Refugee migration to Germany: a magnifying glass for broader public health challenges

PH-LENS Research Group

PH-LENS

Working Paper Series

No. 01
March 2021

An analytical framework for assessing types of refugee accommodation from a public health perspective

Verena Penning & Oliver Razum

Citation:
Penning, V., Razum, O. (2021): An analytical framework for assessing types of refugee accommodation from a public health perspective. Bielefeld: PH-LENS Working Paper Series No. 1, 03/2021.
https://doi.org/10.4119/unibi/2953430

Penning, V., Razum, O.

An analytical framework for assessing types of refugee accommodation from a public health perspective

PH-LENS Working Paper Series No. 1
Bielefeld, March 2021

Editors: Razum, O.; Bozorgmehr, K.; von Unger, H
ISSN: 2702-2676, DOI: https://doi.org/10.4119/unibi/2953430

Papers published in the PH-LENS Working Paper Series have undergone an internal review process.

Gefördert durch DFG Deutsche Forschungsgemeinschaft

PH-LENS is funded by the German Research Foundation (DFG).

PH-LENS Working Papers are refereed scholarly papers. Submissions are reviewed by the general editors before a final decision on publication is made.

The Working Paper Series is a forum for presenting works in progress. Readers should communicate comments on the manuscript directly to the author(s).

The PH-LENS Working Paper Series is intended to aid the rapid distribution of work in progress, research findings and special lectures by researchers and associates of PH-LENS. Papers aim to stimulate discussion among the worldwide community of scholars, policymakers and practitioners. They are distributed free of charge in PDF format via the PH-LENS website: https://www.uni-bielefeld.de/fakultaeten/gesundheitswissenschaften/forschungsgruppen/ph-lens/publikationen/

Unless otherwise noted, this publication is licensed under Creative Commons BY-NC-ND 4.0 International (CC BY-NC-ND). For more information see:

https://creativecommons.org/licenses/BY-NC-ND/4.0/deed.en and
https://creativecommons.org/licenses/BY-NC-ND/4.0/legalcode

PH-LENS „Refugee migration to Germany: a magnifying glass for broader Public Health challenges“
University of Bielefeld
School of Public Health
P. O. Box 100131
33501 Bielefeld, Germany
Phone.: +49 521 106-3837
Email: oliver.razum@uni-bielefeld.de

An analytical framework for assessing types of refugee accommodation from a public health perspective

Verena Penning, Oliver Razum

Abstract

Housing is considered an important social determinant of health. In the context of refugee migration, living in one's own apartment is a key indicator of successful integration. The type of housing in which refugees are accommodated, however, varies widely. Empirically, measuring health-related attributes of accommodation is challenging. The (international) refugee camp context has been focused on from various fields of research, often drawing on particular theoretical concepts. In this article, these theoretical concepts – mainly based on the work of Hannah Arendt, Erving Goffman, Michel Foucault and Giorgio Agamben – form the basis for developing a broad analytical framework of refugee accommodation. Housing in the context of refugee accommodation must be understood from four dimensions, including the broader political context, the immediate surroundings of the accommodation and its' physical and social boundaries, and the structures and processes inside the accommodation that may establish means of social control. As the conditions on each of these three dimensions can affect individuals differently, a fourth, individual dimension complements this analytical framework by a subjective evaluation of the overall living situation. The framework provides a multidimensional approach to assess the context of refugee accommodation which then can be used to systematically analyse health associations. The relevance the dimensions and contextual factors of this framework have on health is supported by empirical evidence as well as conceptual approaches.

1. Housing and health

Housing is widely considered as an important social determinant of health. Research has increasingly shown interlinkages between the context in which people live and individual health outcomes (Baker et al., 2017; Bentley, Baker, Simons, Simpson, & Blakely, 2018; Braubach, Jacobs, & Ormandy, 2011; Braveman, Dekker, Egerter, Sadegh-Nobari, & Pollack, 2011; Evans, Wells, & Moch, 2003; Gibson et al., 2011; Holding, Blank, Crowder, Ferrari, & Goyder, 2019; Jelleyman & Spencer, 2008; Mallett et al., 2011; Rolfe et al., 2020; Ziersch & Due, 2018). Physical health risks comprise the exposure to environmental hazards such as mould, dampness, toxins, low indoor temperatures, or overcrowding (Braubach et al., 2011). However, the relationship between housing and health is far more complex and goes beyond these rather obvious and tangible associations. Baker et al. (2017) assessed the combined impact of factors such as affordability, security and quality of the dwelling, quality of the residential area and access to services and support on physical and mental health. They found that a higher level of housing deficiencies is associated with worse physical and mental health outcomes. Holding et

al. (2019) confirmed that the mental health of social housing tenants is influenced by a range of interlinked factors, such as the affordability of and satisfaction with living conditions, the physical conditions of the dwelling, the physical environment and the social environment of the neighbourhood.

The role of the neighbourhood environment in the relationship of housing and health has frequently been underlined (Evans, 2003; Krieger & Higgins, 2002; Marmot & Wilkinson, 2005; O'Brien, Farrell, & Welsh, 2019; Voigtländer, Berger, & Razum, 2010). In a meta-analysis by O'Brien et al. (2019) perceived neighbourhood disorder (e.g., measured by graffiti or dilapidated housing) was consistently associated with poorer mental health and self-reported health of residents. The results of the study most strongly pointed to a pathway supported by the psychosocial model of disadvantage, in which neighbourhood deterioration causes stress which in turn impacts mental health (ibid.). This is in line with the results of the review by Evans (2003) in which social and physical attributes of neighbourhoods were found to increase psychosocial distress. Further, especially in terms of mental health, housing may be influenced by a range of other factors. Psychosocial processes such as issues of identity, insecurity, social support or control were found to mediate the relationship between housing and mental health (Evans, 2003; Evans et al., 2003).

Besides the housing and neighbourhood conditions as such also frequent changes of accommodation seem to have an effect on health. Bentley et al. (2018) found that multiple transitions in and out of social housing increase psychosocial distress and strongly impact mental health. In line with that, Jelleyman and Spencer (2008) concluded in their systematic review that increased residential mobility is a risk factor for behavioural and emotional problems in children.

The housing – health relationship has also been studied specifically among refugee and asylum seeker populations which comprise particularly marginalized groups (including female, young or old asylum seekers) who frequently live in deprived areas with less favourable living conditions (Bozorgmehr, Razum, Szecsenyi, Maier, & Stock, 2017). As refugees and asylum seekers already face a wide range of pre- , peri and postmigration risk factors for mental disorders (Priebe, Giacco, & El-Nagib, 2016), it is all the more important to comprehensively assess the impact these living conditions have on individual health outcomes. For refugee and asylum seeker populations appropriate housing is not only important from a health perspective, it also forms a key indicator for a successful integration (Ager & Strang, 2008; Ziersch & Due, 2018). In a recent systematic review, a consistent association was found between housing and physical and mental health outcomes of refugees and asylum seekers. While studies conducted in refugee camps in low and middle income countries predominantly pointed to poor physical living conditions, studies in resettlement countries additionally revealed key emerging issues in regard to affordability, suitability, insecure tenure and mobility as well as difficulties securing housing (Ziersch & Due, 2018). However, the authors underlined that the housing-health relationship is intertwined with other factors, such as issues of discrimination or with building social connections, and they point to the need of better research tools to explore this relationship more generally for refugee populations (ibid.). Ager

and Strang (2008) have developed a conceptual framework containing core domains for a successful integration; housing is considered as one of the key variables. The housing domain included factors such as physical size, quality of housing, financial security of the tenancies, and ownership. However, the refugees and local residents interviewed pointed more to the importance of cultural and social impacts of housing (such as the significance of neighbourhoods or the meaning of being settled in an area) than to the factors the authors used to assess the housing domain (Ager & Strang, 2008).

In short, empirical research assessing the housing-health relationship has identified various (often interlinked) contextual factors impacting health (such as: affordability and financial security, satisfaction, housing deficiencies, environmental hazards, neighbourhood disorder or frequent changes of accommodation). Psycho-social processes are further found to mediate this relationship. Given this complexity of the housing context, it seems generally unclear which factors an assessment of the health impacts of housing should include and which not. This in particular applies to refugee camps, extraordinary living spaces, that are subject to great contextual variabilities. Proliferated in different parts of the world, controlled and managed by different actors for different groups of people, camps occur in most different social-spatial and administrative forms. Agier (2011) distinguished four types of camps: First, self-settled and self-organized places, abandoned and informal zones inhabited by displaced people; second, sorting centres such as transit centres, waiting zones and detention centres, all under institutional control (e.g. by national administrations, police institutions, UN agencies, humanitarian NGOs) and all *"[…] generally associated with practices of selection, expulsion or admission […]*" (ibid., p.47); third, refugee camps as most standardized form of camps, established for *"[…] the provisional stationing of a displaced and controlled population […]"* (ibid., p. 53), often located remotely with supervised access; and fourth, refugee camps for internally displaced people, similar to international refugee camps but more precarious and uncertain since legal and social protection is not guaranteed. It is from the angle of the "institutional" refugee camps, that we view the housing-health relationship in this paper, but later drawing conclusions to general refugee accommodation (including private accommodation), as well.

