What Enables & Restrains Business Entrepreneurship in Refugee Camps in Malawi? A Search for Technology-related Causal Mechanisms.

Suzana Brown[1][0000-0002-2184-1701] P.J. Wall[2][0000-0002-5859-4425] Patience Desire[3][0000-0000-0000-0000] Dave Lewis[2] [0000-0000-0000-0000] Lucy Hederman[2] [0000-0000-0000-0000] Chrystina Russell[3] [0000-0000-0000-0000]

[1] SUNY Korea
[2] ADAPT Center, Trinity College Dublin, Ireland
[3] Southern New Hampshire University
suzana.brown@sunykorea.ac.kr
wallp2@tcd.ie
pdesire10@gmail.com
dave.lewis@adaptcentre.ie
hederman@tcd.ie
chrystina.russell@gmail.com

Abstract. This paper examines business entrepreneurship in the Dzaleka refugee camp in Malawi. In particular, the research seeks to discover the underlying causal mechanisms that both enable and restrain entrepreneurship in this context. We leverage a critical realist-based philosophical research approach and methodology to hypothesize these causal mechanisms, and a methodological approach based on critical realism is presented. The research finds that while technology is an important component in the overall environment required for business entrepreneurship to flourish within the refugee camp, the causal mechanisms identified suggest that technology is a not significant enabling or restricting mechanism in this case. Instead, we posit that other non-technology related mechanisms have a more significant enabling or restricting impact on business entrepreneurship in the Dzaleka refugee camp. This is somewhat surprising, as other recent research claims that technology is an integral component required for successful business entrepreneurship. The causal mechanisms that were hypothesized using our methodology are presented, and the implications associated with the lack of technology-related mechanisms in this case, and the associated consequences for future ICT4D related research, are discussed.

Keywords: Business entrepreneurship, ICT4D, critical realism, refugee, causal mechanism, Malawi

1 Introduction

According to the United Nations High Commissioner for Refugees (UNHCR), in 2018 more than 70 million people around the world were forced to flee their homes because

of war, persecution, violence and human rights violations (UNHCR 2019). One of the most affected regions is the African continent, with Sub-Saharan Africa hosting more than 26% of the total refugee population with some estimates putting this at 18 million people in this region. Approximately 4.4 million of these refugees have sought refuge in neighboring countries, e.g. in Rwanda which is currently hosting more than 162,000 refugees in 6 refugee camps. Hosting refugees in camps is supposed to be temporary, but the average time of displacement for a refugee is now over 17 years.

Self-reliance is an integral component of the UNHCR's Framework for Durable Solutions for Displaced Persons (UNHCR 2010). Self-reliance is also a key component in any strategy aimed at avoiding or addressing protracted refugee situations, enabling refugees and host countries to find durable solutions and providing a foundation towards achieving the Millennium Development Goals. Such self-reliance can also have a positive influence by bringing new skills and additional income to the local host community and economy. Uganda and Zambia provide examples of countries that have seen the kind of positive change that refugees brought to isolated and neglected areas (UNHCR 2010).

More recently, the United Nations Conference of Trade and Development (UNCTAD), the International Organization for Migration (IOM) and the UNHCR developed a guide on the role of entrepreneurship for refugees (Zhan, Bolwijn, & Farinelli 2018). The section of this guide which discusses technology exchange and innovative start-ups recommends the promotion of social innovation for refugees. The following are selected policy recommendation:

- Support initiatives that develop digital literacy.
- Invest in information and communications technology (ICT) backbone infrastructure in rural and remote rural settlements.
- Support eCommerce platforms for refugee businesses.
- Support platforms that facilitate collaboration between refugees.
- Support platforms for sharing knowledge and best practices to facilitate the adoption of successful innovations.

Surprisingly, very few studies discuss the potential for entrepreneurship resulting from immigration, i.e. refugee entrepreneurship and their influence on the host economy (Wauters and Lambrecht 2008). However, it is recognized that the issue is complex, and the approach should result in a more nuanced exploration of the entrepreneurial activities relevant to the context and institutionally bounded outcomes (Rindova et al. 2009). Therefore, more recent explorations do consider the benefits of immigrant entrepreneurship concerning the context in which it occurs and are further expanding this area by observing the different dimensions of social capital on the survival and success of refugee-entrepreneurial ventures (Bizri 2017).

