the creation of the WASH space in Za'atari highly influenced how the female refugees experience living in the camp. Foremost, cultural sensibilities, unequal access to facilities and gender-differentiated power relations influenced the dignity and identity of women living in Za'atari. They were forced into practices like having to wait till they were allowed to use the toilet or bathroom or making use of plastic bags instead of facilities, which undermined their dignity because they could not make decisions based on their personal preferences and their sense of self-worth was weakened. Their identity became stronger in the camp, influenced by the hardship they faced related to WASH in the early days and their participation in clubs and community mobilization. Also, although their roots are in Syria, women started calling Za'atari home. They can practice their religion including the importance of personal hygiene and the cultural preferences related to WASH can be carried out nowadays, meaning these aspects of their identity are no longer undermined. There is a big difference in how women see their own role in the changes: Although some did mention women played a big role in the changes mainly by attending clubs or talking with the humanitarian organizations through community mobilizers, they also stated it was their task as a mother and did not want to take credit for it.

7.5 Approval of WASH

This research confirms that to get WASH approved by all end-users (including women) in Za'atari refugee camp, WASH implementing organizations needed to go beyond planning of the physical facilities. Cultural aspects, gender differences and the agency and perception of refugees all influenced WASH. This is in line with Goonewardena et al. (2008) and Massey (2013) who say that space is socially produced and influences how we are living together. Besides the impact female refugee had on WASH, also the rights and obligations of women were adjusted, neglected and negotiated through everyday interactions related to WASH. If we want to make the living environment of refugees in the camp as good as possible it is thus of high importance to incorporate the end-users in the decision-making process. This means that next to the role and perception of men also the role and perception of women both in using and adapting the WASH facilities needs to be acknowledged.

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8.1 Personal communication

- B. Jansen, personal communication, August 18th 2018
- F. Nahbani, personal communication, January 16th 2019
- H. Al-Hawami, personal communication, January 20th 2019
- A. Kassabeh, personal communication, January 22nd 2019
- D. AlQaseer, personal communication, January 23rd 2019
- S., personal communication, January 23rd 2019
- M. Abu Siam, personal communication, January 23rd 2019
- A. Kassabeh, personal communication, February 12th 2019

Due to privacy concerns, the list of interviewees can only be requested through the author. However, even if I communicate some details of the interviewees, I will assure the privacy.

Annex 1. Interview guide - Summary

Interview guide Za'atari Jordan - The role of women in the creation of space through WASH By Brenda Brouwer BSc (Wageningen University & Research) (brenda.brouwer@wur.nl) January – March 2019

1. Introduction and goal

The interviews I am planning to conduct will be asked to answer my main research question 'How is the living environment in Zaatari refugee camp negotiated by the inhabitants (more specific by women) through WASH facilities?'. Next to the interviews a data review will be conducted. The knowledge gathered is useful for UNICEF, UNWomen, UNHCR, WASH for Life and other organisations active in refugee (camp) management in the MENA region. This document outlines the goal & questions to be asked during the interviews.

2. Interviewees

I want to conduct 15-20 in-depth semi-structured interviews of about 1.5 hour with a range of women (different age, different marital status, mothers of children with different ages staying in different districts) who have been in the camp for several years already. In combination with participatory observation: I want to work with women doing their daily choirs and see their habits.

3. Interview set up and questions

The interview questions in this chapter are just a guideline. I want to ask more 'open' questions ('can you tell me about WASH?') but use the guidelines to check if we discussed all the topics.). I want to spent some time to first get to know the women I want to interview before asking them the questions below to gain some trust.

4. Interview

Intro

First I will inform the women about the reason of asking them to participate. Next, I want to inform them about what I am going to do with the outcomes. Of course I will introduce myself and my translator. All information is also stated on the information form I present when asking the women to sign the form of consent . Questions are discussed with Imae, a Jordanian women willing to think along about cultural sensitivity.

General Questions (metadata: who is interviewed?)

- 1. Can you tell me about who you are? What is your role in the community of Zaatari?
 - 1.1 Are you a mother?

- 1.2 Are you working?
- 1.3 Are you active in an organisation?
- 1.4 What's your age?
- 1.5 When did you come to Zaatari?
- 1.6 Did you attend a hygiene promotion course?
- 2. Can you tell me about your family?
 - 2.1 Are you married? To whom? Is he here as well?
 - 2.2 Do you have children? How many? How old are they?
 - 2.3 How many people are living in your household?
 - 2.4 Which family members are in Zaatari?
 - 2.5 Do you all live together or close by?
- 3. Can you tell me about your life in Zaatari?
 - 3.1 Did you move in Zaatari?
 - 3.2 Do you work in Zaatari? Or did you?
 - 3.3 What is your role in Zaatari? How would you describe your role in Zaatari?
 - 3.4 How does a normal day (or week) look like? *
 - 3.5 How important is WASH for you?

