Nairobi reads

Designing for an increased awareness of the power of books and reading for adults in Nairobi

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"When I am reading, I am very absorbed first of all. I disappear into the book. I feel like I travel somewhere and my imagination is wild, so I feel like I have gone there, I am living in that place. You know, these movies where people go back in time and people in that time cannot feel you or see you, that's how I feel when I read books.”

- Laurel, research participant
Acknowledgements

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Abstract

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The promotion of reading books has been a global concern for many decades. Scientific evidence has identified a strong positive connection between reading books and a person’s development and success in life. While this thesis looks specifically at the case of Nairobi, Kenya, people everywhere in the world could generally benefit from a more dedicated practice of reading.

In the present research, the relationships of younger adult Nairobians to reading and books, as well as the reading culture of Nairobi, are studied through a human-centric design perspective. Through a research and design phase, this thesis aims to explore how design practice can identify and implement opportunities for positive reading interventions that have the potential to support younger adults in (re-)discovering meaning, value, and joy in reading books. Another key aim of this thesis is to test design research in a context like Nairobi. Key challenges of this research context are related to reading practices in Nairobi being deeply ingrained in its local culture and history, as well as a prevailing highly informal society. Moreover, the concept of design is relatively underelaborated in public discourse in Nairobi (in contrast, for example, to Finland).

The thesis research questions are investigated through primary ethnographic, constructive and disruptive design research on site in Nairobi, as well as through extensive secondary research. The focus is to understand the experiences, behaviors, attitudes, and beliefs of research participants in regard to books and reading, as well as the reading culture and system that surrounds, influences and has shaped them. By using interviews, focus group sessions, and field observations, combined with several rounds of secondary research, and a systematic and iterative review of the same, this thesis has attempted to provide a good understanding of Nairobi's reading culture (as of 2018), and of people’s personal experiences and perceptions of books and reading there.

The primary research insights and findings
are summarized in four themes and illustrated with quotes from research participants. The four areas are: a) the status quo of Nairobian reading culture; b) beliefs, perceptions and attitudes towards books and reading; c) key influences on reading perceptions and behaviors; and d) reading behavior and what people read.

Mindful of my own position as a foreign researcher, it was found that the reading culture in Nairobi is overall underdeveloped. Younger adult Kenyans in Nairobi report negative associations with books, often due to distressing experiences with books in school and a lack of reading encouragement from home and society. However, the research also found that adult Kenyans do read a lot and on a daily basis, albeit often short-form or social media content accessed via mobile phones. Key factors countering the negative connotations were identified as early positive reading influences, such as from parents or guardians, and reading-positive school curricula (e.g. those taught in private schools). Through secondary research, it was found that reading alone is not enough to ensure personal development. Rather, an awareness of the potential and relevant benefits of reading books, as well as emotional engagement with the reading material, have to accompany the reading experience so that the reader is perceptive to new ideas, which is a prerequisite for learning and growing.

The research phase set the foundation for the design phase, where a vision of Nairobi’s reading culture for 2030, and five draft strategy maps including stakeholders and action steps, were developed. This led to the elaboration of the thesis’ design concept Nairobi reads, which was prototyped and tested.

This thesis includes a discussion on the scope of the thesis topic and several research and design process decisions. Further, requirements for a possible long-term approach for the identified challenge are discussed. These requirements include, for example, close collaboration between key reading culture stakeholders and long-term stakeholder commitment and ownership, in order to initiate system change. Additionally, local community initiatives and families can immediately empower themselves by advocating for more positive perceptions towards books and reading.

Throughout this thesis work, it has become clear that design practice must collaborate with other fields to solve challenges like the one addressed here. In such collaborations, design practice can offer a range of relevant methods and perspectives, as partly shown in this thesis, to uniquely support the process of change making and facilitation.

**Keywords** design research, designing for behavior change, systems thinking, adult reading, reading culture, books, Nairobi, Kenya
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<tr>
<td><strong>inama</strong></td>
<td>Swahili word, <em>to bend (over).</em></td>
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<tr>
<td><strong>matatu</strong></td>
<td>Swahili word for a public transportation bus in Kenya (privately owned).</td>
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<tr>
<td><strong>M-PESA</strong></td>
<td>Kenyan mobile money system.</td>
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<td><strong>Safaricom</strong></td>
<td>Kenyan mobile network operator with headquarters in Nairobi.</td>
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<td><strong>Sauti Kuu</strong></td>
<td>Auma Obama Foundation, empowering youth in Kenya and the world.</td>
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<tr>
<td><strong>BCW</strong></td>
<td>Behavior Change Wheel</td>
</tr>
<tr>
<td><strong>KICD</strong></td>
<td>Kenya Institute of Curriculum Development</td>
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<td><strong>KNLS</strong></td>
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Introduction and Background

The first chapter begins with introducing the personal motivation behind the initiation of the thesis topic. It continues with describing the brief desk research that has been conducted and stating the research assumption that leads the field research. Furthermore, the chapter presents thesis scope, objectives and research questions. Next, the design approach applied in this thesis is opened up and the research process and thesis structure are described. The chapter closes with outlining the research setting in Nairobi, Kenyan history and current issues, African megatrends, the Kenyan educational system and the importance of mobile in Kenya and Africa.