In the following, we investigate how housing has been conceptualized from different perspectives and what it needs to assess the housing situation of refugees and asylum seekers. By approaching a range of theoretical concepts of (refugee) camps and social institutions, we develop an analytical framework that helps to understand the nature of refugee camps and, in a broader sense, of other types of refugee accommodation. This is a first essential step in order to systematically assess the health impact of refugee accommodation.

1.1 Conceptual considerations on housing as a social determinant of health

The World Health Organization (WHO) defines healthy housing as a shelter "*[…] that supports a state of complete physical, mental and social well-being* [… and] *provides a feeling of home, including a sense of belonging, security and privacy*." (WHO, 2018, p.2). This definition already indicates that housing must be more than just the physical structures of the shelter itself but

needs to include a range of contextual factors that all together are capable of capturing this "feeling of home". However, following this definition it remains unclear what is needed to establish a feeling of home; and thus, which contextual factors an assessment of housing should contain. The term "home" is not a material object but always refers to something personal and thus relational. As Karjalainen (1993, p. 70) puts it:

> "*As a home the house is a creation having special properties accessible only to the people who made it their home. These properties—sentiments, emotions, feelings of security, inter-personal relations, sociality, relations between the different generations and all of them with their positive and negative aspects—are difficult to portray from the outside*."

This implies that some people may live in precarious housing but still consider it as a beloved home while for others their neat house never really become a home. This shows that housing as a social determinant of health cannot be assessed only objectively but always needs to include subjective factors such as the sense of belonging or the satisfaction with the living conditions, as in Holding et al. (2019).

Besides physical and social factors of housing, including their subjective components, there is another domain of apparently relevant contextual factors, the political domain of housing. Within the framework developed by the Commission on Social Determinants of Health (CSDH – Conceptual Framework), housing is conceptualized as "material circumstances", which comprise resources for health as well as health risks. Within this framework, housing relates to physical factors of the dwelling itself, such as the structure, indoor and outdoor conditions, but also to the location of the dwelling and the neighbourhood environment (Solar & Irwin, 2010). The framework further illustrates how these housing characteristics are being shaped and formed by the socioeconomic and political context. Material circumstances are conceptualized as downstream factors that reflect the place people live in within a society; factors shaped by individual socioeconomic positions which have arisen from the underlying socioeconomic and political context (ibid.). The CSDH Conceptual Framework thus underlines the role of political decisions and resulting policies that actually determine the distribution of resources within society.

1.2 The political context of refugee accommodation

From the perspective of refugees and asylum seekers, the political domain seems particularly relevant since the political agenda, as well as underlying migration and social policies that are in place, actually shape refugee accommodation. This, in turn, can affect the health of the residents. For example, the UK and the Netherlands both provide state-mandated accommodation. Bakker, Cheung and Phillimore (2016) compared these two accommodation types. Asylum seekers in the UK are often allocated to decentralized accommodation (after initial processing in reception centres) which are located within communities but often in deprived areas with relatively poor housing conditions. Asylum seekers in the Netherlands, in turn, are assigned to collective accommodation centres which are located in the periphery of

communities. While the former type of accommodation may be associated with deteriorated physical health, for the latter the authors found an impact on mental health outcomes, presumably due to a lack of autonomy and privacy (Bakker, Cheung, & Phillimore, 2016).

Germany also provides state-mandated reception centres for asylum seekers. For a period of up to 18 months after arrival, asylum seekers are obliged to live in initial reception centres according to §47 Asylum Act. Thereafter, they are distributed to districts or municipalities within the same federal state. The federal states are responsible for the distribution, reception and accommodation, based on state laws and regulations. They usually delegate responsibilities to districts and municipalities, which then have to provide and manage facilities (Aumüller, Daphi, & Biesenkamp, 2015). Subsequent accommodation can either be decentralized in form of private housing or centralized (i.e. collective facilities), though, according to §53 Asylum Act, asylum seekers should as a rule be accommodated in collective facilities. Thus, the type and structure of accommodation for refugees and asylum seekers in Germany (and in other resettlement countries as well) is politically predetermined, depending on the respective laws and regulations on a federal state, district, and municipality level.

2. Theoretical perspectives on refugee camps

So far, we have demonstrated that the way housing is understood and assessed in empirical health-related research varies. A comprehensive assessment of the contextual effects of housing on refugee health seems challenging given that a holistic conceptual framework and appropriate measurement tools are largely lacking. We thus explore how the housing context of refugees and asylum seekers can be understood from a theoretical point of view. We focus on refugee camps (also comprising collective accommodation here) as a specific type of refugee accommodation (which would also include private accommodation types) and analyse how camps can be understood from philosophic, sociological, and political perspectives. In the process, we ask which dimensions and contextual factors of the camp context are important to consider based on the selected, not directly health-related concepts. How to connect these different theoretical perspectives in order to obtain a broad understanding of this context? We assume that the identified dimensions and contextual factors in the camp context are then also relevant in the general refugee accommodation context. Final result of this work is an analytical framework that contains all relevant dimensions and contextual factors of refugee accommodation (including their operationalization in a German context) which subsequently serves as a basis to systematically assess health impacts.

To establish which theoretical concepts are discussed international, we reviewed literature on different types of camps from the fields of architecture, urbanism and geography, international relations, human rights, and political sociology. We identified four scholars who are frequently referred to or whose concepts were applied, namely Hannah Arendt, Erving Goffman, Michel Foucault and Giorgio Agamben. We explored their main ideas and deduced dimensions and contextual factors from their concepts that are relevant for the analysis of refugee camps (and refugee accommodation in a broader sense). In order to be able to clearly discriminate between different types of camps we included in our analysis literature on concentration

camps. This may seem far-fetched or even highly inappropriate at first glance. However, we found it helpful to overcome practical challenges of discrimination, not the least in view of the substantial body of literature calling refugee camps concentration camps (e.g. Michel Agier).

The Holocaust and the mass murder of non-Jewish populations by Nazi Germany has profoundly shaped the understanding of the term "concentration camp". Moreover, iconic images of Auschwitz-Birkenau led to the impression that concentration camps are by their very nature extermination camps. This is a misconception: concentration camps exist *"[…] on a continuum of carceral practices that includes prisons, detention centres, and extraterritorial holding pens […]"* (Stone, 2017, p.4). Auschwitz, for example, fulfilled the functions of both a concentration camp as well as an extermination camp. Other Nazi concentration camps were not primarily established for systematic murder while yet others such as the camps of Chelmno or Treblinka were only extermination camps. Further, concentration camps existed decades before and after the Second World War in different parts of the world, established to hold different groups of people, but not usually with the primary aim of extermination (ibid.). If considering concentration camps roughly as "*[…] an isolated, circumscribed site with fixed structures designed to incarcerate civilians.*" (ibid., p.4), the question to which extent contemporary refugee camps, detention camps, internment camps could be called concentration camps seems less inappropriate: all these types of camps form sites in which people at least to some extent are held against their will (ibid.). There is a second relevant criterion, namely the degree of access to legal arbitration that camp inmates have. Such access will be existent in refugee camps in countries with an independent legal system. Concentration camps, however, tend to be extra-legal spaces in which inmates cannot appeal being held. Looking at the nature and the history also of concentration camps can thus be meaningful to learn more about the nature of refugee camps.

2.1 Hannah Arendt's typology of concentration camps

In the frame of her analysis of total institutions, Hannah Arendt developed a typology of concentration camps that serves as a basis for many other theoretical considerations (Agamben, 2000; Kotek & Rigoulot, 2001; Van Pelt, 2011; Weinert & Mattern, 2000), also with a specific focus on the contemporary refugee situation (Barichello, 2015; Larking, 2018). Based on Western concepts of afterlife, Arendt divided camps roughly into three Weberian "ideal types": *Hades, Purgatory* and *Hell* (Arendt, 1948) which are gradually marked by a series of humiliations. *Hades* represents a not exclusively totalitarian form of camp which is placed outside the normal penal system and has the overall function to isolate all those people that are seen as undesirable or superfluous, such as refugees or displaced persons. In addition to the isolation of people, *Purgatory* is characterized by unstructured forced labour. Arendt refers to the Soviet Union's labour camp as an example for this second type. *Hell* is consequently representing the worst form of camps in her typology. The Nazi concentration camps exemplified the systematic torture that is characteristic for this type (ibid.).