Academic literature on refugee entrepreneurs typically gives examples of the various creative forms of entrepreneurship, but such activities have largely remained unexamined in depth. One study by Freiling et al. (2019) on refugee entrepreneurial activities collected 17 case studies in order to do cross-case analysis. Another type of published research explores the role that technology can play in facilitating and fostering

entrepreneurship opportunities for refugees in their host country. For example, Abu-Jarour et al. (2019) conducted a series of interviews with Syrian refugees in Berlin to collect preliminary insights, and from these insights organized panel discussions at two of the larger information systems conferences (ICIS 2016 and ECIS 2017). Among the research themes discussed at those conferences were accessibility to information and admissibility to labor markets and entrepreneurship opportunities. Other literature (Heilbrunn 2019) about entrepreneurship in refugee camps demonstrates how refugees initiate entrepreneurial activities in the context of pressure (Alexandre, Salloum & Alalam 2019).

To our knowledge no other study identifies underlining enabling or restricting causal mechanisms that impact successful business entrepreneurship in refugee camps. In addition, none of the studies addresses broader issues such as the socioeconomic context of technology and business innovation. The context is where new technology and business model originated. There are two widely used perspectives regarding the context of ICT innovation process in developing countries. One is a transfer and diffusion perspective, while the other one is a socially embedded approach. The socially embedded innovation approach considers the transfer and diffusion approach overly simplified and inaccurate (Avgerou 2010). The focal point of socially embedded research is the process of innovation in situ (Westrup et al. 2003).

Our approach is centered on one particular refugee camp, Dzaleka camp in Malawi, and the active entrepreneurs within. This particular refugee camp was chosen for a variety of reasons and there are outlined in the following sub-section and also Section 3 below. The main goal of this paper is to discover the underlying causal mechanisms that both enable and restrain business entrepreneurship in that particular camp. From a philosophical perspective, we employ a critical realist-based philosophical approach and associated methodology to identify causal mechanisms that influence entrepreneurship in that setting. There are multiple benefits to using such an approach and methodology this context as detailed by Heeks & Wall (2017), one being the deployment of a triangulated approach that takes into consideration multiple stakeholder perspectives and encourages discussion of multiple methodologies.

1.1 Location

In response to a surge of forcibly displaced people fleeing genocide, violence and wars in Burundi, Rwanda and the Democratic Republic of Congo, the UNHCR established camp Dzaleka in 1994. Dzaleka refugee camp is located in Dowa District around 45km from Lilongwe, the capital city of Malawi. It houses refugees from different countries such as the Democratic Republic of Congo, Burundi, Rwanda, Somalia, and Ethiopia. The UNHCR coordinates all activities in the refugee camp, along with many partners such as the Ministry of Homeland Security, Churches Action for Relief and Development, Welt Hunger Hilfe, World Food Program, and the Jesuit Refugee Services. According to the report of Welt Hunger Hilfe, an organization operating in this camp, as at February 2019 a total of 45,095 refugees are residing in Dzaleka.

1.2   Access to Technology in Dzaleka Refugee Camp

Residents of Dzaleka refugee camp have access to two cellular internet providers in the camp, namely Airtel and TNM. The voice bundle and the Internet bundle differ and because of the low-bandwidth Internet connection they are considered to be not economical for the refugees. The most affordable monthly Internet bundle is equivalent in value to 2 months of corn maize allotment from the UNHCR. Because of these prices, people buy specific bundles that are only for WhatsApp paying only 600 Kwacha per month (equivalent to 80 cents). Residents find Internet bundles expensive and the advertised speeds are often inaccurate. Despite this however, data sharing is not a common practice. There is no free Wi-Fi at the Dzaleka Refugee Camp, and instead residents buy dongles and use them at night because the Internet traffic is lower, and thus the speed of connectivity is faster. Currently, only a few organizations are educating the refugees about technology. One example is AppFactory which offers classes on phone application development. Also, the Jesuit Refugee Service provides lessons that include computer literacy and Jesuit Worldwide Learning provides online studies. These organizations do not provide free Wi-Fi, but students do have access to the Internet while participating in their programs.

