Connected Refugees
Sociotechnical Imaginaries in UNHCR Discourse

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ABSTRACT

The purpose of the current study was to examine how discourses on refugee connectivity have been constructed in reports published through UNHCR's Connectivity for Refugees initiative. As literature on discourses of refugees connectivity is currently scarce and under theorized, the current study aimed to offer new insights into the ideas and imaginaries that contribute to the construction of discourses on refugee connectivity. In order to do so, the concept of sociotechnical imaginaries has been introduced as a theoretical lens. Moreover, a multimodal critical discourse analysis has been performed to answer the research question: "how are discourses around refugee connectivity constructed in the UNHCR Connectivity for Refugees initiative reports over time?"

Based on the analysis, six main components of UNHCR discourse on refugee connectivity have been identified: (1) utilitarian perspectives on improved quality of life; (2) the exceptionalism of the (un)connected; (3) from needs to rights and choices; (4) connectivity as a matter of inclusion; (5) The unquestioned path to connectivity; and (6) connectivity as a universal solution. The findings demonstrated that overall *positioning of connectivity within the reports is positive. Connectivity is generally approached from a positive standpoint focusing on the opportunities it can bring and most importantly, its effect on quality of life. Overall, connectivity is presumed to contribute to well-being and quality of life of all people. This techno-optimistic standpoint however, reduces the broad concept of life quality to a set of utilitarian functionalities. In accordance with the literature, this study has demonstrated the inherent utilitarianism of UNHCR discourse on refugee connectivity.*

Moreover, UNHCR discourse on refugee connectivity is constructed through a predominant positive and techno-optimistic sociotechnical imaginary. The sociotechnical imaginary underlying UNHCR discourse, is based on a utopian conception of a connected future. The realm of connectivity is presented as a separate sphere which can be reached. However, not every individual has the means needed to reach this connectivity. Moreover, connectivity is not just the condition of being 'in contact', the use of digital technology has been approached as a means to access benefits and opportunities that stay out of reach for the unconnected.

KEYWORDS: *Connectivity, Discourse, Refugees, Sociotechnical imaginaries, UNHCR*

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1 Introduction

1.1 Discourses on refugee connectivity

Celebrated for their potential to produce new ways of interaction and the possibilities they offer for innovation, digital technologies have been incorporated into strategies of many humanitarian organisations that focus on refugees (Witteborn, 2018; SINGA, 2014). For instance, the United Nations High Commissioner for Refugees (UNHCR). As the UN Refugee Agency, UNHCR has pursued goals of connectivity and digital inclusion. First and foremost through the establishment of the Connectivity for Refugees initiative as part of its Innovation Service (Warnes et al., 2021).

However, when discussing digital connectivity in contexts of (forced) displacement, we can see that the way digital technology use is approached in the Global North[1] seems to differ from that of 'refugee connectivity' – a concept used here to refer to practices of (promoting) digital media and technology use by refugees. In which technology can be seen as a broad category including "the consumption of practices, services, devices, and spaces related to information processing through a machine" (Witteborn, 2018, p. 21).

Extant research has argued how discourses , or "systems of thought" (Giddens & Sutton, 2021), on refugee connectivity are primarily centred around resilience and self-reliance (Udwan et al., 2020). Moreover, refugee connectivity is often approached from a purely utilitarian perspective (Awad & Tossell, 2021), lacking attention to the importance of leisure (Warnes et al., 2021).

On the other hand, discourses on digital technology use by marginalized communities tend to ascribe a universality to connectivity (Wahome & Graham, 2020; Witteborn, 2018). Digital media are presented as providers of a borderless form of connectivity. For example, discourses focused on development presume digital entrepreneurship as universal and neutral, without regard for underlying inequalities and power differentials (Wahome & Graham, 2020).Thus, discourses on refugee connectivity seem to be paradoxical. They simultaneously differentiate and ascribe universality.

How can we understand efforts by humanitarian organisations at promoting refugee connectivity in this context of conflicting discourses? In order to start unpacking this complex issue, this thesis sets out to examine what discourses on refugee connectivity can be discerned from reports by UNHCR's initiative 'Connectivity for Refugees'. The initiative, established in 2016, focuses on the promotion of connectivity among refugee populations and contexts of displacement. Specifically, the initiative aims to provide "available, affordable and usable mobile and internet connectivity" to displaced populations (UNHCR, n.d.a, n.p.).

In order to examine UNHCR discourse on refugee connectivity, the concept of sociotechnical imaginaries, as introduced by Jasanoff and Kim (2009), is used as a theoretical lens. Sociotechnical

[1] The terms Global North and Global South are used to denote different regions of the world. However, the concepts do not refer to geographically northern and southern countries, but rather to the popular conception of different sociocultural spheres or imaginative geographies. Similar to the conception of Orient-Occident as introduced by (Said, 1979).

imaginaries pertain to shared beliefs on what position science and technology should hold in our society and its desired future (Jasanoff, 2015). As such, these shared beliefs on the role of technology in both our personal lives and society more broadly, underly discourses on refugee connectivity. Which, in turn, inform the interventions undertaken by the UNHCR. Therefore, an examination of sociotechnical imaginaries enables a better understanding of discourses on refugee connectivity.

However, both discourses and their underlying sociotechnical imaginaries are not static. Rather they are subject to change as they are constructed within their specific spatial-temporality (Sharp, 2009). For instance, Hammerstad (2010) has illustrated UNHCR's changing discourse over time towards securitization of forced migration, in which migration is primarily understood as a threat. Therefore, the analysis of UNHCR discourse proposed in this thesis includes a diachronic component; the data sample consists of a set of reports from 2016 until 2022, which have been compared to discern potential discourse changes over time.

In short, by applying sociotechnical imaginaries as a theoretical lens, this thesis used multimodal critical discourse analysis (MCDA) to study the ideas shaping the imaginaries of refugee connectivity in UNHCR Connectivity for Refugees reports. The research question that has been examined is: *"How are discourses around refugee connectivity constructed in the UNHCR Connectivity for Refugees initiative reports over time?"*

1.2 Societal and academic relevance

UNHCR holds an important position within the international arena and is often described as 'the voice' of refugees (Hammerstad, 2010; Barnett, 2011). However, despite its important position when it comes to creating knowledge on refugees, UNHCR itself has received relatively little critical attention in research on the relationship between refugees and technology (Valluy, 2007, in Scheel & Ratfisch, 2014). Therefore, UNHCR practices, and the discourses and imaginaries that inform these practices, deserve further critical analysis.

Moreover, this study holds societal relevance due to its focus on discourses and sociotechnical imaginaries, both of which are performative. In other words, through the use of language, they "bring into being" what they describe (Macionis & Plummer, 2012, p.392). They present a speech act that "does what it says" (Pennycook, 2004, p. 9). This can be understood as follows; sociotechnical imaginaries do not only describe perceptions of reality, but they also bring into being desirable futures and preferred actions to attain those futures (Jasanoff & Kim, 2009). Therefore, sociotechnical imaginaries can be described as "powerful cultural resources" that influence responses to perceived societal issues (Jasanoff & Kim, 2013, p.190).

Thus, they determine not only the scope and urgency of the issue, but also envisioned actions and assumed responsibilities. Scheel and Ratfisch (2014) show how UNHCR discourse has the power

to define ‘problems’ and thereby warrant specific envisioned solutions. In other words, “how we perceive and understand an issue affects how we act on it” (Hammerstad, 2010, p. 240). For example, by positively relating to refugee management practices and creating symbolic differences between certain groups of people, UNHCR discourse legitimizes the use of certain practices, such as increased border controls (Scheel & Ratfisch, 2014).

In addition to this societal relevance, there are several important areas where this study makes a contribution to the academic field. Firstly, literature addressing discourses on refugee connectivity is scarce and under-theorized (Awad & Tossell, 2021). Studies that focus on refugee connectivity often address experiences of refugees with technology, practices of connectivity, or humanitarian and political efforts at establishing technological infrastructures. However, our knowledge on the discourses surrounding these practices and their underlying sociotechnical imaginaries is limited. A comprehensive overview of discourses has not yet been established, nor have discourses on refugee connectivity been systematically studied. However, in order to understand why and how connectivity is promoted by UNHCR, we need to create a better understanding of how the relationship between refugees and technology is understood and communicated.

Secondly, this study aims to contribute to the field by applying sociotechnical imaginaries as a theoretical lens to the study of discourses on refugee connectivity. Although the concept of sociotechnical imaginaries has been applied to the field of migration studies, for example to study biometric border practices (Metcalfe, 2022), its theoretical potential has not yet been explored with regard to discourses on refugee connectivity. Revealing UNHCR sociotechnical imaginary allows us to better grasp the formation of discourses by understanding their deeper ideological underpinnings.

Lastly, commentators have pointed at the seemingly changing nature of discourses on refugee connectivity in recent years (Warnes et al., 2021). This evolving nature of discourses underscores the need for the diachronic analysis in this study. The analysis of changes in UNHCR discourse over time contributes to a more profound understanding of how refugee connectivity is perceived and approached at different times. Because, as argued by Sharp (2009, p. 19) “discourses define the parameters of what can be known and understood at any point in history and in any place.”

2 Theoretical Framework

The theoretical framework consists of three main parts. The first part provides an elaboration on the case of this study; UNHCR and the Connectivity for Refugees initiative. In the second part, a literature review situates this case within a broader context of solutionism and innovation in humanitarianism. Moreover, the literature review provides insights into the historical lineages between media and migration. This discussion illustrates how material infrastructures are connected to the construction of social practices and, importantly, associated imaginaries and discourses. Lastly, in the third part, theory on sociotechnical imaginaries is explored to provide an analytical lens to the study of discourses on refugee connectivity. Furthermore, three patterns are discussed that emerged from the literature on refugees and technology use to inform the analysis of UNHCR discourse. However, before doing so, a conceptualisation of the main concept – refugee connectivity – is provided.

Refugee connectivity

The concept of connectivity is broad and all-encompassing, it is "many things at once" (UNHCR, n.d.b, n.p.). Extant research has employed a variety of concepts to refer to a wide range of practices related to refugees' use of technology, including, but not exclusive to, the use of mobile devices (e.g. Leung, 2011), social media platforms (e.g. Dhoest, 2020) and "infrastructuring" practices aimed at connecting to a mobile or internet network (Kubitschko & Schütz, 2016, p.3). Others refer to connectivity by discussing the use of information and communication technologies (ICT's), a broad category involving different devices and technologies (e.g. Xu & Maitland, 2015). However, explicit conceptualisations of connectivity are often omitted in studies focused on topics related to technology use by refugees.

UNHCR describes connectivity as "the level of connection, both qualitative and quantitative, that end-users have with the internet and other communication networks, and to other users of these networks" (UNHCR, n.d.c, p.1). Again, this definition of connectivity is broad and includes all connections that people have with and through communication networks.