What, according to Arendt (1948), all types of concentration camps have in common is that their occupants "[…] *are treated as if they no longer existed, as if what happened to them were no longer of any interest to anybody, as if they were already dead* […]" (p.750). Inmates are gradually turned into "*living corpses"* (ibid., p.751) in three consequent steps: in *Hades*, the juridical person is eliminated from the individual, putting the inmates' existence outside legality. In *Purgatory*, the moral person in man is additionally destructed and life or death becomes irrelevant, which abolishes the role of victims and abandons human solidarity. And finally, in *Hell,* people's unique identity is destructed, reducing inmates to naked human beings. This gradual preparation of inmates to living corpses and the underlying terror and torment in the camp reveals the idea that everything is not only permitted but also possible in totalitarian regimes (Arendt, 1955). Following Arendt, concentration camps can thus be considered as spaces beyond the law that deprive inmates of all that is human, aiming to depose all those that are superfluous (ibid.). Carl Schmitt, a controversial political theorist and committed Nazi, justified this suspension from law in the state of exception. Following Schmitt, proclaiming a state of exception would legitimate governments to diminish constitutional rights in order to secure or maintain social order. The state of exception thus allows authorities to temporally suspend the existing legal order and define new laws without being bound by them (Meierhenrich & Simons, 2016).

Later, other scholars have extended Arendt's typology by two more types: firstly *Gehenna*, which is supposed to mirror the worst form of the Nazi concentration camps that exclusively served as centres for genocidal mass murder without any camp-like infrastructure (Kotek & Rigoulot, 2001). Secondly, *Paradise,* describing those Nazi camps aiming to gather and train young German men in order to build a unified and strong society, and to shape a sense of community and identity (Van Pelt, 2011).

Trying to localize contemporary refugee camps in this five-tiered typology is useful for several reasons. First, it puts a focus on the underlying intention of the camp. Are contemporary refugee camps established for reasons of isolating the superfluous people such as in Arendt's *Hades* or rather for empowering and strengthen the residents such as in Van Pelts' *Paradise*? Second, it draws attention to the question whether refugee camps are operating outside law, or which legal frameworks do apply (such as: international law, national law, customary camp laws?). Third, depending on the legal order and the intention of the camp, camp residents face different consequences, which should be analysed. Which structures and processes have been established that may attack the moral person in man (here comprising all genders), thus impeding any kind of agency or human solidarity, or that deprive the residents of their identity? To which extent do these structures and processes still allow a self-determined life, or do they narrow down the residents' individuality? It can be assumed that experiences of legal exclusion, moral degradation and lacking self-determination just present additional peri- or postmigration stress factors impacting the health of refugees and asylum seekers.

2.2 Erving Goffman's total institutions

Another approach for the analysis of refugee camps is the concept of total institutions by the sociologist Erving Goffman. In his book "Asylum", published in 1961, Goffman analyses total institutions and the social situation of psychiatric patients. His ideas are not exclusively limited to psychiatric patients, they rather serve as a concept for social institutions in general. In total institutions, main spheres of life, such as eat, sleep, work and play, for entire groups of people are organized under one and the same authority (Goffman, 1973). Goffman classifies total institutions into five groups, depending on the underlying intention: 1) for the care of dependent people, such as retirement homes, 2) for the care of people who are believed to pose an unintended threat to society, such as mental hospitals, 3) for the protection of the community (e.g. prisons or P.O.W-camps), 4) for work (e.g. labour camps), and 4) as a refuge from the world (e.g. monasteries) (ibid.).

All of these types have in common that mechanisms are in place that maintain social stability, though these mechanisms can differ profoundly, ranging from coercion such as in prisons, and renumeration (e.g. in labour camps) to shared ideology as in monasteries (De la Chaux, Haugh, & Greenwood, 2018). In all types of total institutions, the inmates are not only segregated from the society, life inside the institution also becomes to a greater or lesser degree formally administered and controlled. In order to accomplish the institutional goal of social stability, procedures are in place that disrupt individual autonomy, self-determination and freedom for action, Goffman speaks of "mortification". The restriction of freedom of movement and the separation from the outside world leads to "civil death", the loss of social roles and civil rights. Admission procedures, expropriation of personal property and permanent regulations make the inmates aware of their low status, induce a loss of identity and undermine the autonomy of the inmates. Goffman also speaks of physical and interpersonal humiliations, the former through poor food or dirty quarters, and the latter by practicing body controls or by disrespecting different age- or ethnic groups (Goffman, 1973). All these mortifying procedures seem to be particularly relevant for health, given the psychological stress they can induce.

According to Al Ajlan (2020) and Christ (2017), it is these elements of total institutions that engender violence and conflicts among residents of collective accommodation centres in Germany. Often, the accommodation centres are located remotely and isolate the inmates from the community. Inside the accommodation, residents live in a confined space with little privacy and possibilities for retreat. Further, everyday life is subject to internal rules and regulations, e.g. in terms of eating habits, cultural traditions or welcoming friends. Al Ajlan (2020, p. 21) therefore concluded, that violence among the residents "*should be understood as a product of the institution and not as outcomes of individual choices*". De la Chaux et al. (2018) found, though, that refugee camps do not match all elements of total institutions adequately. Drawing on their research in the Dadaab refugee camp in Kenya, they argue that camp residents accessed the camp voluntarily and at least inside the camp could move freely. Further, they point to aspects of mutual dependence that exist between residents and camp staff and less to unilateral control mechanisms. They thus state that refugee camps are similar to total institutions but would not fall into one of Goffman's categories.

Goffman's lens offers a perspective on totalitarian elements of refugee camps, thus on structures and processes inside the camp that are used to accomplish and maintain social stability by centralizing the resident's life to the level of the institution. Identifying mortifying procedures that control and supervise the inmates, reduce their privacy, deprive them of a decent occupation, accommodate them under inadequate physical living conditions, or put them in a position of begging for daily necessities helps to understand pathways that may generate stress and indirectly lead to poor physical and mental health.

2.3 Michel Foucault's heterotopias and disciplinary institutions

Refugee camps can be seen as "[…] *transitory places where the residents as individuals are temporarily reduced to the functionality of the institution.*" (Göler, 2020, p. 70). But how does the *institution* refugee camp function, with which consequences for the residents? Michel Foucault's *heterotopias* serve as an analytical frame here. Foucault described heterotopias as real, locatable places, *"[…] which are something like counter-sites, a kind of effectively enacted utopia in which the real sites, all the other real sites that can be found within the culture, are simultaneously represented, contested and inverted*." (Foucault, 1986, p. 24). In order to describe or analyse different spaces as heterotopias, he set out six principles in his "heterotopology" (ibid.). Though he not literally named camps as example for heterotopias, they can be analysed as such with the help of these six principles. First, he laid out two main categories: heterotopias can either be seen as spaces for those being in crisis and therefore need to be protected (*crisis heterotopia*), or as spaces for people showing a behaviour that is deviant from the general norm, which would justify separating them from their environment (*heterotopia of deviation*). Second, Foucault pointed out that heterotopias can have different functions, depending on the time and the culture in which they occur. Third, heterotopias are able to represent several different, contrasting sides in only one single, real space. Fourth, heterotopias are either "*linked to the accumulation of time*" (ibid., p.26), thus having an indefinite, eternal existence, or are rather temporal and exist only for a short period of time. The fifth principle implies that heterotopias form a system of opening and closing. Thus, they are not freely accessible for everyone but rather isolate those that have permission of access from those who have not. The sixth principle describes how a heterotopia contrasts to all the remaining spaces, and how it creates a space that is other by representing everything that the remaining spaces are not (ibid.).

International refugee camps (Agier, 2011; Oddenino, 2018) and German collective accommodation centres (Göler, 2020) have been considered as such heterotopias. By analysing refugee camps as heterotopias, they are conceived as a product of particular political and social processes in a particular time and space (Göler, 2020). The heterotopia lens enables to look at camps from a rather relational perspective since it helps to analyse the space of the camp in its interaction with the social and political environment. The focus is thus not solely on the physical structures or geographies of the camp but also on surrounding processes that give raise to these structures. When interpreting refugee camps as heterotopias, we need to ask which role is ascribed to the camp residents in community and political discourses. Are they understood

as people being in crisis and therefore need to be protected? Or rather as being deviant and therefore need to be separated? These opposing views lead to different layouts of camps. Further, Foucault's concept informs about the specific function of the camp and the scope of life that it embraces. How does daily life differ for camp residents compared to people from the local community? Do residents have a chance to settle or is the camp only for a temporary stay, making it impossible to call the place "home"? And lastly, what are processes and structures of the camp that "other" people, i. e. emphasizing the otherness of the residents and segregating them from the rest of the community, which would impede social integration of the residents? Considering psychosocial processes as mediators in the housing-health relationship (such as issues of identity or social support), it is reasonable that those structures and processes that may other and segregate the residents can indirectly impact health by impeding residents from developing a sense of identity and from perceiving social support.