2   A Critical Realist Philosophical Approach and Methodology

It has been suggested that the ICT4D body of work is dominated by positivist and interpretivist philosophical approaches (Walsham & Sahay 2006) and that while each of these approaches have their own unique strengths, they also contain many weaknesses that hinder ICT4D research in particular (Heeks & Wall 2018). The relative strengths and weaknesses of positivist and interpretivist philosophical approaches has been written about extensively, and thus we will not contribute to that debate in any meaningful way in this paper. We will however briefly outline the benefits of adopting a "third-way" (Allen et al. 2013, p. 835) research paradigm which goes beyond both positivism and interpretivism. One such third-way research paradigm is critical realism.

It is generally accepted that critical realism is time-consuming, complex, and difficult to operationalize (e.g. Reed 2009, Smith 2018, Fleetwood 2014). In addition, there is little methodological guidance available. The paradigm asserts that general elements of an independent reality exist, but our knowledge of specific structures and causal mechanisms is limited because of the difficulty of accessing them directly through three levels of stratification. These levels of stratification consist of the Real, the Actual and the Empirical domains of reality as proposed by Bhaskar (1975) as represented in Figure 1. Causal mechanisms are best understood as "causal structures that generate observable events" (Henfridsson & Bygstad 2013, p. 911), with these mechanisms residing in the domain of the Real. This is obviously problematic as researchers seek mechanisms, but as mechanisms reside in the domain of the Real they are independent of human knowledge or our ability to perceive them. The Actual domain contains events which are generated from both exercised and non-exercised mechanisms. The domain of the Empirical contains the events that we as humans are able to experience and record

as they are identified by interviewees and through observation by the researcher. Examples of events include the formation of groups and committees, appointment of leaders, approval of new rules and structures, and changes of ICT infrastructure.

This means that any methodology associated with critical realism must be designed to identify and gather events in domain of the Empirical. Using these events, researchers must then have a way to uncover, or hypothesize, the mechanisms residing in the Real. The most widely accepted way of doing this is by way of a process called retroduction. Retroduction literally means "stepping back" from the events that we as researchers can see and record in the domain of the Empirical, to the mechanisms that we must hypothesize from these observed events. Thus, retroduction is key to any critical realist-based methodology (Bhaskar 1975) and requires the researcher to take "some unexplained phenomenon and propose hypothetical mechanisms that, if they existed, would generate or cause that which is to be explained" (Mingers 2004, p. 94).

	Domain		
	Real	Actual	Empirical
Mechanism	X		
Events	X	X	
Experiences	X	X	X

Figure 1: The Stratified Ontology of Critical Realism as proposed by Bhaskar (1975, p. 13)

Despite these many philosophical and methodological challenges, this paper relies on the critical realist-based methodology as developed by Wall et al. (2019) and originally based on Margaret Archer's (1995) morphogenetic approach. This methodology recognizes that agents create causation and this causation can change agency, culture and structure in any particular case. This ability of agents to create causation can work towards either changing things or keeping them the same. Archer refers to this as morphogenesis (where change occurs) and morphostasis (where things stay the same). The first step in the methodology is to create a factual case description and a chorological account of events in as much detail as possible. From this, distinct morphogenetic/morphostatic (M/M) cycles are identified. M/M cycles can be most simply described as logical sections based on discrete time periods that the case can be broken down into. These M/M cycles are then analyzed to produce analytical histories of emergence which form the basis for retroduction. Theorization of mechanisms can then occur when causal influences in social structures, interactions and relationships have been identified.

The M/M cycles can be used to analyze the relationship between structure and agency in any context. Analysis is done over the discrete time intervals – i.e. the M/M cycles – which are used to identify emergent changes in structure, culture, and people,

and their causal relationships. In the specific context of the refugee camps in Malawi, and ICT4D more broadly, these relationships are likely to complex and highly contingent on the ethical, social, cultural and political contexts applying in the particular case. This is discussed in more detail in the sections which follow.