Questions related to WASH and research

- 4. Can you tell me about how you use water, sanitation and hygiene facilities?
 - 4.1 Where do you use the WASH facilities?
 - 4.2 Do you feel safe using it?
 - 4.3 Do you have your own toilet & water tap? Handwash facilities?
 - 4.4 When did you get the private facilities?
 - 4.5 How did you get it? (2 levels: formal/informal, like destroyed or by NGO's and who decided it, husband, streetleader etc.).
 - i. Who decided you got it? *
 - ii. Who built it?
 - iii. Who paid for it?
 - iv. What did you think of it?
 - 4.6 How about maintenance (cleaning and repairing). Who is maintaining it?
 - 4.7 Are you connected to the sewerage? Is your part of the sewerage working?
 - 4.8 Do you need to accompany the kids?
 - 4.9 What do you like about the current situation? (Make metadata notes!)
- 5 Can you tell me what has changed in WASH since you came to Zaatari?

- 5.1 Where did you use the WASH facilities in the first few years?
- 5.2 How were the WASH facilities when you arrived in the camp? What was the situation?
- 5.3 Did you feel safe using the facilities?
- 5.4 Did you need anyone to come with you to the facilities (for safety?)
- 5.5 Who maintained (cleaned and repaired) it?
- 5.6 What has changed over the years in WASH for you?
- 5.7 Did it change after the new facilities were installed or is this exactly how your got it?
- 5.8 How about the kids? Did you always go with them?
- 5.9 Did you have other habits to use it?
 - I. Cleaning house, drinking, food preparation etc. (with less water?)
 - a. How important is a clean house for you?
 - II. Personal hygiene (shower) * (with less water?)
 - a. How important is being clean yourself for you? *
 - III. Did you use the toilet as often as now? *
 - IV. Did you not go if you wanted? Did you have problems with health because of this? *
- 5.10 What do you feel about cleaning with less water?
- 5.11 What did you like of the old situation?
- 6 What do you think of the changes?
 - 6.1 How did the change happen?
 - 6.2 What do you think is the reason it changed? Or what was your reason to make changes?
 - 6.3 Who was involved in the change?
 - 6.4 What was your role in the changes?
 - 6.5 What do you feel about the changes?
 - 6.6 What do you think of the process of change?
 - 6.7 What are your dreams related to WASH? If everything would be possible, how would you like to have it?
- 7 To whom do you talk about WASH and how do you talk about it?
 - 7.1 What do your friends think of the WASH situation?
 - 7.2 How do your friends think of the process of change?
 - 7.3 What does your husband think of the WASH situation?
 - 7.4 How does he think about the process of change?
 - 7.5 Did you talk with an organisation about it?
 - 7.6 How did you experience communicating with the formal WASH organisations?

8. Is there anything else you want to tell about WASH?

Ending the interviews

Thanks. Summary of what I am going to do with results.

(Picture? : What do you want me to take a picture of?)

(Ask if they know other people who might be willing to help. Only if not enough interviewees yet.)

5. Processing of interviews

The information gained from the in-depth interviews with women and the participatory observations will be used to write my MSc thesis for International Land and Water Management at Wageningen University & Research. I am going to do this based on the concept of 'creation of space' by Lefebvre. See table 3 for the use of the questions per sub-research question. The interview notes and transcribed interviews will be stored encrypted and stored on my laptop and an USB with a password for privacy and data security reasons.

Also this information will be provided to UNICEF and UNWomen to inform their programs.

6. Information about research for interviewees & consent

Introduction to research on WASH & Gender

- Wash & Gender. The research is conducted as part of my MSc thesis at Wageningen University & Research. The analyses will be shared with several NGO's and institutions active in Za'atari and may be used for future programming. The interviews itself will not be shared and I will keep them confidential!
- The goal is to understand the role of women in the changes which have occurred in WASH in the past few years. I think without women the situation would have been completely different. Also I want to understand how the improvements in WASH influenced how you like your living environment.
- Please note, I would like to spent a few moment with you and do small interviews before the 'real' interview.