A second approach to analyse camps can be derived from Foucault's book „Discipline and Punish" (Foucault, 1976) in which Foucault analysed the paradigm switch in the penitentiary system when in the 18th century large prisons were built and criminals were no longer physically tortured in public but incarcerated in prisons. He attributed this to the development of discipline and the consequent need to establish institutions to observe and control maintenance of discipline. Foucault argued that the basis for the disciplinary model was the plague epidemic which had made it necessary to control, register and separate people as a mean to secure power over the population. Later, discipline extended to the field of incarceration, directed at all that was considered abnormal and in need to be improved (ibid.). By drawing on Jeremy Bentham's Panopticum (a prison design allowing to observe all inmates from a central sentinel), Foucault drafted a perfect model of a modern disciplinary institution. The Panopticum represents a space with a single point from which everything within this space can be seen, although this point cannot be observed from any place in the panoptic scheme. It thus describes a closed, completely controlled space in which every resident has his fixed place, and all events can be observed and registered. However, since the resident himself cannot see whether he is being observed or not, he will maintain self-discipline and show an obedient behaviour. The panoptic scheme therefore represents a method of exercising power over people or ascertaining power without the need for corporal punishment. It defines the relationship of power to the everyday life of people (ibid.). Foucault further points out that the panoptic scheme is not restricted to prisons but that its' characteristics can be observed throughout society. Wherever there is a need to keep a certain number of people under control, the panoptic scheme can be applied: to students who need to be instructed, to ill people who need to be cured, to workers who need to be supervised, to criminals who need to be incarcerated, etc. Schools, hospitals, labour camps, asylum homes or prisons – all these institutions can be seen as disciplinary institutions according to Foucault. The power of decision-making is thus no longer exclusively vested in the states, but is shifted to microstructures: to doctors, teachers, supervisors, wardens etc. Human beings can even be their own prison wardens (ibid.). And this is what Bochmann (2018) has observed in a Burmese refugee camp. She considers the act of aid delivery as a disciplinary institution. She found that in the process of rice distribution, forms of control and discipline are produced collaboratively

by the camp residents themselves, and that camp structures (here regarding the ration distribution system) are not exclusively created on a meso level by governing actors or humanitarian organizations (Bochmann, 2018). It needs to be discussed to what extent refugee camps can also be considered as disciplinary institutions. We thus use a lens that is – in parallel to Goffman's total institutions - focused on the institution "camp" and its inherent mechanisms of (micro-)control: How is the daily life of the residents controlled by certain regulations and procedures in the camps? To what extent can camp residents participate in decision-making processes and actually shape the camp context?

Foucault later recognized that besides the disciplining of the individual body biopolitical processes play a decisive role in describing power relations of modern times (Foucault, 1979), supporting the inclusion of political aspects in the analysis of refugee camps. Foucault argues that in the age of modernity, sovereign states are increasingly concerned about the power over life and all its facets. The sovereign power is determined to maintain and foster life, and to control and regulate it, rather than to repress, bend, or destroy it. Following Foucault, the lives of population members become the object of political interventions and this can be seen in various aspect such as the control of birth and death rates, or the measurement of fertility, life expectancy, or the general health status of the population. While in former times the existence of the sovereign was the matter of utmost priority, in the age of modernity the biological existence of a whole population is what counts most (ibid.). Using this "biopolitical lens", the analysis of refugee camps would explore the role of states more closely. Following this approach, refugee camps can be seen as a mean by the states to aggregate and form a measurable population of displaced persons in order to keep control over this population (Bulley, 2014). Securing the biological existence is then only a vindication for control mechanisms, as Agier (2011, p. 211) puts it: "*the protection of the stateless (when this is still mentioned) is no more than a euphemistic justification for controlling the undesirables*". A biopolitical perspective would therefore need to investigate national and international legal or policy frameworks and political decisions at municipal or district level that interfere with or determine the life of refugees and asylum seekers in camps. From a health point of view, this biopolitical perspective is particularly insightful since the "protection of the stateless" would suggest a protection of health while the underlying control mechanisms and the resulting reduced level of self-determination could rather have negative effects on health. This perspective could thus reveal an ambiguity between political motives and actions with potentially different effects on health.

2.4 Giorgio Agamben's space of exception

The work of the Italian philosopher Giorgio Agamben (2000) has influenced international research on displacement and encampment from a political perspective (Katz, 2017; Martin, Minca, & Katz, 2019) and offers another lens for analysis. Agamben (2000) has continued Arendt's thoughts on concentration camps as spaces that destruct humanity, but also draws on Foucault and his concept of biopolitics, which he finds lacking in Arendt's analysis of totalitarian regimes, as well as on Carl Schmitt's concept of the state of exception.

According to Agamben, it is only due to the state of exception that everything is possible in camps. He attempts to theorize the modern camp and its spatiality as a permanent space of exception where people are reduced to naked, bare life, deprived of subjectivity. He considers the camp as a technology of power by the states; a space that separates those whose life is worth living from those who need to be abandoned and excluded; a space in which the life of the residents is included in the legal order solely by exclusion, and thus actually becomes politicized (Agamben, 2000). Agamben states that in modern politics, the traditional ancient Greek division between the natural life ("*zoe*") and political life ("*bios*"), which has maintained the political order for ages, is unravelled and biopolitical bodies are produced (ibid.). Camps are the most absolute biopolitical spaces in which the permanent state of exception is materialized. As a consequence, camp inmates find themselves in a zone of indistinction between right and wrong, exception and the rule, or "*zoe*" and "*bios*" (Agamben, 2000, 2015). Thus, the camp can be seen as *"[…] the hidden matrix and new nomos of the political space in which we still live*." (Agamben, 2015, p.36).

Agamben does not distinguish between different types of camps with their specific histories and topographies, but compares Spanish refugee camps, the "*zones d' attente*" of French international airports, and also Guantanamo Bay with concentration camps, arguing that they all have the same underlying structure, and one thing in common: the suspension from law based on the permanent state of exception (ibid.). For this lack of distinctiveness and the consequent relativization of genocidal mass murder in some types of the Nazi concentration camps, he has often been criticized (see Klävers, 2019; Stone, 2017; Werber, 2002). Stone (2017) points out that various types of concentration camps exist which have not exclusively arisen under dictatorships. Though he acknowledges that camps are the product of modernity, he underlines that they have different historical contexts and specific institutional practices that must be considered. Further, Agamben's perspective has led to a new kind of camp studies in the international refugee camp context that Martin et al. (2019) describe as "post-Agambenian studies", overall stating that refugee camps are not exclusively spaces of exception that reduce their residents to bare life but that the exceptional conditions can actually reshape the resident's identity and offer opportunities for political action (ibid.). The camp residents themselves can thus also have an influence on their living place, depending on the resources they have and use. The case of Behrouz Boochani, a journalist who fled from Iran and spent several years in the Australian offshore detention centre on Manus Island, Papua New Guinea (meanwhile closed), illustrates that. In his book "No Friends but the Mountains" (Boochani, 2018) he describes in detail the harsh conditions the residents faced in the camp, whether concerning hygienic conditions, medical access or mechanisms disrupting residents' identities. But still, Boochani describes moments of happiness, daily dance sessions; moments that show that residents (at least to some extent) have agency over their lives despite the conditions they face.

An analytical lens based on Agamben is – similar to Foucault – focused primarily on the state level and underlying biopolitical mechanisms that aim to keep control over refugee populations. In line with Arendt, camps are considered as spaces outside law which according to Agamben results in camp residents being reduced to bare lives. An analysis informed by

Agamben would therefore investigate whether camp residents are in fact suspended from law, it thus needs to assess legal and policy frameworks. In light of the discussion of Agamben's concept of "bare life" it should also be analysed to which extent residents actually perceive to have agency over their life (despite restrictive legal frameworks that are in place). Considering refugee camps as state of exception may point to negative health effects for the residents: Being legally included solely by exclusion would deny any legal protection and could increase individual vulnerability. Being constantly controlled and perceived as superfluous may affect people's personal well-being and reduce their quality of life, the "zone of indistinction" and the resulting absence of order may result in precarious, undignified living conditions. All this may have negative consequences for health.

3. Framework development

The previous section has outlined pertinent theoretical concepts and ideas about the meaning of camps and social institutions. Additionally, it has been summarized how each of these concepts can inform the analysis of refugee camps as a specific type of refugee accommodation. This section presents the most important ideas of these concepts and derives from them dimensions and underlying aspects that are relevant for an analysis of refugee camps from a health perspective. In light of these different theoretical perspectives on the nature of camps and social institutions, it is relevant to consider four different dimensions: first, a political or legal dimension that assesses legal-administrative regulations under which the camps operate that are the result of wider policy frameworks. Second, a societal perspective that sets the camp in relation to its surroundings and thus focusses on the closer environment of the camp. Third, an institutional dimension that captures the structures, regulations and procedures inside the camp. And fourth, an individual dimension that sums up how the overall living situation is individually perceived, thus how someone actually feels affected by the circumstances the first three dimensions have uncovered.

The following section provides an overview of each of these dimensions. It also describes how the identified contextual factors can be operationalized, either, if available, by established measurement instruments – or by indicators we developed themselves (which would demand testing and validation). The operationalization of the dimensions is also summarized in the end of this chapter (Table 2). Since the operationalization demands a specification, we focus on collective accommodation in a German context but are aware that the international camp context would require an adapted set of indicators. This, however, will be part of subsequent work.

3.1 Political dimension

The political dimension mainly draws on Foucault's concept of biopolitics, Arendt's typology of concentration camps (which was extended by others), and on Agamben's space of exception. The central question is here how politics interfere in the camp resident's life and whether camp residents are reduced to biopolitical bodies deprived of their rights. Given that, it would be

useful to investigate why the camp has been established: for controlling the deviant people, caring for the dependent people, or rather for reasons of empowering and strengthening? It is plausible that the layout of the camp is closely linked to the underlying political intention. This, however, is rather hidden and intransparent, thus, hardly to investigate directly. If political motives can be identified at all, it then remains not only questionable whether these motives actually correspond to the truth, but also whether there are no further motives that apply but remain undiscovered.