3   Data Collection

Data collected consisted of semi-structured interviews of active entrepreneurs, focusing on the ones bringing changes into the community, and also with the businesses bringing technological and entrepreneurial innovation. Each interview had 15 semi-structured questions regarding their experience and motivation, and the major obstacles to their business with an emphasis on the role of ICT. Entrepreneurs were allowed to elaborate on questions they found most pressing and share some of their thoughts and recommendations. Conducting interviews started in October 2019 and were conducted on a face-to-face basis by a local resident who is currently a student at the Global Education Movement (GEM) that provides access to online degrees to refugee learners, an initiative by the Southern New Hampshire University (SNHU). The student speaks multiple languages and is trained by the SNHU faculty to conduct qualitative research. The interviews were conducted in French, English, Kinyarwanda, Kirundi, and Kiswahili which are all native languages of the camp residents. The translation was done by the same local student to keep subjects comfortable with the process, and the duration was between 45 minutes and 1 hour for each interview. The local student is a refugee from Rwanda and has been residing in Dzaleka Refugee Camp since January 2015. Ethical approval for this research was granted by SNHU and is a home institution for one of the authors on this paper.

Dzaleka refugee camp is seen as a multicultural community because the people brought with them cultures and norms from their native countries. It has a large youth population interested in learning about technology and its use in studying and doing business. Very few camp residents own laptops, but a large number have smartphones. For example, 65% of the people who use smartphones are aged between 16 and 35. The demand for ICT products and services is very high within the camp. Even though there are many languages, Kiswahili is the most popular language in Dzaleka and doing business in the camp requires knowledge of Kiswahili.

It is important to note that Malawi's policies regulating the movement and the right to employment of refugees to make opportunities to earn a living outside the camp are very limited. Therefore, the majority of refugees are completely reliant on external assistance for survival. On the other hand, many refugees are trying to obtain online employment, and the government of Malawi is allowing refugees to operate businesses in the camp contingent upon them paying taxes. This has led to a variety of businesses in the camp, many of them related to the production and distribution of food and food services. The refugee camp currently has approximately 50 local businesses in operation. An attempt was made to interview all of them, but for various reasons we were only able to interview approximately half of 25 in total. Future iterations of this work will interview all active entrepreneurs in Dzaleka camp.

3.1 Entrepreneurs and ICT in the Refugee Camp

From this initial set of 25 interviews of active entrepreneurs in Dzaleka camp, a subset of three who specifically operate in the ICT field was identified. One of them is a female who started her business in 2010 repairing phones. Talking about her motivation she says;

> "... [I] got the idea of doing business from my mum. She told me that I am supposed to find something to do instead of waiting for her to give me something to do."

She credits her success to the circumstances of camp residents who cannot afford new phones, and therefore they need to repair them more than the regular population. When asked about ICT tools, she says;

> "I use a few applications such as Google Chrome and YouTube in order to search [for] good phones and watch some tutorials on how to repair them. I advertise my phones and service on my WhatsApp status."

In addition, she identifies several obstacles including the need to increase her knowledge, the Internet being very expensive and slow, and inadequate ICT literacy among camp residents.

One male entrepreneur started his business in 2013 repairing and selling computers. He had a similar business in his home country, Burundi, before coming to the refugee camp. In own his words;

> "I decided to put into action what I have studied before."

He uses many applications;

> "... such as Adobe Audition, Microsoft office, Reiboot, YouTube, F.lux, Power Director, WhatsApp, Facebook and so on."

When asked about the growth of this business, he claimed;

> "I have many customers because this world is growing on the technology side."

His main obstacle is a requirement for constant improvement because;

> "...technology is keeping improving every day".

The third interviewee is also a male entrepreneur who started his business in 2015 teaching computer programming to youth and creating software. His background was in journalism and communication. He stated that he;

> "...observed the need through the realization of being a victim as a refugee."