Therefore, combining these insights, in this study the concept of 'refugee connectivity' is used to refer to all practices related to digital technology directed at either refugees themselves or UNHCR as a provider of humanitarian assistance to refugees. In doing so, this study follows Witteborn (2018, p. 21), who describes technology as "the production and consumption of practices, services, devices, and spaces related to information processing through a machine, including devices such as mobile phones and digital practices such as commenting on Facebook."

Thus, as conceptualised in this thesis, refugee connectivity involves both practices of connectivity provision and practices of connectivity use, specifically for and with refugee populations.

As will be further elaborated in the following sections, the concept of refugee connectivity is closely related to notions of innovation in humanitarian practices.

2.1 United Nations High Commissioner for Refugees

Innovation in humanitarianism

UNHCR was founded in 1950 with the aim of aiding displaced populations in the aftermath of World War II (UNHCR, n.d.d). Since its start, UNHCR has worked to protect and assist refugees in many emergencies and refugee crises (UNHCR, n.d.d). This assistance ranges from direct emergency aid, such as the provision of safe drink water, healthcare and sanitation, to projects aimed at changing structural conditions, such as using advocacy to influence governments (UNHCR, n.d.e.).

In line with its ambitions to protect and assist, UNHCR can be characterised as a humanitarian organization (Barnett, 2011). Humanitarianism can be defined as "the impartial, independent, and neutral provision of relief to those in immediate danger of harm" (Barnett, 2005, p. 724). However, at present most humanitarian organisations, including UNHCR, expand their practices by aiming to transform structural factors that cause vulnerability, for example by spreading "development, democracy, and human rights" (Barnett, 2005, p.733).

Within these practices, humanitarian operations increasingly incorporate digital innovation by pursuing new applications of digital technology and focusing on the use of data (Madianou, 2019; Maitland, 2018). In this context, innovation often entails the development of new data practices and introduction of digital technology aimed at providing connectivity in previously 'disconnected' contexts. These practices are grounded in a "progressivist and deterministic understanding of technology" (Madianou, 2019, p.3). In other words, digital innovation is often embraced as the inevitable path to development with the expectation that it offers solutions to complicated humanitarian challenges, such as refugee crises (Madianou, 2019).

The construction of UNHCR's Innovation Service can be seen as a prime example of this tendency (Maitland, 2018). The "Connectivity for refugees" initiative – the focus of this thesis – is a project of the UNHCR Innovation Service. The Innovation Service is a special part of UNHCR aimed at "supporting innovation with and for refugees" (UNHCR, n.d.f, n.p.). Established in 2012, the Innovation Service creates "spaces for experimentation to take place in UNHCR's operations, as well as at its Headquarters, whilst instilling a future-oriented approach into how we solve problems and create impact for refugee communities" (UNHCR, n.d.g, n.p.). Through the innovation service, UNHCR increasingly focuses its efforts on digital inclusion and connectivity (Smith, 2021). For example, through the Connectivity for Refugees initiative.

In 2016 the Connectivity for Refugees initiative was launched. The project aims to "ensure that all refugees, and the communities hosting them, have access to available, affordable and usable

mobile and internet connectivity" (UNHCR, n.d.a). This includes not only constructing technical infrastructure, such as building a cell tower, but also providing education to increase digital literacy and advocating for the removal of obstacles where needed (UNHCR, n.d.b). The main focus of the Connectivity for Refugees initiative, is providing digital connectivity to displaced populations and experimenting with the potential of digital technology and media to create a "path to self-reliance" for refugees while simultaneously creating "transformative innovation in humanitarian assistance" (UNHCR, n.d.h, n.p.). Thus, the project focuses on providing connectivity both for the empowerment of refugees and the enhancement of the provision of assistance by the UNHCR itself.

Since 2020, the initiative has been operating under a new name: 'Digital Access, Inclusion and Participation'. However, at the moment of writing, both in UNHCR documents and on the UNHCR website, the initiative is still most often referred to as 'Connectivity for Refugees'. Therefore, in this thesis the original name – 'Connectivity for Refugees' – is used to refer to the initiative and its operations both before and after 2020.

Partners and funds: a note on UNHCR positionality

UNHCR works with a number of partners to reach their humanitarian goals. In addition to governments and NGO's, this involves actors from the private sector. For example, the UN Foundation, (UNHCR, n.d.i). Founded in 1998, the UN Foundation raises funds to assist the United Nations and its causes (UNFoundation, n.d.a). In addition to assisting with funds for the UN, since 2007 the foundation also acts as a strategic partner by "bringing together ideas, people, and resources" (UNFoundation, n.d.b, n.p.).

Although funds like the UN Foundation enable UNHCR to carry out their projects and work to assist refugees, funding practices can also influence how and where UNHCR is able to provide humanitarian assistance and where sufficient action is lacking (Väyrynen, 2001). Funds are sometimes used as a form of political action when donors connect certain preconditions to their funds, allocating it to specific projects, thereby redirecting UNHCR's attention to certain emergencies or strategies (Väyrynen, 2001).

The United States of America and a number of Western European countries have played a significant role in the funding of UNHCR (Väyrynen, 2001). Moreover, partners of the UN Foundation are mostly businesses, organisations and foundations based in 'Western' countries (see UN Foudation, n.d.c). This can result in the prevalence of Western views on connectivity in UNHCR discourse and consequently impact UNHCR practices and goals. Therefore, when studying discourses it is important to keep this positionality into account as it can lead to the reproduction of colonial unequal power relations in which Western views are central (Quijano, 2000, in Madianou, 2019).

2.2 Innovation: the interrelatedness of media and migration

Problematic innovation: testing grounds and solutionism

Closely related to the notion of connectivity is that of innovation. Through the Innovation Service, UNHCR is increasingly focusing on incorporating innovation, digital technology and connectivity into their practices. Although innovation offers the potential to enhance people's lives – for example by enabling contact with loved ones and facilitating the provision of aid – the introduction of innovative technologies can also bring harm (Maitland, 2018). A focus on technology and innovation within humanitarian practices can be problematic as it risks treating vulnerable populations as testing grounds for digital 'solutions' (Madianou, 2019).

For example, since 2015 the so-called 'hackathons' have become popular means of stimulating innovation in humanitarianism. Hackathons are events in which participants are invited to create digital solutions – 'hacks' – for issues related to refugee and migration crises in an increasingly digitized world. Problematically, however, innovation is inherently linked to testing, experimentation and risk-taking (Madianou, 2019). The innovations that are developed during hackathons are experiments that introduce new technological 'solutions'. However, this means that refugee populations are used to test these new innovations while being exposed to their associated risks. Leurs and Smets (2018) warn that digital technologies, instead of presenting an 'easy fix' can aggravate situations, for example by "halting mobility, dismissing voice, and surveilling connectivity" (Leurs & Smets, 2018, p. 4). Thus, innovation events such as hackathons in the humanitarian field risk turning vulnerable groups into subjects of testing as the innovations are experimental by definition (Madianou, 2019).

Historically, marginalized, oppressed and othered populations have always figured as testing grounds for the implementation of new technology (Seuferling & Leurs, 2021). Technological innovations are "tested on populations, who often have no choice nor say over this process" (Seuferling & Leurs, 2021, p. 670). For example, when manoeuvring through migration infrastructures, refugees are often involuntarily subjected to technological innovations, premised on datafication. Think for example of the increasingly digital systems of bordering in which everything from fingerprints to facial micro-expressions can become datafied as an extended form of surveillance (Chouliaraki & Georgiou, 2019).

However, not just migration management and bordering practices could potentially harm refugees, innovations aimed at supporting refugees and providing connectivity could equally pose a threat to vulnerable populations. In order to function, mobile applications often need personal information which could potentially be misused (Marino, 2021, p.155). Consequently, the datafication of refugees' biographies enables forms of surveillance and control which are oppressive in nature (Seuferling & Leurs, 2021).

Moreover, although innovations can sometimes provide promising short-term impact, it is more ambiguous whether events like hackathons actually offer a meaningful contribution on the long-term (Marino, 2020). Introducing technological 'fixes' can overshadow the need for other, more comprehensive, structural solutions (Marino, 2020). In addition, according to Madianou (2019) innovation and experimentation in the humanitarian field are inherently exploitative. Technological innovations often extract data, which functions as an important source of value for companies and other stakeholders (Madianou, 2019). Due to this exploitative nature, the introduction of innovations and technologies has changed how refugee crises are understood not just as humanitarian emergencies, but also as "repositories of data" (Marino, 2020, p. 140).

Furthermore, in the language of innovation the notion of 'disruption' is typically used to measure impact and success (Marino, 2021). A successful innovation should change or 'disrupt' things for the better. But, as argued by Mariano (2021, p. 139); "what does disruption mean when applied to contexts where lives are already heavily disrupted by war and persecution?"

Finally, as innovation increasingly takes central importance in humanitarian practices, many products end up not being used. According to Leurs and Smets (2018) an estimated number of 1500 apps have been designed for refugees that are rarely used. They argue that a lack of involvement of refugees during the development of these applications might cause this over-abundance (Leurs & Smets, 2018). Although some hackathon events have tried to include refugees into the development process, Marino (2020) warns that there is a fine line between actually including refugees for their expertise and simply using refugees' presence as a show of inclusivity. When refugees are not valued for their expertise on the matter, but included only symbolically, this can lead to increasing social distance and Othering of refugees as they are reduced to their refugee experience (Marino, 2020).

Despite these issues, the implementation of new media and digital technological infrastructures in refugee aid and management often goes unquestioned due to "solutionist desires and fantasies" that are projected onto technological innovation (Seuferling & Leurs, 2021, p. 672). Digital innovation is embraced with the expectation that it offers solutions to complicated humanitarian challenges (Madianou, 2019). However, this techno-optimistic and solutionist tendency is unrealistic as technology is unable to "magically fix 'the crisis'" (Leurs & Smets, 2018, p. 4)

Moreover, innovation is generally perceived as objective, efficient and inevitable, which justifies its use, but simultaneously disguises power inequalities and the potential oppressive nature of this technological solutionism (Seuferling & Leurs, 2021). As argued by Madianou (2019), digital innovation practices reproduce power asymmetries, both between refugees and the agencies governing them, and on a wider global scale.

Technological advancement, often in the form of connectivity, is treated as a reflection of progress and development (Seuferling & Leurs, 2021). This Western perspective on progress as inherently linked to advancement in digital technology is pervasive. Marino (2021, p. 125) notes how "a techno-hype" seems to "invade all spaces of humanitarian intervention." Especially in the early

stages of this innovation wave, digital connectivity solutions were "thrown at refugees and fieldworkers without a clear understanding of the available physical and digital infrastructures" (Marino, 2021, p. 153).

Thus, despite the potential issues discussed in this paragraph, innovation and digital connectivity have become increasingly popular within the humanitarian field since 2015. However, in order to critically engage with humanitarian discourses on connectivity, our understanding needs to go further back and take into account the historically interconnectedness of media and migration infrastructures.