The political dimension can be analysed by assessing the restrictive nature of asylum and migration laws in terms of accommodation as well as policies promoting (or inhibiting) integration. This is due to the assumption that the political intention is reflected in laws and administrative regulations. Are there policies that tie refugees and asylum seekers to certain types of accommodation and limit their freedom of movement? Are there policies that centralize life on the level of accommodation (such as teaching outside the regular system or a centralized asylum process), thus attributing to segregation? Or do policies promote the transfer to decentralized accommodation and grant, for example, housing benefits?

Since no established measurement instruments could have been identified that measure this rather specific field, we suggest the following indicators in order to operationalize this dimension in a German context:

Indicators for restricted freedom of movement:

- Residence obligation I: Do policies foresee compulsory residence in a particular district or municipality?
- Residence obligation II: Do policies foresee compulsory residence in collective accommodation centres?
- Length of stay: What is the minimum / average length of stay in the accommodation?

Indicators for limited integration opportunities

- Asylum claim processing: Do policies foresee the processing of the asylum claim inside the accommodation centre?
- Access school system: Do policies foresee that child education is provided inside the accommodation centre or do they provide access to regular schools?
- Housing benefits: Do policies grant housing benefits?

3.2 Societal dimension

The societal dimension is based on Foucault's concept of heterotopias. The main question that opens up on this dimension is to what extent the camp can be considered as *other* place. In order to find out more about the space camp as such and its' relations to the surroundings, the general appearance, accessibility and localization of the camp can be assessed which may inform about how the camp fits in its' environment. Further it needs to be investigated whether the residents themselves are either accepted by and integrated into the community, or

whether they form a separated – other - group. And further: do residents have a chance to settle and call the place home or is it rather a place of transit? And what if the structures imply a temporary stay but refugees reside there much longer than expected?

In order to operationalize this dimension, two main spheres have to be assessed: first, how the physical environment of the camp differs from the surroundings (and thus visibly attributes to the exclusion of the residents) and second, the inclusiveness of the social environment.

Indicators for physical environment

- Outer appearance of the camp
  The SHED ("Small-area Housing Environment Deterioration") Index assesses different domains of the physical environment of living places, specifically for refugee and asylum seeker populations in Germany. Based on the Broken-Window Theory, the SHED investigates the quality of windows, walls and outside spaces as well as the presence of garbage or graffities and an overall rating of the living environment (Mohsenpour, Biddle, Krug, & Bozorgmehr, 2021). To investigate the outer appearance of the camp, the items reflecting the outdoor environment of the camp can be used.
- Neighbourhood characteristics
  In order to compare housing environment deterioration with neighbourhood deterioration, more information about the neighbourhood of the camp is needed. However, there is a great variability of applied measurements of neighbourhood deterioration in empirical research (Ndjila, Lovasi, Fry, & Friche, 2019). Marco, Gracia, Martín-Fernández, & López-Quílez (2017) developed and validated a Google Street View (GSV) - based Neighbourhood Disorder Observational Scale in a European context. The scale measures similar domains on the neighbourhood level compared to the SHED (e.g. graffities and garbage in the street, abandoned or vandalized buildings) but also the level of deterioration of recreational places.
  Neighbourhood characteristics such as the level of remoteness, the security of the neighbourhood but also a subjective evaluation of the neighbourhood quality can be assessed by selected items of the German Neighbourhood Environment Walkability Scale (NEWS-G) (Bödeker, Bucksch, & Fuhrmann, 2012), which measures, among others, the kind of buildings in the neighbourhood (section A), the distance to shops and public services (section B and C), the quality of the neighbourhood environment (section F) as well as security from crime (section H), which are all relevant for assessing the societal dimension. The Neighbourhood Environment Walkability Scale is a widely used and validated subjective measurement scale analysing residential environments for friendliness towards physical activity that recently has been adapted to the German language and culture (Adams et al., 2009; Bödeker et al., 2012). First analyses found acceptable psychometric characteristics and good stability, though the NEWS-G has to be evaluated in more representative studies (Bödeker et al., 2012).

Indicators for social environment

- Perceived trust and solidarity in the neighbourhood
  The extent residents perceive trust and solidarity within their neighbourhood can be measured with the Integrated Questionnaire for the Measurement of Social Capital (SC-IQ) which was developed by the World Bank, actually for the application in developing countries (Grootaert, Narayan, Nyhan Jones, & Woolcock, 2003). The SC-IQ has six different dimensions, one of them comprises items regarding trust and solidarity. Though the items would need to be culturally adapted, tested and validated in a German context, especially the items 2.2, 2.3 and 2.5 are still appropriate. The dimension measures aspects such as: trust among neighbours, level of trust to specific groups of people or level of support (ibid.).
- Social exclusion
  Indicators of social exclusion can also be measured using items of the fifth dimension of the SC-IQ (social cohesion and inclusion), here especially items 5.1, 5.2 and 5.10 to 5.15. The items measure aspects such as the feeling of togetherness, everyday social interaction, or the extent people living in the same neighbourhood differ from each other (ibid.). Again, the items would need cultural adaptation, testing and validation in a German context.

3.3 Institutional dimension

The institutional dimension leads back to Goffman's concept of total institutions and Foucault's considerations about micro-structures of control. From both lenses, it is relevant to focus on the structures of and processes in the camp in order to get insights about the extent to which the camp takes control of the life of its' residents. Aspects of privacy and places for retreat inform about whether residents – following the panoptic scheme - are physically being made visible and transparent. Further, it needs to be assessed to which extent the residents themselves have agency and empowerment, thus lead a self-determined life.

Centralizing mechanisms, thus those mechanisms through which the institution prescribes and centralizes certain aspects of the residents' life, needs to be investigated, as well, since they can be understood as means of control. Assessing physical living conditions can further demonstrate whether residents are accommodated in a dignified and decent way or whether conditions can be considered as "mortifying procedures" in Gofman's sense.

In sum, this dimension demands three kind of indicators: for the physical living conditions in the camp, for centralizing mechanisms as well as indicators for empowerment and action:

Indicators for physical living conditions:

- The SHED-index which is an appropriate instrument to operationalize the societal dimension can also be applied here since it measures the level of deterioration and thus

whether the accommodation is in a good or poor physical state. All items of the index would be appropriate here.

- Physical accommodation conditions can further be compared to officially established minimum standards of refugee accommodation in order to identify discrepancies between expected standards and existing conditions. Since minimum standards are not established by national law in Germany, however, a distinct reference standard is lacking. Some federal states have established minimum standards for collective accommodation, though only few are of obligatory nature (Wendel, 2014). They can still serve as a reference point here since they overall point to similar standards. An overview of these summarized standards is provided in Table 1.

Table 1: Minimum standards for collective accommodation, summary based on individual concepts of the federal states (for a detailed overview see Wendel, 2014).

Indicator	**Minimum standard**
Minimum size of living space per person	6 – 7 sqm / person
Maximum number of persons per room	4 – 6 persons / room
Location	- Public transport and public services must be accessible - Location in or at least connected to built areas
Closed residential units	- Sanitary facilities must be separated by gender - Separate residential units for families
Common rooms	- At least one common room (if there are children among the residents, at least one playroom for children - If there are no recreational places around, the accommodation should provide outdoor facilities

- Indicators for centralizing mechanisms

  For centralizing mechanisms in the German accommodation context, we suggest the following indicators:

  - Catering: Whether the accommodation provides catering or whether the residents can prepare their meals on their own
  - Equipment: Whether the accommodation is fully equipped or whether the residents can furnish their rooms on their own
  - Curfews: Whether the residents are free to enter and exit the accommodation at any times or whether exit / entry is controlled.

- Indicators for empowerment and action
  The SC-IQ provides a dimension measuring empowerment and political action (Grootaert et al., 2003). If adapting these items to the level of accommodation, some of these items (6.2 – 6.4) offer a useful mean to measure the extent to which residents can participate in everyday decisions and can take action in the accommodation. For example, adapted items of the empowerment and political action dimension of the SC-IQ would measure the extent to which residents feel to have control over decisions that affect their daily life, or how much impact residents think to have in making the accommodation a better place to live.

3.4 Individual dimension

Each of the three dimensions considered so far can (but do not have to) affect the individual: from a biopolitical point of view, life can be controlled and regulated by the state, impacting one's agency and legal opportunities. From a societal perspective, residents can be physically and socially excluded, impacting one's participation in social life. And on an institutional level, residents can lack self-determination and empowerment by living a controlled, "institutionalized" life. This fourth dimension should evaluate all these cumulated consequences. The importance of the individual dimension lies in the nature of subjectivity which was already highlighted in the beginning of this paper. For some, cumulated unfavourable conditions (as measured by the indicators outlined so far) matter more than for others. Every person has a different historic background, has faced different challenges and has different resources. This individual dimension should therefore reflect how residents actually perceive the circumstances described on the political, societal and institutional dimension. This can be measured by another indicator, assessing the general satisfaction with the overall living conditions (style and answering format can be adapted from SC-IQ 6.1.: "How happy to you consider yourself to be?") as well as a subjective evaluation of the extent to which housing conditions have improved compared to the last residence in the country of origin.