The goal was to change his life and support other people around him. He also uses many applications;

> "...the android studio for android development, Eclipse, Netbeans, Notepad++ and Microsoft office package."

His motivation is based on what he calls "*the good cause of changing youth life*". The main obstacles for this business are legal registrations and difficulty raising funding.

This interview data formed the basis for the retroduction of the mechanisms using the philosophical approach and associated methodology as very briefly described above. This resulted in three mechanisms being retroduced. These three mechanisms are discussed in the following section.

4 Causal Mechanisms Retroduced

The overall objective of this work was to use the philosophical base of critical realism and a unique methodology associated with Margaret Archer's morphogenetic approach to reveal mechanisms that explain how the interaction of different structural, cultural and agency factors can explain how these mechanisms have influenced business entrepreneurship in the Dzaleka refugee camp in Malawi. To reemphasize, we do this by relying on the research framework as developed by Wall et al. (2019) as based on Archer's (1995) morphogenetic approach. Sat its simplest level, this research framework uses data collected to identify events, with these events being used to retroduce mechanisms. Data was collected in this case primarily by semi-structured interview as detailed in the previous sections. This data was then analysed and used to prepare a detailed factual case study description leading to the development of a chronological account of events. These documents then gave rise to the identification of discrete M/M cycles which were identified empirically and based on Archer's morphogenetic approach which has three stages as follows (Archer 1995, Archer 1996):

- Stage one: The researcher identifies relevant antecedent social structural and cultural relations.
- Stage two: The researcher examines the activities of agents that are constrained and facilitated by the identified antecedent social structural and cultural relations.
- Stage three: The researcher examines the effect of the agential activities on the antecedent social structural and cultural relations. This effect may be to re-produce social structure and cultural system unaltered (morphostasis) or to modify or transform them (morphogenesis).

Analysis was then carried out over the discrete M/M cycle time periods, with each domain evaluated in time over each analytical cycle. This is at the core of the Wall et al. (2019) methodology and this approach was used to retroduce the mechanisms in this case. This methodology led to a total of three causal mechanisms being hypothesized. As previously mentioned, we were surprised these mechanisms were not strongly related to technology. This would seem to run counter to the literature, and specifically the work produced by UNCTAD and the UNHCR as referenced above which proposes that investment in ICT as a backbone infrastructure in rural and remote rural settlements, digital literacy, and the development of eCommerce platforms should be the key components of any policy underpinning business entrepreneurship in refugee camps.

4.1 Mechanisms Retroduced

This section will discuss the three mechanisms which were retroduced using the philosophical approach and methodology as outlined in the previous section. The mechanisms retroduced in this case are as follows:

- The refugees attitude towards, and their belief in, the importance of self-reliance. This attitude and belief is scaffolded by a strong family support system and includes the motivation of the entrepreneurs in the refugee camps to be successful.
- The ready and available workforce within the refugee camps who provide a customer base willing to buy goods and spend money. This includes the desire to learn new skills, and in particular technology based skills. Also included is the specific business environment and associated infrastructure within the Dzaleka refugee camp.
- The mobile telecommunications technology and associated infrastructure available within the Dzaleka refugee camp. This includes the innovative use of a variety of technologies and software platforms by the refugees to facilitate business, and also their desire to learn about this software.

It is important to state clearly that it is highly likely there are many more mechanisms that may be retroduced in this case, and the three mechanisms we present in this paper are not the only ones that have influenced the outcomes of the evolution of entrepreneurship in Dzaleka. We do appreciate that the three mechanisms retroduced by this iteration of our work are broad in nature, but we expect increasing levels of specificity of mechanisms in future versions of our work. This will happen when we obtain additional data, and in particular when we obtain additional data from different interviewees using alternative methods such as observation and focus group discussions. All of this will add depth and detail to the two key documents at the heart of our methodological approach – i.e. the detailed factual case study description and a chronological account of events – and will allow for the three already retroduced mechanisms to be further validated. It may also allow for additional new mechanisms to be retroduced. Furthermore, it is important to note that although there is currently significant overlap between the three mechanisms as presented in this paper, we do expect mechanisms to be more clearly bounded in our future work and for there to be less overlap between any existing and new mechanisms retroduced.