Media and migration: historical lineages

Although the popularity of digital innovation and connectivity might be characteristic for our current time, it is important to remember that the relation between media and migration is not new (Seuferling & Leurs, 2021). Media and migration infrastructures are historically connected. Think for example of the use of letters and newspapers, later followed by phones and computers as mediums for communication by refugees and as means for governing migration. Therefore, Seuferling and Leurs (2021) argue that experiments with innovation, which are currently popular among humanitarian refugee organisations, are the result of this historical interrelatedness of migration and media infrastructures.

Even though the media landscape has changed considerably over the last decades, the central role of media in migration can be traced back all the way to mediated practices of ordering through files and archives (Seuferling & Leurs, 2021). Although it might seem far removed from the use of digital media and technologies discussed in this thesis, understanding the importance of historical lineages is important to comprehend present-day infrastructures and imaginaries connected to visions of connectivity and innovation.

Digital connectivity is often seen as a distinct form of technology which presents a break with more traditional forms of media, however, it is important to realize that media technologies are historically connected, building on each other and slowly replacing older technologies over time (Seuferling & Leurs, 2021). Therefore, today's "tech-based management of migration 'crises'" can only be understood when taking into account the historical lineages that underpin its formation (Seuferling & Leurs, 2021, p. 672).

Innovation is not just a material or technological change, the introduction of new media and technologies also involves a change in the practices of use and connected normative rules. These practices and normative rules are what Gitelman (2006) calls 'protocols'. For instance, the practice of emailing follows protocols of appropriate practices such as starting your message with a greeting and ending with your name. But it also involves the use of a QWERTY-keyboard layout in which the specific letter-order – which differs from the alphabet, starting in the top left corner with the letters QWERTY – directs how an email can be typed (Gitelman, 2006). This shows how the social and the

material are connected and how historical changes in material infrastructure also involve changes in social protocols and practices.

For example, paper as a medium brought into being certain practices, such as filing, ordering and identifying. Moreover, these practices involve certain ways of imagining the world around us, they influence how we relate to the world and the people in it (Seuferling & Leurs, 2021). The use of paper as a medium brought with it "imaginaries of sorting, controlling and administrating people in time and space" (Seuferling & Leurs, 2021, p. 678). As such, the infrastructure of migration that is constructed in relation to dominant media infrastructures is based on similar imaginaries in which controlling and ordering bodies in space have become central practices (Seuferling & Leurs, 2021).

Moreover, these practices do not disappear when media infrastructures evolve and new media are introduced. Rather, new media build on existing media technologies, incorporating related practices while simultaneously creating new protocols and possibilities (Seuferling & Leurs, 2021). Therefore, as media infrastructures are evolving, approaches to humanitarian aid and migration infrastructures more broadly are also changing. As media and migration infrastructures intersect (Seuferling & Leurs, 2021), media technologies and their related social protocols and imaginaries influence how migration infrastructures and humanitarian practices are developing.

Furthermore, it is important to take into account the broader context in which these practices have developed. Media and migration infrastructures do not exist in a vacuum but rather "reflect a distinctive historical, socio-cultural, economic and political conjuncture" (Seuferling & Leurs, 2021). For example, Seuferling and Leurs (2021) demonstrate how current digitalized migration infrastructures reflect unequal power dynamics, reaching all the way back to colonial projects. As argued by Quijano (2000, in Madianou,2019, p. 3), when we look at humanitarianism from a decolonial lens, "humanitarianism reproduces relationships of inequity between the western 'saviours' and the suffering former colonial subjects."

The development of technical 'solutions' can create a form of dependency in which refugees are involuntarily subjected to and made dependent on technological infrastructures imposed by the humanitarian actors. Thereby a focus on innovation can "reinvigorate and rework colonial relationships of dependency" (Madianou, 2019, p. 2). Madianou (2019) introduces the term technocolonialism to refer to this rearticulation of colonial relationships in the specific context of digital innovation practices in humanitarianism.

Moreover, in order to understand the inherent coloniality of innovation practices in humanitarianism, it is important to resist discourses of inevitability. As discussed in the foregoing, media technologies cannot be reduced to neutral material infrastructures. Rather, they are premised on the values and worldviews of their creators and thereby risk the imposition of certain preferred practices. Although often presented as an inescapable process of progress that develops autonomously, it is important to realize that experimentation with and development of media and technology infrastructure are instead the direct result of decisions made by actors that have interest in their

development (Seuferling & Leurs, 2021). And thus, these developments reflect underlying infrastructures of power (Seuferling & Leurs, 2021).

However, these power asymmetries are not always directly visible. Humanitarian intervention is often introduced as a response to emergency situations in which human subjects are in need of direct aid and support. Due to this moral basis of practice and the urgency related to intervention, unequal power relations are "generally occluded under the imperative to 'do good' and the context of emergencies" (Madianou, 2019, p. 3).

All in all, if we want to understand how UNHCR approaches refugee connectivity, it is important to take the broader socio-historical context into account, as well as changes in this context over time. Therefore, in order to analyse the incorporation of connectivity in humanitarian aid for refugees, it is important to critically engage with the historical lineages of its formation.

2.3 Refugee Connectivity: Imaginaries and Discourses

Imaginaries and discourses

Imaginaries are generally described as broader systems of knowing and perceiving reality that underly all other practices. Broadly speaking, imaginaries refer to "shared mental life" (Strauss, 2006, p. 322). Or more specifically, "the ways in which people imagine their social existence, how they fit together with others, how things go on between them and their fellows, the expectations that are normally met, and the deeper normative notions and images that underlie these expectations" (Taylor, 2002, p.106). This broader imaginary of our social reality makes possible certain ways of relating to the world and in turn, the construction of certain discourses.

Discourses can be defined as "bodies of ideas and language"(Macionis & Plummer, 2012, p. 956). They are also referred to as "'systems of thought' or ways of thinking about and discussing the world within a particular framework" (Giddens & Sutton, 2021, p. 789). Thus, discourses are collections of ideas and ways of thinking about specific things or practices, often collected in and expressed through language. In effect, "discourses define the parameters of what can be known and understood at any point in history and in any place" (Sharp, 2009, p. 19).

Thus, although the concepts of (sociotechnical) imaginaries and discourses are connected, they are not synonymous. In short, discourse relates to collections of ideas, often directly related to spoken or written language. Whereas imaginaries pertain to broader social cognitive perceptions of reality that underly the construction of discourses. In other words, imaginaries are "coded into forms of mediation, including tools, discourses, images and protocols" (Seuferling and Leurs, 2021, p. 674). Therefore, uncovering imaginaries enables a better understanding of the discourses that are constructed through them. If we want to understand UNHCR discourses on refugee connectivity, we need to critically engage with their underlying imaginaries as well.

This thesis focuses on a specific form of imaginary to understand how discourses on refugee connectivity are constructed by UNHCR, namely *sociotechnical imaginaries*.

Sociotechnical imaginaries

A useful concept to understand how discourses on refugee connectivity come about, is that of sociotechnical imaginaries. First introduced by Jasanoff and Kim (2009), the concept has been defined as "collectively held, institutionally stabilized, and publicly performed visions of desirable futures, animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology" (Jasanoff, 2015, p.6). Thus, a sociotechnical imaginary can be understood as an imaginary, or system of shared beliefs, pertaining to what position science and technology should hold in our society and its desired future. This imagined future arises from the conceptions of possible utopian and dystopian ideals; the interplay between shared goals and fears (Jasanoff, 2015).

The concept of sociotechnical imaginaries has been introduced to illustrate the co-production of social order on the one hand, and stances towards science and technology on the other (Jasanoff & Kim, 2009). The underlying rationale is that the social and the material should not be considered as separate spheres, rather they are produced in interrelation (Jasanoff, 2015). As such, we can regard sociotechnical imaginaries as the result of a process of co-production while also acknowledging its active contribution to the co-productive process of its formation (Jasanoff, 2015).

Crucially, sociotechnical imaginaries are not passive beliefs but rather instrumental in determining what aspects of society and technology are desirable to promote and how (Jasanoff & Kim, 2009; Jasanoff, 2015). As argued by Jasanoff and Kim (2009, p. 123) "imaginaries operate for us in the understudied regions between imagination and action, between discourse and decision." Thus, perceptions of desired futures are intrinsically connected to understandings of the present and the envisioned actions needed to attain that future. As such, sociotechnical imaginaries enable both an understanding of social reality in the moment and a projected vision of a desirable future. They show the performativity of discourses, translating imagined futures into strategies, connecting imagined futures with possible routes for action while foreclosing others.

Originating in science and technology studies, the concept of sociotechnical imaginaries has first been used for a study on nuclear power. However, scholars have proven its usefulness for the field of digital migration studies. For example, Metcalfe (2022) applied the concept to the study of biometric border practices, showing how migrants deploy alternative imaginaries to contest dominant sociotechnical imaginaries. Moreover, Otto et al. (2019) employ the concept in their study on the preservation of Maltese identity and refugee management to show how connections of past, present and future contribute to a spatiality of identity. Kubitschko and Schütz (2016) used the concept of sociotechnical imaginaries to examine a volunteer-based initiative providing refugees with access to

the internet, to show how infrastructure served primarily as a political matter. However, the concept's potential has not yet been explored for a critical analysis of discourse on refugee connectivity in the context of humanitarian aid.

By asking what sociotechnical imaginaries underly UNHCR innovation service discourses on refugee connectivity, this present research examined what positions refugees and digital media hold in the envisioned futures by UNHCR. These envisioned futures as embedded within sociotechnical imaginaries can inform us on the ideas and beliefs that instruct the organisations policies and practices and thereby inform the construction of specific discourses. As such, sociotechnical imaginaries can be used as a theoretical lens for the examination of discourses that are constructed around refugee connectivity.

Refugees and technology: three patterns

Before we are able to study discourses on refugee connectivity, we need to understand how the relationship between refugees and connectivity is discussed in the literature. Based on the literature review, this section offers a first attempt at identifying different ways in which the relationship between technologies and refugees is discussed. On the basis of literature on refugees, technology use, innovation, digital media, humanitarianism and marginalized populations more broadly, three recurring patterns have been identified. The three patterns that emerged from the literature review are: (1) connectivity as a utilitarian toolkit, (2) connectivity as exceptionalism and (3) connectivity as a source of resilience and self-reliance.

These recurring ways of discussing connectivity provide a first indication of different types of discourses surrounding refugee connectivity. However, these three categories have been constructed for analytical purposes. In practice they are neither exhaustive reflections of discourses on refugee connectivity nor mutually exclusive categories. However, they reflect broader tendencies in the literature on refugees and technology and will function as guiding theoretical and empirical insights for the analysis.

The discussion shows, among other things, the paradoxical nature of discussions on refugees and technology, as they simultaneously differentiate, for example through practices of 'Othering', while also ascribing a certain universality to digital connectivity practices.