Table 2: Overview of the operationalization of each dimension of the analytical framework in a German context (collective accommodation).

Legal-administrative dimension	**Societal dimension**	**Institutional dimension**
Indicators for restricted freedom of movement: - Residence obligation* (accommodation level and district / municipality level) - Intended length of stay* *Indicators for limited integration opportunities* - Location of asylum claim processing * - Location of child education* - Housing benefits by government*	*Indicators for physical environment:* - Outer appearance of the camp (using SHED Index[1] items referring to outdoor environment) - Neighbourhood characteristics: deterioration (GSV-based Neighbourhood Disorder Observational Scale[2]), level of remoteness, security, quality of neighbourhoods (NEWS-G[3]: A, B, C, F, H) *Indicators for social environment* - Trust and solidarity (SC-IQ[4] 2.2, 2.3 and 2.5) - Social exclusion (SC-IQ[4] 5.1, 5.2; 5.10-5.15)	*Indicators for physical living conditions* - SHED Index[1] - Comparison of physical living conditions with reference standards (e.g. minimum standards established by federal states) *Indicators for centralizing mechanisms:* - Catering vs. self-supply* - Furnished vs. unfurnished rooms* - Exit- / entry controls* *Indicators for empowerment and action* - SC-IQ[4] (6.2-6.6: adapted to level of accommodation)
Political and legal opportunities	Physical and social inclusion	Empowerment and action
Individual dimension		
General satisfaction with living conditions (format adapted from SC-IQ 6.1.) Improvement of living conditions (compared to last residence in country of origin)*		

[1] Mohsenpour et al. (2021)
[2] Marco et al. (2017)
[3] Adams et al. (2009), Böddeker et al. (2012)
[4] Grootaert et al. (2003)
** items suggested by the authors with no reference to existing, validated instruments*

3.5 A framework combining relevant dimensions and contextual factors

So far, we have outlined the different dimensions and underlying contextual factors that are relevant for the analysis of refugee camps derived from different theoretical perspectives. For the final framework to be developed, we expand our focus from the specific camp context to refugee accommodation in general since the dimensions drawn from the camp context can also be applied to other kind of refugee accommodation such as private accommodation types: On the legal dimension, it may be relevant to know, for example, whether refugees and asylum seekers in private accommodation can make use of housing benefits in the same degree as the national population or whether they are excluded from those benefits. On the societal dimension, we can ask in the same way as in the camp context whether refugees and asylum seekers in private accommodation are physically and socially integrated in or excluded from the community. The institutional level may seem less applicable at first glance, but it is just the absence of these "institutional characteristics" in private accommodation that in fact show that there may be greater degrees of self-determination and empowerment, that there are less mortifying or centralizing procedures. One can thus expect rather positive outcomes on this dimension compared to the (presumably) more controlled camp context, which would also be a relevant result. And on the individual dimension, it is as relevant as in the camp context to assess whether residents are satisfied with their overall living situation.

Figure 1 presents the final analytical framework and illustrates how the different dimensions in the refugee accommodation context can be arranged. They form different layers arranged from proximal to distal of the individual with the individual dimension as the inner core of the model representing a subjective overall evaluation of the cumulative consequences of the superior dimensions. The second closest layer represents the institutional dimension. Since this dimension mirrors structures and processes inside the accommodation, thus aspects of the direct living environment of the individual, the link to the individual is still quite narrow. The subsequent layer is formed by the societal dimension. This layer puts the accommodation into its' context. It thus presents the wider living environment of the individual. The outermost layer reflects the political dimension. This dimension is arranged most distal from the individual, hence illustrating the broad, general context that rather affects the individual in its' living environment indirectly through legal-administrative frameworks that in a wider sense reflect the political motives behind laws and regulations in the context of refugee accommodation.

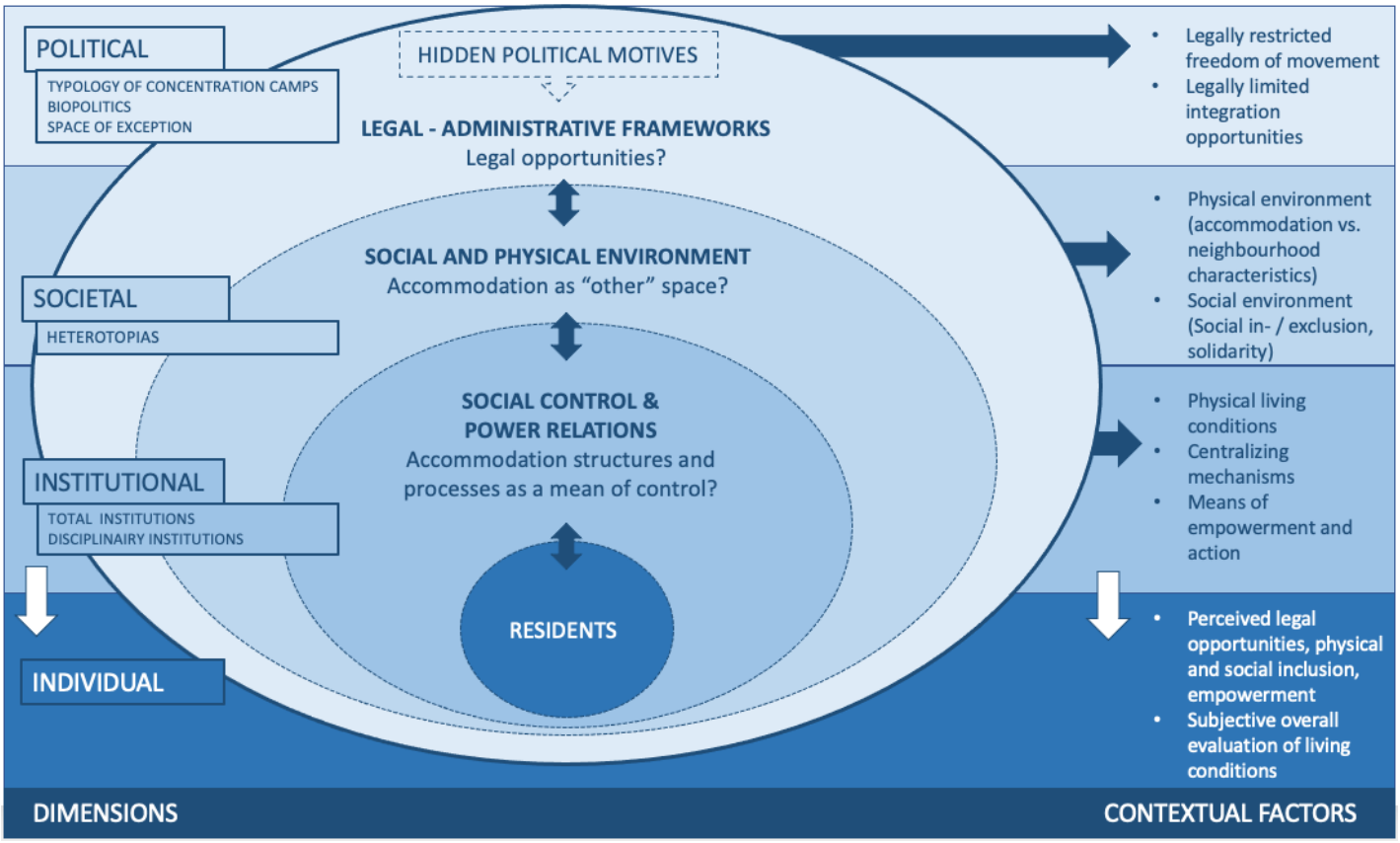

Figure 1: Analytical framework of refugee accommodation

The way the dimensions are arranged in the framework is inspired by the "rainbow model" of social determinants of health by Dahlgren and Whitehead (1991) in which a range of individual as well as contextual factors that form the main influences on health are arranged from proximal to distal of the individual. In Dahlgren and Whitehead's model, housing forms a subcomponent of the second outer layer, the living and working conditions. However, as illustrated in the introductory chapter of this paper, housing comprises various of underlying factors which the model is not capable to define. In the framework proposed here, we have selected this broad subcomponent of housing and offer a mean for a multidimensional analysis of the accommodation context of refugee populations. The framework draws upon theoretical concepts of camps and social institutions that did not focus on health in particular. Based on empirical findings as well as conceptual considerations, we argue that the dimensions and contextual factors of this framework are relevant for health, as well. It is already known that a range of contextual factors impact health, including physical aspects of housing and physical and social aspects of the neighbourhood. Further, empirical research (Baker et al., 2017) as well as conceptual approaches in the frame of the social determinants of health (Dahlgren & Whitehead, 1991; Solar & Irwin, 2010) suggest assessing housing from a multidimensional perspective. Our framework has adopted this multidimensional approach for the analysis of refugee camps and refugee accommodation in general and included a set of contextual factors that have been found to impact health in empirical research, as well, such as: the physical conditions and the quality of the dwelling (Braubach et al., 2011; Baker et al., 2017; Holding et al., 2019) or of refugee camps (Ziersch et al., 2019), and the quality of the physical and social

neighbourhood environment (Baker, 2017, Evans, 2003; Holding et al., 2019; O'Brien et al., 2019).