The first mechanism retroduced by this iteration of our work concerns the overall attitude of self-reliance and self-belief which is prevalent amongst the refugees we interviewed. This emerged clearly from the data, with the refugees strongly believing in themselves and their ability to innovate and be entrepreneurial. This innovative and entrepreneurial spirit was often scaffolded by a strong family support system. This is evidenced by one refugee who got the idea of doing business from her Mother who told her it was her own responsibility to find something to do instead of waiting for her to be given something to do by someone else. Action, as opposed to inactivity and dependence on others, was the default attitude amongst the refugees we interviewed. One refugee stated, "*I decided to put into action what I have studied before*" in order to create his business. Another refugee stated that his main goal was to change his own life and support other people around him. In almost all instances the refugees we spoke to were highly motivated and this was as a result of having the resilience and past experience of being able to survive in extremely resource constrained environments. This attitude of self-belief and resilience could be clearly seen amongst the entrepreneurs in

the refugee camps in particular. They believed they had to create their own opportunities and could rely on their family support systems to help create such opportunities for both themselves and their families.

The second mechanism retroduced concerns the ready and available workforce and customer base available within the refugee camps. This may seem like an obvious mechanism, but it is important in this case and includes the business environment and associated infrastructure specific to the Dzaleka refugee camp as such infrastructure is a necessary prerequisite for entrepreneurship. One good example of this is the person teaching computer programming and creating software with the youth in the refugee camp. If there was no willingness to learn and consume what he is offering he would have no business. In his own words he *"observed the need through the realization of being a victim as a refugee"* and he acted on this need for his services and skillset. If this need and willingness to learn was not there it would be more difficult for entrepreneurship to flourish.

The third mechanism retroduced is the mobile telecommunications technology and associated infrastructure available within the Dzaleka refugee camp. We expanded this mechanism to include the manner in which people have leveraged the available technology to do business and how this overlapps with the refugee's desire to learn more about technology and create opportunities for themselves. This mechanism is evidenced by the innovative use of WhatsApp and Facebook to create new business opportunities. The mechanism also includes the somewhat surprising use of a wide variety of software applications and platforms in such a resource constrained environment. These include the android studio for android development, Eclipse, Netbeans, Notepad++, Adobe Audition, Reiboot, F.lux, Power Di-rector, and YouTube. It is clear that this mechanism also encompasses the manner in which refugees overcame a variety of technological obstacles such as the Internet being very expensive and slow and inadequate ICT literacy among many camp residents. For us, this represents a mechanism concerned with the power and potential of technology and how this can be leveraged for business and entrepreneurship as opposed to the actual technology itself.

As already mentioned, these three mechanisms have been retroduced from what we consider to be the first iteration of this work. There is highly likely to be many other mechanisms present in this case and we intend to uncover these mechanisms as we collect additional data and use alternative data collection methods. Based on this iteration of the work, it is important to note the significance of the mechanism concerning the attitude of self-reliance and motivation of the entrepreneurs in the refugee camps as this is perhaps most influential of the three mechanisms we present. It is also worth noting the high level of overlap between this mechanism and the other two mechanisms retroduced in this case. Furthermore, we consider this mechanism to be the primary determinant of the success or failure of business entrepreneurship in the Dzaleka refugee camp.

5   Summary and Conclusions

This research adopts a critical realist perspective to identify the underlying causal mechanisms that both enable and constrain business entrepreneurship in the Dzaleka refugee camp in Malawi. A critical realist-based philosophical and methodological approach was used to retroduce three mechanisms that explain how the interaction of different structural, cultural and agency factors have influenced this case. These mechanisms were not primarily technology related, but instead consisted of the attitude of self-reliance and motivation of the entrepreneurs in the refugee camps, and the available workforce, customer base, and overall business environment and associated technological infrastructure available in the refugee camp.