Connectivity: a utilitarian toolkit

Firstly, scholars have argued how discourses on refugee connectivity tend to revolve around a utilitarian perspective on digital technology in which technology primarily functions as a 'toolkit' fulfilling purely functional features to alleviate a situation of precarity (Awad & Tossell, 2021). In

other words, the role of technology in refugee connectivity is approached as that of a tool for inclusion of displaced persons into "a utilitarian productivity discourse" (Witteborn, 2018, p. 22).

The origin of this utilitarian perspective can be situated within a shift of opinion dating back to 2015, amidst the so-called 'refugee crisis' (Awad & Tossell, 2021). To assure the perceived eligibility of refugees for humanitarian aid, representations of refugees had to fit "Eurocentric ideas of sad and poor refugees" (Leurs & Ponzanesi, 2018, p. 6). Thus, discourses on refugees and connectivity by humanitarian organisations had to move away from perceptions of digital technology as 'luxury' towards connectivity as a 'survival tool' (Awad & Tossell, 2021).

Through the utilitarian discourse, connectivity is embedded in a sociotechnical imaginary as an unquestioned necessity of life. When media and digital technologies are imagined as preconditions for the alleviation of precarity (Awad & Tossell, 2021), imaginaries of desired futures are premised on the development and conservation of technology as an intrinsic part of human life.

However, the prevalence of a utilitarian discourse on refugee connectivity is found to be both empirically limited and politically problematic as it risks 'Othering' of refugees (Awad & Tossell, 2021). First, a focus on utilitarianism neglects the complexities of actual practices with digital technology. Refugees' experiences with digital innovations are diverse and vary greatly by context and phase of their experience (Alencar, 2020). Awad and Tossell (2021) empirically demonstrated these complexities in their study among Syrian refugees. Interviews with refugees showed how digital technology does not always fulfil purely utilitarian functions that fit into a discourse which unproblematically assumes refugees' longing for continuous connectivity, as is presumed in the utilitarian discourse (Awad & Tossell, 2021). They argue that mobile connectivity does not only function as a "desired toolkit" but can also be experienced as an "uncomfortable imposition" (Awad & Tossell, 2021).

In addition, the utilitarian discourse risks contributing to othering of refugees by generalizing and simplifying a conception of 'connected refugees' in which connectivity is stripped down to reflect only elementary human needs (Awad & Tossell, 2021). In an online commentary, Warnes et al. (2011) argue how utilitarian motivations are often central to interventions seeking to enhance digital connectivity while neglecting the importance of leisure. "People are people and social interaction and leisure are a clear use-case worldwide, yet the humanitarian context hones in on utility and, as such, other dimensions of usage are glossed over or even ignored" (Warnes et al., 2021, par. 3). Dominant discourses on the use of digital media thereby tend to differentiate between 'migrant connectivity' and 'non-migrant connectivity' as two separate practices. Thereby, a practice of Othering arises. Connectivity of migrants and refugees is deprived of the complexity with which connectivity practices of 'non-migrants' are approached (Awad & Tossell, 2021). These differentiations bring us to the second pattern: connectivity as exceptionalism.

Connectivity as exceptionalism

Secondly, although connectivity is promoted as a useful tool, discourses on refugee connectivity often relate to the use of media and communication technology by refugees as exceptional or out of place. As argued in the foregoing, images of refugees carrying smartphones or laptops are incongruent within the Eurocentric idea of refugees as vulnerable, poor and deprived of all basic necessities (Leurs & Ponzanesi, 2018).

Ticktin (2016) argues how discourses, especially in media and politics, increasingly differentiate between 'real' refugees in need of aid and protection on the one hand, and economic migrants with false intentions on the other. This moral distinction serves to distinguish the deserving from the undeserving. In this discourse, in order to qualify for humanitarian assistance, refugees need to fit within the general conception of helpless victims. In other words, "humanitarianism requires innocent sufferers to be represented in the passivity of their suffering, not in the action they take to confront and escape it" (Boltanski, 1999, in Ticktin, 2016, p. 259). Smartphone use by refugees disrupts this narrative and has therefore been met with suspicion (McCaffrey & Tana, 2019, p. 28).

This discourse finds its basis in an imaginary, or an undestanding of reality, in which the 'West' or the Global North, is differentiated from the Global South as the geographical location of progress and innovation. Connectivity and the innovation of digital technology are imagined as attributes of the West.

This discourse on refugee connectivity as both exceptional and thereby as a signal of undeservingness of the refugee status is problematic. Discourses on refugee connectivity are often rife with stereotypes that reduce refugees to their displaced condition. However, the discourse of exceptionalism fails to grasp the global availability of technology (Twigt, 2018). Refugees as smartphone users are no exception to other smartphone users. This discourse thereby limits complex realities "into discriminating dichotomies that once again differentiate the "west" from the rest" (Twigt, 2018, p. 1). Further, McCaffrey and Tana (2019) challenge false stereotypical presumptions of refugees as incompetent and unprepared for the potential of digital connectivity. Refugees' online presence, should no be seen as an exceptional case (McCaffrey & Tana, 2019). As argued by Leurs and Smets (2018, p. 8), "singling out technology use perpetuates stereotypical understandings of forced migrants, as if it is special and unexpected people coming from outside of Europe are carrying a relatively cheap piece of technology when fleeing from war, violence, and prosecution."

Connectivity: a source of resilience and self-reliance

Thirdly, scholars have demonstrated the centrality of resilience and self-reliance in discourses on refugee connectivity (Udwan et al., 2020). Dominant discourses and their related imaginaries prescribe certain preferred ways of acting and relating to technology by refugees. Central to this discourse on resilience is the need for refugees to be digital market-ready. As argued by Georgiou

(2019, in Udwan et al., 2020, p.2), “at present, successful refugees are particularly those who are entrepreneurial and digitally savvy.”

According to Turner (2020) the figure of the ‘refugee entrepreneur’ is increasingly dominant in both humanitarian and media discourses on refugees. This discourse surrounding the figure of the ‘entrepreneurial refugee’ reflects an emphasis on self-reliance. Consequently, the implicit understanding is that instead of humanitarian assistance, refugees should first and foremost be supported in their integration into the capitalist free market (Turner, 2020). As illustrated by Marino (2021, p. 166), “the commodification of displacement into an issue of connectivity (and lack thereof) further aggravates the not so subtle idea that marginalised communities should find solutions within their own self-governance rather than in national and supranational politics.”

Moreover, connectivity and digital entrepreneurship are often approached as a universal solution to issues of marginalized communities more broadly, without regard for context and existing power asymmetries, thereby disguising underlying inequalities (Graham, 2015). Connectivity, employed as a neutral benchmark for progress (Wahome & Graham, 2020), can be embedded in sociotechnical imaginaries as a desired future. A universal future in which connectivity in itself is a reflection of progress and should thus be promoted for everyone.

Thus, within this discourse on self-reliance and development are imaginaries of borderlessness and global universality. Technology and connectivity are presented as solutions with outcomes that are similar in different spatial locations (Wahome & Graham, 2020). However, scholars have shown that these imaginaries are far from universal, rather they are particular to the context in which they are created and reflect the “inherent coloniality” of the discourse (Wahome & Graham, 2020, p. 1123).

Marino (2021, p.141) argues that the emphasis on digital resilience is problematic as it can “support the view that tools and devices can substitute more comprehensive and institutionalised forms of support in both receiving and sending countries.” When the focus on digital self-reliance takes precedence over other forms of humanitarian support, underlying structural issues stay unaddressed. Based on a study among Syrian refugees, Turner (2020, p. 139) notes how the increasing focus on self-reliance and entrepreneurialism “shifts attention to how refugees can (and thus implicitly should) adapt to their new circumstances, rather than facilitating demands for human rights, political change, and humanitarian support” (Turner, 2020, p. 139).

3 Methodology

3.1 Multimodal Critical Discourse Analysis

To examine how discourses on refugee connectivity are constructed by the UNHCR Connectivity for Refugees initiative over time, multimodal critical discourse analysis (MCDA) has been conducted. The analysis focused on a total of 13 reports that have been published through the Connectivity for Refugees initiative.

Originating from the field of critical linguistics, critical discourse analysis (CDA) offers possibilities for a systematic and thorough analysis that can reveal how language is used to create meaning (Machin & Mayr, 2012). Discourses as "systems of thought" are "ways of thinking about and discussing the world within a particular framework" (Giddens & Sutton, 2021, p. 789). These discourses, however, are not always immediately visible. Therefore, the main goal of CDA is typically "exposing strategies that appear normal or neutral on the surface, but which may in fact be ideological and seek to shape the representation of events and persons for particular ends" (Machin & Mayr, 2012, p. 5). Thus, CDA as a method can help to uncover discourses.

Multimodal critical discourse analysis (MDCA) expands this focus by including the analysis of both linguistic and visual semiotic aspects of a text and placing them in relation to each other (Machin & Mayr, 2012). The relevance of using MCDA in this study is threefold.

First, communicating meaning is not restricted to language, therefore we need to include the study of other semiotic modes into our analysis as well, such as images (Machin & Mayr, 2012). Especially in the field of refugee and migration studies, the need to critically examine visual data arises from the performativity of images. For example, Boersma and Schinkel (2015) have illustrated how the presentation of seemingly objective quantitative data can contribute to 'Othering' by placing migrants at a visual distance from society in graphs. As such, images can be performative; the effects of these practices go beyond mere representation and can have real-world effects.

Second, MCDA lends itself well for the examination of both discourses and sociotechnical imaginaries. Not only are texts important for the articulation of discourses, but they are also intrinsically connected to sociotechnical imaginaries and their (re)production. As shared understandings of reality and visions for the future (Jasanoff, 2015), imaginaries determine how people relate to their reality and consequently, how they construct texts that reflect this reality. Imaginaries ultimately become part of discourses that are used when constructing and enacting our reality (Graham, 2015). As articulated by Jasanoff and Kim (2009, p. 123), imaginaries "reside in the reservoir of norms and discourses, metaphors and cultural meanings." Therefore, in order to uncover the sociotechnical imaginaries that reside in UNHCR discourse, multimodal critical discourse analysis offered the needed critical tools.

Third, MCDA as a method critically engages with power relations, which suited the study of UNHCR as it is a powerful institution with considerable authority (Barnett, 2011). Critical discourse analysis is premised on the idea that "power is transmitted and practiced through discourse" (Machin & Mayr, 2012, p. 4). Specifically, institutions – such as UNHCR – can be seen as a site for the naturalisation of knowledge, as "language is part of the way that people seek to promote particular views of the world and *naturalise* them" (Machin & Mayr, 2012, p. 2-3, italics in original). This process of naturalisation is power ridden and therefore a suitable site for critical discourse analysis.