The CSDH - framework (Solar & Irwin, 2010) has particularly highlighted the role of the political context since it gives raise to certain material circumstances, such as the living conditions, which in turn may generate health inequalities. Political or legal aspects of housing have rarely been considered so far in empirical research assessing the relationship between housing and health. Especially in the context of refugee camps they seem especially relevant, considering refugee camps as biopolitical "spaces of exception". Political or legal restrictions may attribute to the segregation or disintegration of refugees and asylum seekers, to uncertainties, to a lack of personal control or to disrupted identities. It is reasonable that the political dimension can indirectly impact health via restricted housing opportunities and resulting negative psychosocial processes. The same applies to suppressive mechanisms inside the accommodation. In institutional settings, residents may need to submit to certain rules and regulations or daily schedules. Again, residents may perceive little personal control over their own lives and lack a sense of identity. That these psychosocial processes play a role in the housing-health relationship has already been ascertained (Evans, 2003; Evans et al., 2003).

Further, the WHO definition of "healthy housing" (WHO, 2018) comprises not only physical aspects of housing but also factors that create a "feeling of home". For some, certain living conditions may be perceived as more positive than for others based on the housing conditions they have faced in the past. It is always a question of individual resources, habits and histories. This needs to be considered to assess health impacts, as well. We thus saw the need to include subjective components to the framework, hence the individual dimension.

It further must be noted that the different dimensions in the analytical framework can interact with each other (hence the arrows in Figure 1). For example, policies that foresee a compulsory stay in certain types of accommodation may reduce opportunities for social interaction with the local community, the same applies when centralizing mechanisms making the accommodation to "a world on its own". Further, as Boochani (2018) illustrates, camp residents can inhabit their prescribed living space, still creating moments of joy though living conditions may be undignified. The influence residents themselves have on their living situation therefore needs to be taken into account, as well. The dimensions are thus not to be considered in isolation but rather in their overall context with the other dimensions.

4. Conclusion and moving forward

This working paper attempts to unravel the complexity of the broad housing context for refugee and asylum seeker populations in Germany by developing an analytical framework that builds on different theoretical approaches about camps and social institutions. Including different approaches from the broad fields of sociology, philosophy and political theory helped us to identify key dimensions and contextual factors that should be considered for an analysis of refugee accommodation from a Public Health perspective. Based on the assessed theoretical concepts we found that the accommodation context for refugees and asylum seekers can be described on four dimensions: a broad dimension that reflects political aspects determining

the accommodation context (mainly relating to policy frameworks and consequently on legal-administrative regulations that are in place); a societal dimension that reflects how the accommodation relates to the surroundings physically and socially; an institutional dimension illustrating processes and structures inside the accommodation (and thus indicating means of control and "mortifying procedures"); and an individual dimension that evaluates how residents overall perceive their living situation (it thus indirectly reflects how the residents are affected by the conditions of the superordinate dimensions). Since the framework provides measurable indicators for each dimension, we have presented a systematic approach to assess the context of refugee accommodation which consequently enables to analyse health associations. Existing models based on the social determinants of health such as Dahlgren and Whitehead's rainbow model (1991) or the CSDH – framework (Solar & Irwin, 2010) support the structure of our analytical framework.

In ongoing work of this research project, we draw on this analytical framework and further analyse how the broad housing context of refugees and asylums seekers differs in Germany and how the different accommodation types identified are associated with mental and physical health. As a further step, it is also necessary to investigate how the framework can be applied in an international context. While the dimensions developed here can be transferred to camp settings in other countries, as well, the operationalization of the dimensions is based on a specific German setting. Other more generous approaches would be required in order to operationalize the dimensions in a way that they fit to German refugee accommodation centres as well as, for example, to Palestinian refugee camps.

Notes:
Conflict of interest: The authors declare no conflict of interest.
Funding: Verena Penning is funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation, FOR 2928).
Ethical statement: Neither primary data for human nor for animals were collected for this research.

Corresponding author:
Verena Penning
Dept. of Epidemiology & International Public Health
School of Public Health, University of Bielefeld P.O. Box 10 01 31, 33501 Bielefeld, Germany
E-mail: verena.penning@uni-bielefeld.de

References

Adams, M., Ryan, S., Kerr, J., Sallis, J., Patrick, K., Frank, L., & Norman, G. (2009). Validation of the Neighborhood Environment Walkability Scale (NEWS) Items Using Geographic Information Systems. *Journal of Physical Activity and Health*, *6*(Suppl 1), 113–123.

Agamben, G. (2000). *Means Without End. Notes on Politics*. Minneapolis: University of Minnesota Press.

Agamben, G. (2015). *Homo Sacer. Die souveräne Macht und das nackte Leben* (10th ed.). Frankfurt am Main: Suhrkamp.

Ager, A., & Strang, A. (2008). Understanding integration: A conceptual framework. *Journal of Refugee Studies*, *21*(2), 166–191. https://doi.org/10.1093/jrs/fen016

Agier, M. (2011). *Managing the Undesirables. Refugee Camps and Humanitarian Government*. Cambridge: Polity.

Al Ajlan, A. (2020). The Asylum Procedure in Germany: Desperation and Uncertainty as Risk Factors for Violence Among Young Adult Asylum Seekers in Collective Accommodations. *Journal of Interpersonal Violence*. https://doi.org/10.1177/0886260520957976

Arendt, H. (1948). The Concentration Camps. *Partisan Review 15:*, (15), 743–763.

Arendt, H. (1955). *Elemente und Ursprünge totaler Herrschaft*. Frankfurt am Main: Europäische Verlagsanstalt.

Aumüller, S. J., Daphi, P., & Biesenkamp, C. (2015). *Die Aufnahme von Flüchtlingen in den Bundesländern und Kommunen. Behördliche Praxis und zivilgesellschaftliches Engagement.* Stuttgart: Robert Bosch Stiftung.

Baker, E., Beer, A., Lester, L., Pevalin, D., Whitehead, C., & Bentley, R. (2017). Is housing a health insult? *International Journal of Environmental Research and Public Health*, *14*(6). https://doi.org/10.3390/ijerph14060567

Bakker, L., Cheung, S. Y., & Phillimore, J. (2016). The asylum-integration paradox: Comparing asylum support systems and refugee integration in the Netherlands and the UK. *International Migration*, *54*(4), 118–132. https://doi.org/10.1111/imig.12251

Barichello, S. E. (2015). The Legacy of Hannah Arendt on the Analysis of the Contemporary Condition of the Refugee. *Universitas: Relações Internacionais*, *13*(1). https://doi.org/10.5102/uri.v13i1.3189

Bentley, R., Baker, E., Simons, K., Simpson, J. A., & Blakely, T. (2018). The impact of social housing on mental health: Longitudinal analyses using marginal structural models and machine learning-generated weights. *International Journal of Epidemiology*, *47*(5), 1414–1422. https://doi.org/10.1093/ije/dyy116

Bochmann, A. (2018). The Power of Local Micro Structures in the Context of Refugee Camps. *Journal of Refugee Studies*, *32*(1), 63–85. https://doi.org/10.1093/jrs/fey018

Bödeker, M., Bucksch, J., & Fuhrmann, H. (2012). Bewegungsfreundlichkeit von Wohnumgebungen messen: Entwicklung und Einführung der deutschsprachigen "Neighborhood Environment Walkability Scale." *Prävention Und Gesundheitsförderung*, *7*(3), 220–226. https://doi.org/10.1007/s11553-012-0344-3

Boochani, B. (2018). *No Friend But The Mountains. Writing from Manus Prison.* Sydney: Picador.

Bozorgmehr, K., Razum, O., Szecsenyi, J., Maier, W., & Stock, C. (2017). Regional deprivation is associated with the distribution of vulnerable asylum seekers: A nationwide small area analysis in Germany. *Journal of Epidemiology and Community Health*, *71*(9), 857–862. https://doi.org/10.1136/jech-2016-208506

Braubach, M., Jacobs, D. E., & Ormandy, D. (2011). Environmental burden of disease associated with inadequate housing: Methods for quantifying health impacts of selected housing risks in the WHO European Region. *WHO Regional Office for Europe*, 238. http://www.euro.who.int/__data/assets/pdf_file/0003/142077/e95004.pdf. Accessed September 9, 2020.