Important to remember:

- Your name and the information you give will be treated as private and confidential and will not be shared with anyone except the research team.
- The interview will take about 90 minutes and there are no right or wrong answers we are interested in your unique perspectives and ideas.

- If you agree, we would like to record our conversation and we will store the recording in a safe lockable place.
- As researcher, I cannot provide any direct benefits, services or assistance, but your insights and experiences will be valuable for projects of several NGO's active in Za'atari and my MSc thesis.
- If you have any questions now or at any other time about this research, please feel free to ask or to contact me at 0798472681.
- You are free to decide if you would like to talk to me and it is not a problem if you refuse (this will be just between us and no-one else will know). Also during the interview if there are specific questions you do not feel comfortable answering, it is fine to skip these. Your participation (or non-participation) will not affect any services you are receiving in the community from any of the programmes. It will not affect your relationship with others in your local community or with your employers.

Consent form

Agreement to participate in WASH study of Brenda Brouwer

The research information was presented in written form and read to me. Anything I did not understand was explained and all my questions were answered

I understand that I participate voluntarily in this research, and have the right to withdraw at any

point	during	the	interview.	1	can	decline	to	answer	certain	questions
- I a	gree to thi	s interv	view being rec	orde	ed, and	understand	l that	these recor	dings will d	only be used
for this	research a	and pot	ential related	rese	earch ir	the future	. No p	art of this	interview s	hall be used
for any other purposes than this research and related research in the future without my writter										
consent.										
Please t	cick boxes	for all t	hat apply:							
□ I agree to participate in the study.										

ignature/ Mark of Respondent	
)ate	
ate and a second se	

□ I agree to have meetings digitally recorded.

Nama	
Name	

I have explained the objectives of the study and explained the informed consent procedure to interviewee. She understands that all information will be kept private and confidential, that there are no right or wrong answers, and that they can withdraw from the interview at any time.

I hereby confirm that the women has given consent to be part of the study.

Signature of Researcher	Brenda Brouwer	
Date		
Name of interviewee:		
Phone number		

سيتم إجراء البحث كجزء من أطروحة الماجستير في جامعة Wageningen & Research, وسيتم تقاسم التحليلات مع العديد من المنظمات غير الحكومية والمؤسسات الفاعلة في الزعتري ويمكن استخدامها في البرامج المستقبلية. لن تتم مشاركة المقابلات وستبقى سرية!

يكمن الهدف في فهم دور المرأة في التغييرات التي حدثت في منظمة (واش) في السنوات القليلة الماضية وأعتقد أنه بدون النساء لربما كان الوضع مختلفًا تمامًا, كما انني أريد أن أفهم كيفية تاثير (واش) على طريقة التعلق بالبيئة المعيشية الخاصة.

- يرجى ملاحظة أنني أود قضاء بضع دقائق معك وإجراء مقابلات صغيرة قبل اجراءالمقابلة الفعلية. من المهم أن نتذكر:
- سيتم التعامل مع اسمك والمعلومات التي قدمتها على أنها خاصة وسرية ولن تتم مشاركتها مع أي شخص باستثناء فريق البحث.
 - تستغرق المقابلة حوالي 90 دقيقة ولا توجد إجابات صحيحة أو خاطئة . نحن مهتمون برأيكم وأفكاركم الفريدة.
 - في حال الموافقة ، فاننا نريد تسجيل محادثتنا وسنخزن التسجيل في مكان آمن مقفل.

- بصفتي باحثًا ، لا يمكنني تقديم أي منافع أو خدمات أو مساعدة مباشرة ، ولكن رؤيتك وخبراتك ستكون قيّمة لمشاريع العديد من المنظمات غير الحكومية الفاعلة في الزعتري والطروحتي الجامعية.
- إذا كان لديك أيه أسئلة الآن أو في أي وقت آخر حول هذا البحث ، فلا تتردد في السؤال أو الاتصال بي على 0798472681.
- لك مطلق الحرية في أن تقرر ما إذا كنت تريد التحدث معى ولن يشكل الرفض اي مشكلة (سيكون هذا فقط بيننا ولن يعرف أحد غيرنا). أيضا خلال المقابلة إذا كانت هناك أسئلة محددة لا تشعر بالراحة عن الإجابة عليها فلا بأس من تخطي هذه الأسئلة. لن تؤثر مشاركتك (أو عدمها) على أية خدمات تتلقاها في المجتمع من أي من البرامج ولن يؤثر ذلك على علاقتك مع الآخرين في مجتمعك المحلي أو