A potential limitation of the use of MCDA for the analysis of reports is that it only addresses one side of the discursive practice. It enables the examination of discourses by UNHCR but leaves those who are subject to that conversation absent from the analysis. Likewise, it does not provide any information on how discourses are received by those who read the reports. As argued by Machin and Mayr (2012, p.10), "we cannot say from the application of these tools how readers will receive these texts nor make any conclusions about the intentions of authors." Nevertheless, the proposed methodology allowed for a systematic analysis of UNHCR discourses and imaginaries within the limited scope of this thesis project and could furthermore yield interesting insights for future research.

3.2 Data collection and sampling

The research corpus selected for this thesis consisted of official reports by UNHCR for the Connectivity for Refugees initiative as part of its Innovation Service. A focus on reports is chosen as such texts and documents are important means in the construction of discourses. Instead of passive "information containers", documents are performative and can be regarded as "methodologically created communicative turns in constructing versions of events" (Flick, 2009, p. 259). Documents are active in the (re)production and articulation of discourses. Furthermore, reports are instructive for the study of sociotechnical imaginaries as "documents are the medium most often used to construct and transmit sociotechnical imaginaries" (Sadowski & Bendor, 2019, in Wahome & Graham, 2020, p. 1125). Moreover, as argued in the foregoing, the UNHCR holds considerable authority, this authority is transferred onto the documentation that the organisation produces, especially when presented as neutral or objective data as is typical for official reports. To understand UNHCR discourse, analysing documents can be instructive as it may offer a perspective that transcends perceptions of individual actors within an institution (Flick, 2009), offering insight into the broader discourse as constructed by the organisation as a whole.

Specifically, the analysis focused on reports that are produced by the UNHCR Innovation Service as part of the Connectivity for Refugees initiative, which started in 2016. The initiative is concerned with "providing connectivity in displacement" (UNHCR, n.d., para. 1). Likewise, the sampled reports are concerned with issues of refugee connectivity and thus offered appropriate data for the study proposed here. As described on the UNHCR website, these reports are: "a collection of

research, insights and innovations from the field at the crossroads of displacement and connectivity" and they serve to "learn how UNHCR navigates challenges and how refugees move in a shared digital space" (UNCHR, n.d., para. 5). Thus, although individual subjects of the reports differ, their underlying subject matter relates to issues of connectivity in displacement.

A total of 13 reports will be analysed that have been published over the period 2017-2021. This sample includes the first until the most recently published report through the Connectivity for Refugees initiative, thus covering the full range of official reports constructed since the advent of the initiative in 2016. This allowed for a comparative analysis of change in discourse over time.

Although all reports have been published through the Connectivity for Refugees initiative, among the 13 reports was a special collection of 'research briefs'. The reports in this series are published in a similar way to other UNHCR reports. They have a similar layout and include the UNHCR logo on the cover. However, these reports have been written by researchers outside of UNHCR. Although they are the result of a collaboration between UNHCR and the researchers, they are all prefaced by an identical introduction which specifically distances the text from UNHCR discourse: "the views expressed in the publication are the views of each author. It is important to note that space was given to the authors intentionally to express their independent views and that these do not represent UNHCR." (Appendix A, D8, 2020, n.p.). Therefore, the text of these reports has not been included into the analysis as a reflection of UNHCR discourse directly. However, they have been examined to contrast these discourses to UNHCR discourse and provide insight into the influences on UNHCR discourse over the years as they are commissioned by the UNHCR to "bring insights into the complexity of digital connectivity, inform and challenge dominant views and narratives around access and inclusion of displaced persons in increasingly digital societies" (Appendix A, D8, 2020, n.p.). Moreover, only the textual expressions are distanced from UNHCR discourse. The visual representations, among which the cover with the UNHCR logo on it, do inform the choices and imaginaries present in overall UNHCR discourse.

3.3 Data analysis

The data was downloaded from the official website of the Connectivity for Refugees initiative. Subsequently, computer-assisted qualitative data analysis software (CAQDAS) ATLAS.ti has been used for the analysis, mostly for the linguistic features of the texts. The advantage of using this software arises from its ability to structure data-analysis in a systematic and rigorous manner (Paulus & Lester, 2016). In addition to computer assisted coding, a manual descriptive analysis has been used to engage elaborately with the visual elements of the report covers. This analysis has been carried out through Microsoft Word and involved in depth analysis and description of the visual data. Furthermore, coding has been complemented with an analysis of emphasis through Microsoft Excel. This analysis involved the use of a spreadsheet to document and compare all emphasized textual

elements of the reports. These include: titles, subtitles, bolded text and underlined text, with the exception of figures and appendices. This enabled a comparative analysis of those aspects of the texts that have deliberately been attributed extra emphasis to connote important elements of discourse. Together these analytical approaches enabled a comprehensive analysis of all textual and visual elements of the data.

Multimodal critical discourse analysis offers a set of tools for the analysis of both linguistic and visual aspects of the data. These tools have been applied during the coding process of the analysis. Both sets of tools – visual and linguistic– enabled me to critically engage with the underlying meaning in the texts. In order to examine how science and technology are imagined by UNHCR, a systematic analysis of the different linguistic and visual aspects of the reports has been carried out. Uncovering these sociotechnical imaginaries can furthermore unpack the broader discourse that is constructed around refugee connectivity in the UNHCR reports.

Firstly, language use has been analysed to examine how discourses on refugee connectivity are constructed. This allows for identification of what is said, how it has been said and, equally important, what has *not* been said. First, the analysis considered lexical choices – i.e. the words that are used and the connotations of these lexical choices (Machin & Mayr, 2012). Second, the occurrence of 'overlexicalization' has been coded, which can be seen as a form of "excessive description" and often involves the repetition of words or synonyms (Machin & Mayr, 2012, p. 37). Third, lexical absence has been studied, i.e. what is not said? Fourth, the structural oppositions that are presented in the texts have been considered. Important for this part of MCDA is the understanding that words are part of networks of meaning (Halliday, 1978, in Machin & Mayr, 2012). When opposing concepts are used, e.g. good and bad, both meanings are mobilised. This means that a concept is understood not only through its own meaning, but also through that of its opposite even if the opposing concept is not explicitly mentioned (Machin & Mayr, 2012). Fifth, attributed authority has been examined to analyse to what extent and how authority has been attributed in the text and how this is conveyed. Together, these tools enabled a systematic examination of language use in the UNHCR reports to discern how discourses on refugee connectivity have been constructed.

Secondly, as with the analysis of linguistic text features, MCDA offers a set of tools for the analysis of visual aspects as these contribute to the overall formation of discourses as well. First, iconography in the texts has been analysed by focussing on denotation – i.e. the particular things that are documented – and connotation – i.e. abstract ideas or implicit concepts (Machin & Mayr, 2012). This allowed for an examination of the construction of meaning. Second, attributes used in the images have been considered, as they can communicate ideas and values through their representation. Third, the setting of the image has been taken into consideration. Finally, the use of salience has been studied. Within an image, salience can be used to create "hierarchies of saliences" (Machin & Mayr, 2012, p. 54). Together, these tools guided the process of data analysis.

In addition, differences and similarities between the reports have been systematically addressed to allow for a comparative analysis of changing discourses over time. Differences over time have been analysed on the basis of publication year of the reports. The time comparison allowed for the analysis of changes in discourse and sociotechnical imaginary and has furthermore taken into consideration the relevant contextual factors that contribute to the formation of these discourses within their respective timeframe.

3.4 Positionality

As a researcher my personal positionality undoubtedly has an influence on the research process. Just like power and ideology are intrinsically connected to the discourses that are subject of study, so too does critical discourse analysis actively engage with the political nature of knowledge construction (Kress, 1990). It is therefore important to shortly reflect on my position as reflexivity is a much needed activity to avoid "false neutrality and universality" (Rose, 1997, p. 306).

As a white woman, born and raised in the Netherlands without ever having migrated or sought refuge in another country, my personal perspective on issues of (forced) migration is by definition indirect, formed through media, education and social interaction. My academic background holds an important position in this positionality and the development of this thesis. My sociology bachelor's and master's degrees, have sparked an interest in a broad range of public issues, among which (forced) migration. Along with a desire to critically examine the taken for granted. Moreover, this current master's programme 'Media, Culture and Society' turned my attention to the incorporation of media and technology throughout society. As well as a focus on discourses and the overall importance of language and visuals. This combination of influences has attributed to the choice of topic and design of the current study. Moreover, the increasing media attention for refugees since 2015, during my time as a student, has shaped my knowledge and understanding of forced migration processes.

In order to critically engage with my own positionality and its influence on the creation of knowledge presented in this thesis, I have incorporated efforts of reflexivity throughout the different phases of the research project. For example by continuously re-evaluating my research approach and critically reviewing my own coding and interpretation. These efforts are fortified by adjustments made in accordance with feedback from my supervisor, which functioned as an additional check and perspective on the work presented in this thesis.

4 Results

Based on the analysis this study has revealed a number of recurring themes and observations that indicate how the discourse around refugee connectivity is constructed in reports published through the UNHCR Connectivity for Refugees initiative over time. Frequent reference is made to the reports (e.g. D1, . . . , D13), see Appendix A for a complete overview of the sample characteristics.

4.1 Utilitarian perspectives on improved quality of life

Quality of life

In the reports, connectivity was repeatedly placed in direct connection to an improved quality of life. Often this improvement was described in terms of well-being, new beginnings, opportunities or general enhancement. See for example the following quote from report D1 (2016, p. 20): "The research proves that there is enormous opportunity and potential to enhance refugees' lives by increasing their access to connectivity and their ability to use it to help themselves and others." Moreover, in D7 (2020, p. 13), the authors argued for the importance of enabling access to "basic mobile connectivity and financial services", as it could "greatly improve their [refugees] livelihoods and open up their economic opportunities." D4 (2020, p. 33) emphasized that "there are limitless potential applications of technology for improved refugee well-being." In D1 (2016, p. 4) internet connectivity in schools has even been described as a way to "open up a new world for Somali refugees." Furthermore, D2 (2019, p. 25) illustrates how "the communication features of mobile phones" can be leveraged "to enhance professional, educational or livelihood opportunities." Thus, when technology and connectivity are introduced, life improves.

The positive connection between quality of life and connectivity becomes most apparent in the 2016 report titled 'Connectivity for Refugees'. The subtitle of this report reads: "How internet and Mobile Connectivity can Improve Refugee Well-Being and Transform Humanitarian Action" (D1, 2016, p. cover page). This places connectivity in a direct and causal relation to an improvement of well-being. Moreover, since 2019, the initiative works with the following vision statement:

> "The vision of Connectivity for Refugees is that 'displaced populations and communities that host them have the right, and the choice, to be part of a connected society, and have access to *technology that enables them to build better futures* for themselves, their families and the world'" (D3, 2019, p.1, emphasis added).

Likewise, this draws up a causal relationship between technology and connectivity on the one hand and improved quality of life on the other. This vision statement can be seen as central to UNHCR discourse as it is repeated in multiple reports and currently even the first introductory statement on the Connectivity for Refugees web-page (UNHCR, n.d.c).