Braveman, P., Dekker, M., Egerter, S., Sadegh-Nobari, T., & Pollack, C. (2011). Exploring the Social Determinants of Health. Housing and Health. *Robert Wood Johnson Foundation*, (7). https://doi.org/10.1136/bmj.4.5579.621-c

Bulley, D. (2014). Inside the tent: Community and government in refugee camps. *Security Dialogue*, *45*(1), 63–80. https://doi.org/10.1177/0967010613514788

De la Chaux, M., Haugh, H., & Greenwood, R. (2018). Organizing Refugee Camps: "Respected Space" and "Listening Posts." *Academy of Management Discoveries*, *4*(2). https://doi.org/https://doi.org/10.5465/amd.2017.0040

Evans, G. W. (2003). The Built Environment and Mental Health. In *Journal of Urban Health: Bulletin of the New York Academy of Medicine* (Vol. 80).

Evans, G. W., Wells, N. M., & Moch, A. (2003). Housing and mental health: A review of the evidence and a methodological and conceptual critique. *Journal of Social Issues*, *59*(3), 475–500. https://doi.org/10.1111/1540-4560.00074

Foucault, M. (1976). *Überwachen und Strafen* (1st ed.). Frankfurt am Main: Suhrkamp.

Foucault, M. (1979). *Der Wille zum Wissen. Sexualität und Wahrheit*. Frankfurt am Main: Suhrkamp.

Foucault, M. (1986). Of Other Spaces. *Diacritics*, *16*(1), 22–27.

Gibson, M., Petticrew, M., Bambra, C., Sowden, A. J., Wright, K. E., & Whitehead, M. (2011). Housing and health inequalities: A synthesis of systematic reviews of interventions aimed at different pathways linking housing and health. *Health and Place*, *17*(1), 175–184. https://doi.org/10.1016/j.healthplace.2010.09.011

Goffman, E. (1973). *Asyle: Über die soziale Situation psychiatrischer Patienten und anderer Insassen*. Frankfurt am Main: Suhrkamp.

Göler, D. (2020). Places and Spaces of the Others. A German Reception centre in Public Discourse and Individual Perception. In B. Glorius & J. Doomernik (Eds.), *IMISCOE Research Series Geographies of Asylum in Europe and the Role of European Localities* (pp. 69–91). https://doi.org/https://doi.org/10.1007/978-3-030-25666-1

Grootaert, C., Narayan, D., Nyhan Jones, V., & Woolcock, M. (2003). Measuring social capital of persons residing in a long-term psychiatric institution. In *World Bank Working Paper*. https://doi.org/10.1177/0020764006065147

Holding, E., Blank, L., Crowder, M., Ferrari, E., & Goyder, E. (2019). Exploring the relationship between housing concerns, mental health and wellbeing: a qualitative study of social housing tenants. *Journal of Public Health*, *42*(3), 231–238. https://doi.org/10.1093/pubmed/fdz076

Jelleyman, T., & Spencer, N. (2008). Residential mobility in childhood and health outcomes: A systematic review. *Journal of Epidemiology and Community Health*, *62*(7), 584–592. https://doi.org/10.1136/jech.2007.060103

Karjalainen, P. T. (1993). House, Home and the Place of Dwelling. *Scandinavian Housing and Planning Research*, *10*(2), 65–74. https://doi.org/10.1080/02815739308730324

Katz, I. (2017). Between Bare Life and Everyday Life : Spatializing Europe's Migrant Camps. *Architecture_MPS*, *12*(1). https://doi.org/10.14324/111.444.amps.2017v12i2.001

Klävers, S. (2019). Kolonialismus, Holocaust und Moderne: Brüche oder Komplizenschaften? In *Decolonizing Auschwitz? : Komparativ-postkoloniale Ansätze in der Holocaustforschung* (pp. 178–219). https://doi.org/10.1515/9783110600414-005

Kotek, J., & Rigoulot, P. (2001). *Das Jahrhundert der Lager. Gefangenschaft, Zwangsarbeit, Vernichtung*. Berlin: Propyläen.

Krieger, J., & Higgins, D. L. (2002). Housing and health: Time again for public health action. *American Journal of Public Health*, *92*(5), 758–768. https://doi.org/10.2105/AJPH.92.5.758

Larking, E. (2018). Are Refugee Camps Totalitarian? *Arendt Studies*, *2*, 243–252. https://doi.org/10.5840/arendtstudies2018216

Mallett, S., Bentley, R., Baker, E., Mason, K., Keys, D., Kolar, V., & Krnjacki, L. (2011). *Precarious housing and health inequalities: What are the links?* Hanover Welfare Services, University of Melbourne, University of Adelaide, Melbourne Citymission, Australia.

Marco, M., Gracia, E., Martín-Fernández, M., & López-Quílez, A. (2017). Validation of a Google Street View-Based Neighborhood Disorder Observational Scale. *Journal of Urban Health : Bulletin of the New York Academy of Medicine*, *94*(2), 190–198. https://doi.org/10.1007/s11524-017-0134-5

Marmot, M., & Wilkinson, R. (2005). *Social Determinants of Health*. https://doi.org/DOI:10.1093/acprof:oso/9780198565895.003.14

Martin, D., Minca, C., & Katz, I. (2019). Rethinking the camp: On spatial technologies of power and resistance. *Progress in Human Geography*. https://doi.org/10.1177/0309132519856702

Meierhenrich, J., & Simons, O. (2016). A Fanatic of Order in an Epoch of Confusing Turmoil: The Political, Legal, and cutlural Thought of Carl Schmitt. In J. Meierhenrich & O. Simons (Eds.), *The Oxford Handbook of Carl Schmitt* (pp. 3–72). https://doi.org/10.1093/oxfordhb/9780199916931.013.26

Mohsenpour, A., Biddle, L., Krug, K., & Bozorgmehr, K. (2021). Measuring deterioration of small-area housing environment: Construction of a multi-dimensional assessment index and validation in shared refugee accommodation. SSM - Population Health, 13. https://doi.org/https://doi.org/10.1016/j.ssmph.2020.100725

Ndjila, S., Lovasi, G. S., Fry, D., & Friche, A. A. (2019). Measuring Neighborhood Order and Disorder: a Rapid Literature Review. *Current Environmental Health Reports*, *6*(4), 316–326. https://doi.org/10.1007/s40572-019-00259-z

O'Brien, D. T., Farrell, C., & Welsh, B. C. (2019). Broken (windows) theory: A meta-analysis of the evidence for the pathways from neighborhood disorder to resident health outcomes and behaviors. *Social Science and Medicine*, *228*, 272–292. https://doi.org/10.1016/j.socscimed.2018.11.015

Oddenino, I. (2018). Re-Drawing Heterotopias: Challenging Refugee Camps as Other Spaces in Kate Evans' Threads: From the Refugee Crisis. *Le Simplegadi*, *XVI*(18), 75–84. https://doi.org/10.17456/simple-97

Priebe, S., Giacco, D., & El-Nagib, R. (2016). Public Health Aspects of Mental Health Among Migrants and Refugees: A Review of the Evidence on Mental Health Care for Refugees, Asylum Seekers and Irregular Migrants in the WHO European Region. Health Evidence Network Synthesis Report, 47. https://www.ncbi.nlm.nih.gov/books/NBK391048/. Accessed: September 9, 2020.

Rolfe, S., Garnham, L., Godwin, J., Anderson, I., Seaman, P., & Donaldson, C. (2020). Housing as a social determinant of health and wellbeing: Developing an empirically-informed realist theoretical framework. *BMC Public Health*, *20*(1), 1–19. https://doi.org/10.1186/s12889-020-09224-0

Solar, O., & Irwin, A. (2010). A Conceptual Framework for Action on the Social Determinants of Health. *Social Determinants of Health Discussion Paper 2 (Policy and Practice)*. http://apps.who.int/iris/bitstream/10665/44489/1/9789241500852_eng.pdf?ua=1&ua=1. Accessed: September 9, 2020.

Stone, D. (2017). *Concentration Camps* (1.). Oxford: Oxford University Press.

Van Pelt, R. J. (2011). Paradise / Hades, Purgatory, Hell/ Gehenna. A political typology of the camps. In J. C. Friedman (Ed.), *The Routledge History of The Holocaust*. New York: Routledge.

Voigtländer, S., Berger, U., & Razum, O. (2010). The impact of regional and neighbourhood deprivation on physical health in Germany: A multilevel study. *BMC Public Health*, *10*(July). https://doi.org/10.1186/1471-2458-10-403

Weinert, V., & Mattern, J. (2000). Die Hölle auf Erden . Eine Annäherung an Hannah Arendts Analyse totaler Herrschaft. *Utopie Kreativ*, *113*, 251–263.

Wendel, K. (2014). *Unterbringung von Flüchtlingen in Deutschland: Regelungen und Praxis der Bundesländer im Vergleich*. Frankfurt am Main: Pro Asyl.

Werber, N. (2002). Die Normalisierung des Ausnahmefalls. Giorgio Agamben sieht überall Konzentrationslager. *Merkur*, *56*(7), 618–622.

World Health Organization (WHO, 2018). WHO housing and health guidelines. Geneva: World Health Organization.

Ziersch, A., & Due, C. (2018). A mixed methods systematic review of studies examining the relationship between housing and health for people from refugee and asylum seeking backgrounds. *Social Science and Medicine*, *213*, 199–219. https://doi.org/10.1016/j.socscimed.2018.07.045