Considering the notion of self-reliance is becoming an integral part of many strategies aimed at enabling refugees and host countries to find durable solutions, we believe we make an important contribution to this debate by identifying mechanisms which confirm that self-reliance is indeed key to successful entrepreneurship in such instances. However, the other mechanisms we hypothesize would seem to run counter to the existing body of knowledge in this area which suggests that business entrepreneurship in this context is also driven by technology. We found no such mechanism, but we did hypothesize mechanisms to support the assertion that the technology itself is not a significant causal mechanism in such environments. Instead, it is the potential and the innovative use of such technology that is important for entrepreneurship in this case.

Based on our preliminary results to date we call for additional work in Dzaleka refugee camp in Malawi to either support or counter our initial findings. Furthermore, we call for more critical realist-based approaches and methodologies which examine refugee entrepreneurship in general. This is important, as such mechanism-based explination is likely to influence where scarce resources are allocated in refugee camps into the future.

References

AbuJarour, S. A., Wiesche, M., Díaz Andrade, A., Fedorowicz, J., Krasnova, H., Olbrich, S., & Venkatesh, V. (2019). ICT-enabled Refugee Integration: A Research Agenda. Communications of the Association for Information Systems, 44, 874-890.

Allen, D. K., Brown, A., Karanasios, S., & Norman, A. (2013). How should technology-mediated organizational change be explained? A comparison of the contributions of critical realism and activity theory. MIS Quarterly, 835-854.

Alexandre, L., Salloum, C., & Alalam, A. (2019). An investigation of migrant entrepreneurs: the case of Syrian refugees in Lebanon. International Journal of Entrepreneurial Behavior & Research.

Archer, M.S. (1995). Realist Social Theory: The Morphogenetic Approach. Cambridge, UK, Cambridge University Press.

Bhaskar, R. (1975). A Realist Theory of Science. Hassocks, England, Harvester Press.

Bizri, R.M. (2017). Refugee-entrepreneurship: A social capital perspective. Entrepreneurship & Regional Development, 29(9-10), 847-868.

Freiling, J., Harima, A., & Heilbrunn, S. (2019). Refugee Entrepreneurship A Case-based Topography. Machmilan.

Heilbrunn, S. (2019). Against all odds: refugees bricoleuring in the void. International Journal of Entrepreneurial Behavior & Research.

Henfridsson, O., & Bygstad, B. (2013). The generative mechanisms of digital infrastructure evolution. MIS quarterly, 907-931.

Heeks, R. & Wall, P.J. (2018). Critical realism and ICT4D research. The Electronic Journal of Information Systems in Developing Countries 84(6).

UNHCR (2010). IASC Framework on Durable Solutions for Internally Displaced Persons, The Brookings Institution – University of Bern Project on Internal Displacement, April 2010.

UNHCR (2019). https://www.unhcr.org/news/press/2019/6/5d03b22b4/worldwide-displacement-tops-70-million-un-refugee-chief-urges-greater-solidarity.html.

ICIS (2016). International Conference on Information Systems (ICIS 2016), Dublin, Ireland December 11-14, 2016.

ECIS (2017). European Conference on Information Systems, Guimarães, Portugal, June 5-10, 2017.

Rindova, V., Barry, D. & Ketchen, D. (2009). Entrepreneuring as emancipation. Academy of Management Review, Vol. 34 No. 3, pp. 477-491.

Wall, P.J., Lewis, D., & Hederman, L. (2019). Identifying Generative Mechanisms in a Mobile Health (mHealth) Project in Sierra Leone: A Critical Realist Framework for Retroduction. International Conference on Social Implications of Computers in Developing Countries, Springer.

Walsham, G., & Sahay, S. (2006). Research on information systems in developing countries: Current landscape and future prospects. Information technology for development, 12(1), 7-24.

Wauters, B., & Lambrecht, J. (2008). Barriers to Refugee Entrepreneurship in Belgium: Towards an Explanatory Model. Journal of Ethnic and Migration Studies 34 (6): 895–915.

Zhan, J., Bolwijn, R., & Farinelli, F. (2018). Policy guide on entrepreneurship for migrants and refugees.