This discourse was furthermore strengthened through argumentation of its opposite; descriptions that equate lack of connectivity with poorer quality of life and lingering needs. For

example in D2 (2019, p.79) it was mentioned that "without concerted efforts to promote digital inclusion, existing inequalities in refugee populations may be exacerbated and deny the most vulnerable the life-enhancing opportunities of mobile." Moreover, in the D7 (2020, p.1) report, it is argued that a lack of connectivity "leaves millions of people unable to legally access online information, communicate with others, and receive cash assistance and transfers, among other benefits of connectivity". Thus, lack of connectivity means a lack of benefits and exclusion from life-enhancement. This argumentation on both sides of the structural opposition strengthens the proposed relationship between connectivity and quality of life in both directions.

Interestingly, over time this relationship was less frequently articulated in an explicit way, for example by using terms such as well-being or quality of life. However, even when statements were not made as explicit as in the foregoing examples, the data still showed an underlying discourse in which improved connectivity was placed in direct relation to an important positive development in the life of refugees. For example by describing connectivity as a "key service" (D7, 2020, p.5).

Although a positive discourse on connectivity might not be surprising for an initiative with the goal of improving connectivity for refugees, this direct and presumed causal relation between connectivity on the one hand and quality of life on the other was less explicitly apparent from the literature review. In the reports, connectivity is not just presented as something that makes certain facets of life easier, but also intrinsically better.

Uilitarianism

The analysis revealed that the aforementioned proposed improvement of overall life and well-being has almost exclusively been approached through utilitarian functionalities of connectivity. As demonstrated in the examples, some of the main use cases of connectivity that have been discussed in the reports are: livelihood and economic opportunities, education, information access, use of online financial services, practical communication, navigation and protection (see Appendix B). Although the discourse on connectivity thus entails a broad range of practices, these use cases can be characterized as mainly utilitarian. They pertain to practical issues, basic needs and a matter of survival.

These results are in accordance with the second pattern observed in the literature review: 'connectivity as a utilitarian toolkit'. Consistent with the observations of Awad and Tossell (2021) these results indicate a predominant focus on utilitarianism in UNHCR discourse on refugee connectivity. In the data, functions of connectivity are often presented as tools that are needed by refugees and mainly function to fulfil practical needs. For example, D5 (p.5) argues that " priority topics are likely to be educational and training resources, health and family planning information, agricultural extension information, refugee support information and online public services. Also, more 'e-government' services are needed."

Moreover, this utilitarian focus of connectivity use introduces a focus on self-reliance. If connectivity can be leveraged for a number of critical utilitarian functionalities, refugees can use this

to independently improve their life without reliance on other actors. For example, in D1 (2016) it was argued that "most significantly, better connectivity can promote self-reliance by broadening the opportunities for refugees to improve their own lives." Likewise, in discussing the strategic approach of UNHCR, D5 (2020, p.10) argues that "by facilitating access to connectivity and digital inclusion, not only is refugee self-reliance enhanced, but hosting populations can also benefit from the enhanced connectivity services." This is in accordance with the third pattern in the literature review which identified a concern with self-reliance in discourses on refugee connectivity (e.g. Udwan et al., 2020; Marino, 2021).

Thereby UNHCR discourse tends to equate the broad categories of well-being and quality of life to the limited collection of utilitarian functionalities of connectivity. Other positive experiences that are generally included in conceptions of quality of life such as entertainment, relaxation, quality time, and fun, are rarely mentioned in the reports. For example, although the use of social media is mentioned in a collection of personal stories of refugees in D12 (pp.36-44), this non-utilitarian use case is rarely subject of attention when reports discuss the need for connectivity interventions.

The only non-utilitarian use case that is frequently mentioned throughout the reports is communication with loved ones. For example, in D5 (p.5) it was argued that "mobile networks are top ranked in desirability where there is no existing mobile connectivity. The massive advantage of being directly reachable by family, friends, colleagues and humanitarian support agencies is self-evident." Moreover, D12 mentions how "mobile services enabled people on the move to connect with family, friends, and other migrant communities" (D12, p. 27). However, this non-utilitarian use of connectivity is often referred to only briefly.

Interestingly, an exception to the predominant utilitarian pattern can be found in report D8 'Access and Agency', which critically reflects on – among other things – non-utilitarian use: "non-instrumental use (i.e. entertainment) is an important component of nearly everyone's technology use" (D8, p. 13). Moreover, this report shortly considers the non-utilitarian connectivity practice of digital storytelling as contributing to mental well-being. The report referred to practices of storytelling as "therapeutic" (D8, 2020, p.5). In this report, digital storytelling is considered to contribute to refugees' well-being by providing "control over sharing their story" (D8, 2020, p.5).

However, this report is part of the research brief series (see Appendix A). As part of the research brief series, this report is written by an independent researcher and the contents are actively distanced from UNHCR representation. Therefore, as discussed in the methodology, this report cannot be seen as a direct representation of UNHCR discourse. Nevertheless, the absence of similar discourses in the other reports reinforces the identified pattern of utilitarianism.

Surprisingly, the utilitarian perspective is not just used to describe connectivity use by refugees, as was mainly observed in the literature. Connectivity is furthermore approached as a utilitarian tool from the perspective of humanitarian assistance. In the reports, connectivity was described as a useful development within the humanitarian sector to facilitate UNHCR practices. This

was first reflected in the title of D1 "How Internet and Mobile Connectivity can Improve Refugee Well-Being and *Transform Humanitarian Action*" (cover page, emphasis added). The report argued for the importance of connectivity for UNHCR:

> "A connected refugee population can also play a critical role in enabling organizations such as UNHCR to innovate effectively and to improve the quality of services that we provide. Connectivity has the potential to transform how we communicate, the way in which we respond to the protection needs of displaced people, and our delivery of humanitarian services." (D1, 2016, p.5)

This idea of connectivity as a utilitarian tool for humanitarianism is repeated throughout multiple reports. For example, according to D12 (p.10) "digital connectivity has played a pivotal role in the transformation of the twenty-first century humanitarian response." And D6 (p.8) argued that "humanitarian organisations have used connectivity to alter the way they provide or expand their coverage for certain services." These ideas are referred to as "connectivity for aid", which has been defined as "enabling humanitarian organizations with connectivity in the field" (D12, p.9).

4.2 The exceptionalism of the (un)connected

Relating this utilitarian tendency to the typology discussed in the theoretical framework, we can furthermore see that UNHCR discourse on connectivity tends to differentiate refugee connectivity from other connectivity practices by approaching it through a purely utilitarian lens. This resonates with the second pattern identified in the UNHCR discourse; 'Connectivity as exceptionalism.' As argued in the foregoing, the analysis revealed that the reports positioned refugee connectivity as a distinct form of connectivity in which leisure and entertainment have little to no place.

Interestingly, however, although differentiated as a purely utilitarian, the use of technology and connectivity by refugees in itself is not met with suspicion. This contrasts the findings presented in the literature review, which indicated that refugee connectivity is generally met with suspicion (McCaffrey & Tana, 2019) as it disrupts ideas of refugees as passive and helpless victims (Ticktin, 2016). Rather, as illustrated in the foregoing themes, connectivity use by refugees is presented as a desirable outcome of UNHCR activities. In as far as refugees were not already connected, according to UNHCR discourse, they should be.

Thus, it is not the use of connectivity per se that is made to be exceptional. Rather it is the lack of connectivity as compared to the 'western' world that is othered or made exceptional. See for example D1 (2016, p.5) which creates a contrast between overload and scarcity: "over the last 25 years, the internet and mobile communications have transformed life in the industrialised and the developing world. Now that information is so freely available, we worry more about overload than scarcity."

4.3 From needs to rights and choices

From the start of the Connectivity for Refugees initiative in 2016, connectivity has often been described as a need or a must. For example, D1 (p.22) argued that: "to address the issues identified in the Assessment, refugees *must* have access to available, affordable and usable mobile and internet connectivity" (D1, p.22, emphasis added). Moreover, reports frequently discussed the importance of assessing these connectivity needs among refugees. For example in D4 (p.6), which argued for the need to "evaluate the refugees' existing abilities and needs" as the first step in creating "a humanitarian connectivity project."

This need for connectivity is emphasized in different ways, first by describing the affordances offered by connectivity to be vital and basic. For example: "displaced people are also living without the connectivity they need to obtain vital information, communicate with loved ones, access basic services and to link to the local, national and global communities around them" (D1, 2016, p. 5). In addition, emphasis is created by highlighting refugees' vulnerability:

> "The connectivity needs of displaced populations are exacerbated by their status and vulnerabilities: on the one hand they often face challenges in access to connectivity throughout displacement, and on the other hand, they often rely on this same connectivity for protection, information, health, education and other life-saving purposes." (D3, p.4)

This focus on connectivity as a need can be related to the presumed gains in life quality as discussed in the foregoing. For example, report D1 describes the need for connectivity as a precondition to be able to change life for the better. The report argues that refugees need to be able to access "up-to-date information," because without this form of connectivity "refugees cannot access basic services such as health and education or make informed decisions on how *to start improving their lives*" (D1, 2016, p.8, emphasis added).

Furthermore, as demonstrated, connectivity has also frequently been approach as a need due to its utility for humanitarian support. Thus, connectivity is mostly presented as a need, something that people are lacking and that must be delivered in order for them to start a better life and for UNHCR to make aid provision easier and better. This focus on necessity was strongest in 2016, but has stayed throughout all of the reports.

However, from 2019 onwards, the focus on needs has increasingly been accompanied by a discussion of connectivity in terms of rights and choices. The initial 2016 report did not yet use the terms right or choice to refer to the relationship between refugees and connectivity practices. However, from 2019 onwards the idea of choice becomes central: "whether it is about connecting or disconnecting, what matters is choice" (D3, 2019, p. 16).

Moreover, since 2019 the vision of the initiative is formulated as follows: "UNHCR believes that displaced populations and hosting communities have the *right*, and the *choice*, to be included in a connected society" (D2, 2019, n.p., emphasis added). This change does not seem accidental, as the evolvement of UNHCR's vision on refugee connectivity is explicitly mentioned in D4. The author notes how the "vision has evolved to now focus on refugees' right to be digitally included" (D4, p.3).

This change in terminology is important as it connotes a different meaning. Needs connote a deficit; that which is needed is currently lacking or insufficiently provided. Right and choice on the other hand, imply the option to remain unconnected; being connected is an optional condition. When connectivity is a choice, disconnected individuals are not incomplete. They have chosen a different path as connectivity is a right but not a must.

Moreover, according to the literature review, we should beware of discourse that "unproblematically assumes refugees' longing for continuous connectivity" (Awad & Tossell, 2021). The introduction of the idea of 'choice' challenges this presumption. People can choose to be connected, but they can also choose not to.

However, despite the changing terminology, in practice the aspects of right and choice are still largely presented as needs. A discourse of choice implies the availability of different options – to increase connectivity or to stay disconnected. However, in most cases only one side of this choice is discussed and considered: to increase connectivity. Therefore, the discourse of needs seems to remain intact. This contradiction in UNHCR discourse becomes apparent through the one-sided discussion of rights and choices.

When the choice of non-use is discussed, this is generally approached as either problematic or due to the existence of barriers. For example, in D4 (2020, p.7) it is argued that "non-technology and non-economic issues play a central role in decisions to participate online or not, such as lack of digital skills, linguistic and literacy barriers, social norms, and cultural attitudes." By discussing the choice not to connect in terms of barriers and skill-deficiencies, while discussions focused on increasing connectivity are regarded in terms of improvement (see section 4.1), the discussion of choices becomes inherently one-sided.

Again, a difference can be noted between the general UNHCR reports and the research brief series. In contrast to the other reports, the option to remain unconnected is extensively discussed in D8, as part of the research brief series. This document emphasizes the importance of taking the unconnected into account. "Research should also consider that the choice to use a phone or not may reflect agency in negotiating social norms or simply personal preference" (D8, 2020, p. 13). Therefore, this report argued that "humanitarians, similar to organizations worldwide, must treat individuals choosing to remain unconnected with respect and dignity" (D8, p. 13).

4.4 Connectivity as a matter of inclusion

Similar to the renewed focus on rights and choices, over time the UNHCR reports increasingly focus on inclusion. The term first appeared in reports from 2019. In D3 (2019, p.4), digital inclusion is defined as "the criteria and requirements necessary to ensure that end-user, including disadvantaged communities (such as displaced populations), have access to and are able to use Information and Communication Technologies (ICTs) and that this responds to their connectivity needs." The report argues that "inclusion happens when we strive towards having the same rights and opportunities" (D3, 2019, p.16). The importance of inclusion is explained in D2 (2019, p.5) which argued that "without concerted efforts to promote digital inclusion, existing inequalities in refugee populations may be exacerbated and deny the life-enhancing opportunities of mobile to the most vulnerable."

From 2020 onward, the term inclusion gains even more prominence as the initiative started working with a new name: "Digital access, Inclusion and Participation" (D4, p.1). This name change has consequences for its connected connotations. As argued in the methodology, words are part of a networks of meaning (Halliday, 1978, in Machin & Mayr, 2012). Therefore, the structural opposite of a term has implications for its perception (Machin & Mayr, 2012). Thereby, the term inclusion implies exclusion. If inclusion is presented as a solution, it logically follows that we are currently in a situation of exclusion. Furthermore, the old name 'connectivity for refugees' had the term refugees in the title. In the new name, the refugee subject is no longer present. A shift from connectivity specifically for refugees (i.e. 'refugee connectivity'), which connotes a separation between refugee connectivity and other forms connectivity, to a focus on inclusion of all actors into one common form of connectivity.

Moreover, due to this name change, the refugee subject has received a more active role. A possible interpretation of the name 'connectivity for refugees' is that connectivity is provided for or to refugees. In this perception, UNHCR is working on connectivity for refugees who are merely receiving. In the new name – 'digital access, inclusion and participation' – the first half still involves a more or less passive condition. Someone can only be included into something through an active effort of the "in-group" to include someone who is currently still on the outside. However, the last part of the new name, participation, implies an active position of refugees who are able to participate in the process of (creating) connectivity. This focus on participation is illustrated most clearly in report D5 'Community-led connectivity.' Which focuses on "exploring the potential of community-based approaches to provision of connectivity services" (D5, 2020, p.1). This participatory approach is used because, as argued in D5 (2020, p.1) "the skills and capacities of the refugee / host community are often under-utilised."

Furthermore, the analysis has shown that a digital future of a connected society has been described in the reports. For example, "the M4H programme envisions a digital humanitarian future in which mobile and digital solutions play an optimisation role in providing improved access to services, information and choice for people who could be or already are affected by crisis."(D1, 2016, p.6). In addition, the aim of the Connectivity for Refugees initiative includes the prospect of a connected

future as it "aims to ensure that refugees and the communities that host them have the right, and the choice, to be included in a connected society" (D13, 2022, n.p.).

This connected future is projected as separate sphere of connected individuals in which benefits and opportunities reside. The analysis shows that connectivity 'solutions' and technological devices are projected as tools needed to reach these benefits and opportunities. These descriptions indicate an imaginary in which 'the connected' is positioned separately from refugees. Connectivity is out there, and refugees are not (yet) in it, but they should be (able to). Therefore, inclusion matters.

4.5 The unquestioned path to connectivity

The analysis revealed that approaches to connectivity in UNHCR discourse are often premised on ideas of movement and progress, creating the idea of a 'path' to connectivity. Lexical choices demonstrated this tendency. For example, D13 (2022, p. 6) discussed the importance of "interventions focused on *paving the way towards* effective accessibility" (emphasis added). Another illustrative example can be found in D3 (2019, p.1), in which it was argued that "UNHCR *set off on a journey* to bring connectivity to some of the most disconnected places and persons" (emphasis added). The report argued that it offered "a glimpse into the future, *the road ahead* and some of the tools that can guide the initiative and *keep moving it in the right direction*" (D3, 2019, p.1). The use of terms related to journeying and mobility – such as road, path, way, moving and direction – imply the idea of connectivity as positioned in the future or a distant locale.

Moreover, as the foregoing themes have demonstrated, connectivity in UNHCR discourse is positioned as an inherently positive aspect of its sociotechnical imaginary. Thereby, connectivity becomes something that we *should* be moving towards. This positive position of connectivity in the sociotechnical imaginary of UNHCR is strengthened by associations between connectivity and ideas of progress or revolution, terms which furthermore connote ideas of movement, both in space and time. For example, in report D12 (p. 10), the use of connectivity as a form of aid is described as "a significant step in the evolution of humanitarian assistance." Moreover, D1 (2016, p.8) voiced concerns for the equal distribution of benefits that result from "the digital revolution". Likewise, D3 (p.16) argued for the importance of inclusion of 'the unconnected' into this revolution: "The vision of Connectivity for Refugees, (…) is to bridge the digital divide, connect those who are currently not connected and include everyone in the digital revolution that is taking place globally." This focus on progress is in accordance with the literature which showed how advancements in digital technology are generally regarded as a reflection of progress (Seuferling & Leurs, 2021). Moreover, scholars have argued how this perspective can be characterized as 'Western'. Thereby situating UNHCR discourse within a western perspective on connectivity.

In addition, the idea of movement arises from a narrative in which issues related to connectivity are described in terms of roadblocks, barriers and obstacles. These terms connote an idea

of interrupted mobility. Thereby strengthening a discourse around connectivity in which movement is central. For example, D2 (2019, p. 3) argued that "affordability, literacy and digital skills, and charging are the main barriers to mobile phone ownership and mobile internet use in all contexts." Moreover, D3 (p.8, emphasis added) reflects on "*obstacles* and challenges, but also *progress* and impact" in UNHCR approach to connectivity. The report concludes that "there are still many barriers on the path to connectivity, from technical to social and political" (D3, p.17). Moreover, D13 (2022, p.29) discussed how legal frameworks can create "roadblocks to connectivity."

Importantly, the idea of connectivity issues as 'roadblocks' contributes to the idea of a path to connectivity that is largely unquestioned. Through a representation of issues as barriers or roadblocks, the underlying path remains in tact. These barriers must be dealt with, but they are something to 'overcome' not something that will change UNHCR's course to a connected future. Although connectivity risks are a frequently discussed topic in almost all reports, these risks are presented as considerations to improve the way connectivity is supported, not to question the future of connectivity per se. For example, risks are discussed as something to be "managed" (e.g. D12, p.4.; D3, p.60), "tackled" (e.g. D1, p.8), "mitigated" (e.g. D3, p.30; D6, p.9; D12, p.8) or "addressed" (e.g. D3, p. 23; D12, p. 66).

Thus, not only did the reports indicate a discourse of movement and progress, this movement went largely unquestioned. The 'path' to a connected future, that is frequently described or implied in the reports – as shown in the foregoing – is presented as unquestioned. As an integral part of the sociotechnical imaginary of a connected future, the need for connectivity is demonstrated and approached in different ways, but rarely questioned. To stay within the journeying terminology: although different routes are considered, the destination is always enhanced connectivity.

Furthermore, when connectivity is linked to ideas of an 'unquestioned path' of progress, connectivity becomes something on which you can be either behind, on track, or ahead. For example, according to D1 one of the main challenges is the fact that "refugees are behind in connectivity" (2016, p.7). The report argued that "the digital revolution is transforming the world but refugees are being left behind" (D1, 2016, p.8). This can be contrasted to positionings of UNHCR as having "taken the lead" (D13, 2022, p. 19). Or humanitarian organisations as "*providing a path* to self-sufficiency" (D2, 2019, p. 6, emphasis added). This differentiation between the position of refugees and humanitarian organisations on the 'path' to a connected future, resonates with findings from the literature review. Extant research has argued that discourses on refugee connectivity tend to distinguish refugees by portraying them in ways that fit with Eurocentric ideas (Leurs & Ponzanesi, 2018). For example by portraying refugees as deprived of all basic necessities and in need of humanitarian assistance to escape this position (Leurs & Ponzanesi, 2018).

Lastly, visual aspects of the data strengthen this discourse of movement. One example can be found in D13 (2022) which repeatedly portrayed images of bridges. Most notably, the cover of the report shows a blue animated bridge, reaching from the left side of the page to the right. On the left

side of the bridge we see a row of people walking across the bridge, presumably refugees. However, an abstract rectangular object resembling a computer chip or a SIM-card has been positioned in the middle, connecting the two sides of the bridge. Although they are walking towards it, the people have not yet reached the computer chip. This interesting image connotes the idea that technology functions as a bridge, it connects and enables people to move forward. However, the refugees are still on their way towards this technological artifact, strengthening the aforementioned ideas of differentiated positionalities on the 'path' to connectivity. Moreover, as the two sides of the bridge are held together solely by the computer chip, the importance of technology in this setting of displacement is emphasised. The salient portrayal of both the bridge and the computer chip – in terms of size, foregrounding and centrality – furthermore add to this idea of importance.

4.6 connectivity as a universal solution.

The final component of UNHCR discourse that has been discerned from the analysis pertains to ideas of solutionism. Overall, within the reports, digital technologies are presented as solutions for a broad range of issues faced by refugees. The reports frequently use the term solution when discussing connectivity interventions. For example in report D1 (2016, p. 15) which argues that "there has been a rise in innovative new solutions, aimed at delivering connectivity to the unconnected, such as TV White Space, drones, balloons, and so on." Moreover, the report argued that connectivity can be used for "protection, communication, education, health care, self-reliance, community empowerment and other durable solutions" (D1, 2016, p. 22). In addition, the idea of "connectivity-as-aid solutions" (D12, 2021, p. 12) is frequently used to describe the use of connectivity as a form of aid in itself, offering a solution to situations of precarity.

Furthermore, reports frequently used terms such as 'effective', 'efficient', 'strategy', and 'success'. These business-like lexical choices connote solutionist tendencies. Through the use of these terms the condition of the unconnected refugee is presented as a problem that can be fixed through proper strategy that is effectively and efficiently executed. For example, D5 discussed the potential of community networks and argued that "many of their features suggest that they can be *particularly effective* at addressing their connectivity needs" (D5, 2020, p.2, emphasis added). Moreover, it was argued that "there has been increasing interest in *innovative strategies* to address unmet needs for affordable communications infrastructure" (D5, 2020, p.9, emphasis added).

The results of this study are in agreement with the findings from previous studies presented in the literature review. As argued by Madianou (2019) the introduction of new and innovative digital technologies is often embraced due to the assumption that it is able to offer a solution to complex issues. However, as extant research has demonstrated, a focus on digital 'solutions' can be problematic as they are often connected to practices of innovation, testing and experimentation (Madianou, 2019). Scholars have argued that we should be wary of interpreting the introduction of digital technology into

contexts of displacement as ‘easy fix’ (Leurs & Smets, 2018). “Solutionist desires” can overshadow potential issues and risks associated with the introduction of technology as a solution (Seuferling & Leurs, 2021, p. 672).

When refugee connectivity is approached in terms of problems and solutions, coupled with a business-like discourse, imaginaries on the relationship between refugees and technology change as well. The term solution implies the existence of a problem. However, due to the performative nature of language, the ways in which we define what problems and their corresponding solutions are, impacts not only how we interpret the world around us, but also how we intervene in this world.

Moreover, as argued in the theory, due to the interrelatedness of media and migration, the construction of certain media infrastructures exerts an influence over our perception of the world around us (Seuferling & Leurs, 2021). Thus, when UNHCR focuses on the introduction of solutions, this risks bringing into being an imaginary in which technology is the main, or even the only, fix to a complex situation of displacement.

Nevertheless, this warrants nuance as an innovation ‘hype’ seems to be less present in the reports than anticipated based on the literature review. The data shows an eagerness of UNHCR to engage with risks and critically examine potential issues related to the introduction of digital technology in contexts of displacement. D12 (2020) for instance, has the subtitle “Managing Digital Risks to Refugee Connectiviety” and has focused exclusively on the potential risks associated to the use of digital technology by refugees. However, as argued in the foregoing (see section 4.5) these risks are mainly presented as issues to overcome, the underlying positive position of connectivity as a solution and a prerequisite for well-being (see section 4.1) remains.

Furthermore, reports mention the need to adapt interventions to local context. For instance, D1: “each context has distinct characteristics and prevailing political and regulatory environments, which helped to build evidence and a better understanding of how refugees are accessing and using mobile technology and the nuanced barriers they face” (D1, 2016, p. 7). Nevertheless, the overall consensus seems to be that increased connectivity contributes to refugee well-being (see section 4.1). Moreover, connectivity has been presented as a universal ‘path’ to a connected future (see section 4.5), thereby universalising connectivity as a solution with similar positive effects in different locales as we are all ‘on the road to a connected future’.

5 Conclusion

This study set out to examine discourses on refugee connectivity in reports published through UNHCR's Connectivity for Refugees initiative. As literature on discourses of refugees connectivity is scarce, the current study aimed to offer a more profound understanding of the ideas and imaginaries that contribute to the construction of such discourses. In order to do so, the concept of sociotechnical imaginaries has been introduced as a theoretical lens. Moreover, a multimodal critical discourse analysis has been performed to answer the research question: *"how are discourses around refugee connectivity constructed in the UNHCR Connectivity for Refugees initiative reports over time?"*

The analysis has revealed a components of UNHCR discourse on refugee connectivity: (1) utilitarian perspectives on improved quality of life; (2) the exceptionalism of the (un)connected; (3) from needs to rights and choices; (4) connectivity as a matter of inclusion; (5) The unquestioned path to connectivity; and (6) connectivity as a universal solution.

First and foremost, the analysis revealed the overall positive positioning of connectivity within the reports. Connectivity is generally approached from a positive standpoint focusing on the opportunities it can bring and most importantly, its effect on quality of life. Overall, connectivity is presumed to contribute to well-being and quality of life of all people. This techno-optimistic standpoint however, reduces the broad concept of life quality to a set of utilitarian functionalities. In accordance with the literature, this study has demonstrated the inherent utilitarianism of UNHCR discourse on refugee connectivity.

Moreover, UNHCR discourse on refugee connectivity is constructed through a predominant positive and techno-optimistic sociotechnical imaginary. The sociotechnical imaginary underlying UNHCR discourse, is based on a utopian conception of a connected future. The realm of connectivity is presented as a separate sphere which can be reached. However, not every individual has the means needed to reach this connectivity. Moreover, connectivity is not just the condition of being 'in contact', the use of digital technology has been approached as a means to access benefits and opportunities that stay out of reach for the unconnected.

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Appendix A: Sample Characteristics

Document ID	Year of publication	Title	Subtitle	Published by	Series
D1	2016	Connecting Refugees	How Internet and Mobile Connectivity can Improve Refugee Well-Being and Transform Humanitarian Action.	UNHCR	
D2	2019	The Digital Lives of Refugees	How displaced populations use mobile phones and what gets in the way	GSMA, UNHCR	
D3	2019	Connections		UNHCR	
D4	2020	Collaborating for Connectivity	Understanding how to implement humanitarian connectivity partnerships with private sector partners	UNHCR	
D5	2020	Community-led Connectivity	Assessing the potential of Community Network Models in the context of forced displacement in East Africa		
D6	2020	Connecting with Confidence	Literature Review	UNHCR	
D7	2020	Desplazados y Desconectados Americas - Part I	Understanding legal and regulatory barriers to forcibly displaced persons' access to connectivity and financial services in South America	UNHCR	
D8	2020	Access and Agency	Digital refugees and the future of protection in the context of ubiquitous connectivity	UNHCR	2019 Research Briefs
D9	2020	Disruption and digital revolution for whom?	Considerations on the use of blockchain and distributed ledger technology in displacement contexts	UNHCR	2019 Research Briefs
D10	2020	Internet governance in displacement			2019 Research Briefs

D11	2020	Space and Imagination	Rethining refugees' digital access	UNHCR	2019 Research Briefs
D12	2021	Connecting With Confidence	Managing Digital Risks to Refugee Connectivity	UNHCR	
D13	2022	Desplazados y Desconectados Part II	Understanding how the regulatory frameworks in Argentina, Costa Rica, Dominican Republic, Guatemala, Mexico and Trinidad & Tobago affect forcibly displaced populations access to digital connectivity.	UNHCR	

Appendix B: Coding Tree

Example: theme 4.1

Open codes	**Categories**	**Themes**
Improvement of life	Quality of life	Utilitarian perspectives on improved quality of life
Well-being		
Positive impact		
New beginnings	Transformative impact	
Opportunities		
Transformative impact		
Impact beyond connectivity		
Connectivity use: education	Utilitarian use of connectivity	
Connectivity use: employment and livelihood opportunities		
Connectivity use: financial services		
Connectivity use: humanitarian assistance		
Connectivity use: information		
Connectivity use: navigation		
Connectivity use: practical communication		
Connectivity use: protection		
Connectivity use: self-reliance		
Connectivity use: services		
Connectivity use: storage		
Connectivity use: emergency situations and disaster response		
Connectivity as a tool		

Appendix C – example descriptive analysis of visual elements

Report covers

Year	ID	Cover	Description
2022	D13	Front	Denotation: - Setting: Background looks like a blue sky with clouds in different shades of blue and white. However, on closer look, the clouds in the background are shaped like a map of north and south America. - Attributes: o In front of the blue background in the middle of the page, we see an animated bridge, reaching from one side of the cover to the other. On the bridge people are walking from left to right. The people are illustrated silhouettes in a dark blue shade. The row of people consists of men, women and children, most of them are carrying bags and other belongings. Two people are also carrying children. o In the middle of the bridge, we see a rectangular object in the same shade of blue as the bridge. Although not directly clear, it looks like a sim card or computer chip. - In the middle of the chip are a few holes that we can see through. However, through these holes we do not see the bridge continuing. Thus the computer chip is the only thing holding the two parts of the bridge together. - The people are not yet crossed through or passed along the computer chip. There are no people on the other side of the bridge. - Top-centre of the page: UNHCR logo in black. - In the middle under the bridge, the title: “Desplazados y Desconectados” in bold and big black letters. - Below the title we see the subtitle: “Americas Part II” a horizontal dividing line and more information: “Argentina, Costa Rica, Dominican Republic, Guatemala, Mexico and Trinidad and Tobago” - On the bottom of the page in a dark grey shade: UNHCR Digital Inclusion programma 2022.

			Connotation: - The people are not identifiable, however they look like a group of refugees on their journey, due to intertextuality of the visual and linguistic aspects of the cover. - Technology is a bridge it is connecting people with their future - People are walking towards technology (the computer chip). Technology enables people to cross this space: it is connecting one side of the bridge to the other. - Setting: North and South America as background, these two continents form the setting for this image. - The bridge and chip / sim-card are blue, the colour of UNHCR, whichi could connote the idea that UHNCR is providing the bridge (providing connectivity: both from one side to the other and in the form of connectivity, i.e. the chip). - Computer chip in the middle of the bridge could connote the idea that technology is inevitable to go forward. You are unable to cross the bridge without moving 'through' technology. - Bridge could also connote the idea of time, bridging past and future / technology is connecting the past and the future. If so, are there no refugees in the future? The bridge is empty on the right side, 'after' the computer chip has been passed. - Salience: Of all visual elements, the bridge, with the computer chip, is most saliently presented. Both through foregrounding and centring of the image. Although the background contains information on the setting of this study (the "Americas") the bridge is presented with more salience. Moreover, the computer chip is disproportionately large in contrast to the relatively small people. Thus, through salience, technology is presented as being of main importance to this image. The title shows that this is part 2. Therefore this image is connected to D8, they exist together. In this report both refugees and technology are more saliently visible, they are not just indirectly but also visibly depicted in the centre of the image.
		Back	Denotation:

			- Same image as front. But without the people and the chip connecting the bridge. - The bridge is now connected, stretching over the width of the page. - In the middle: UNHCR logo and “UNHCR Innovation Service” - Below: title in black in big letters: “connect with us” - Below contact details of three different media, twitter, youtube and mail, denoted with little black icons followed by the username or address to find UNHCR on the different media. Connotation: - mission accomplished? The bridge is now connected, technology has either arranged this connection or is no longer necessary. - The people are no longer visible. Due to the direction of walking in the front cover, this connotes the idea of people having crossed the bridge. Either despite or because of technology.