1.1 / Personal motivation

This thesis is a self-initiated passion project, which was developed based on two initial questions: What thesis topic and project could provide the most significant personal learning outcome? How can this thesis address a meaningful topic that at the same time provides valuable experience for practicing design in Nairobi, Kenya in the future? To the reader, the second question may seem unusual as to why practicing design in Nairobi is the focus. Some of my previous journey and background is shared in the next paragraph to explain this.

It was during summer 2015 that I stepped onto Kenyan ground for the first time. Having heard many stories about this country through a friendship with a Kenyan, I felt an instant and unknown familiarity with the place. That summer, I was part of a German initiative called Impact Week, which was brought to life by an acquaintance of mine and aimed at introducing design and entrepreneurial thinking to students at Africa Nazarene University in Nairobi. In a group of twenty professionals, we spent more than a week interacting with students and teachers and also visited parts of town and the infamous iHub, a newly established tech community, building and coworking space in Nairobi. During this short trip, and while listening to students analyzing daily challenges around healthcare, education, mobility, finance, and agriculture, I noticed the immense poten-
People [...] are no longer stuck in poverty forever. All those with drive and a bit of money--whether it is their own or a microcredit loan--can make themselves useful and contribute to the world’s well-being. So optimists are encouraging us to prepare for self-management and empowerment

(REN Ouden, 2011, p.2)

ential for design as a problem-solving practice in such an environment. What started as a short trip continued a few months later with me moving to Kenya to work for a newly founded local business and continued by, furthermore, engaging in User Experience consultancy for a local strategy, research, and training firm and a creative & digital agency. When I left Kenya to pursue a Design Master’s degree in Finland, I knew that I would have to be back eventually. Kenyan culture and the growing design industry and its potential captured me and seemed to promise meaningful work in this field. I felt that it was there that I would eventually want to practice design and face common challenges related to the topics that matter to me (such as education, health or environmental issues) together with other passionate and local tech and design practitioners.

Having stayed in touch with events and friends in Kenya, a significant issue for especially the young population of Kenya and Nairobi manifested: unemployment.

Approximately 800,000 young Kenyans enter the labour market every year and youth unemployment is estimated to be as high as 35%, compared to the overall national unemployment rate of 10%. Furthermore, 80% of unemployed Kenyans are below 35 years old. (Business Call to Action, 2016)

While unemployment is a problem that has many causes, it became apparent that unemployability was a significant issue. Even the young Kenyans that complete university education and live in Nairobi, for example, still often struggle to find a job. The skills acquired during tertiary education do rarely match the skills needed in the industry, “90% of all unemployed young people lack vocational skills” (Business Call to Action, 2016), or prepared the students’ resourcefulness to find ways to find or even create work themselves.

I repeatedly discussed this topic with a local friend who is passionate about education and entrepreneurship and I tried as best as I could to put myself into the shoes of those job seekers. From there, the following question emerged: What is the simplest (in terms of money, time and access) way to educate and develop oneself to become more knowledgeable, smart and creative, in general, but indirectly also related to finding or creating work?

For some time, I have been fascinated by the idea that everyone has the potential for solving a problem already within them. This idea has been inspired by the Capability Approach, a theoretical framework first developed by Amartya Sen (1999) and further elaborated by Martha Nussbaum (2001). Ilse Oosterlaken’s (2009) interpretation of it for the design context
made me realize that design in complex problem settings should not necessarily provide final solutions. Instead, it could provide the means for people to discover, develop and tap into their capabilities, and thus empower themselves to solve the problems in their surroundings.

When trying to connect the dots between these topics mentioned above, while including my interests in self-development and self-powerment, the following idea emerged: Could it be an appreciation for books and reading that could lead to self-development and empowerment by expanding and developing one’s understanding of the world, imagination, and resourcefulness?

This notion led to a first brief desk research which investigated how much Kenyans read and how much reading and books are valued in Kenya.

1.2 / Brief desk research and reading assumption

Conducting first preparatory desk research suggested that Kenyans’ reading behavior and culture were part of recent public media discussions. For example, the national news channel KTN News Kenya broadcasted a half an hour feature on January 2018, including three guests such as a local publisher, a writer and the CEO of the Kenya National Library Services. Besides other themes, the reading behavior and interests of Kenyans, as well as Kenyan reading culture, was discussed. The debate described a general lack of reading culture. Despite a local history of newspaper reading culture, today people spend their time online and especially on social media. Therefore, the interest and appreciation for longer reading formats and books is questioned. Further, the news show mentions that schools do not adequately teach how to enjoy reading and that many young Kenyans leave their formal education believing that reading equals studying and books equate to textbooks only. A typical response to why people believe they

Books, purchasable at low cost, permit us to interrogate the past with high accuracy; to tap the wisdom of our species; to understand the point of view of others, and not just those in power; to contemplate — with the best teachers — the insights, painfully extracted from Nature, of the greatest minds that ever were, drawn from the entire planet and from all of our history. They allow people long dead to talk inside our heads. Books can accompany us everywhere. Books are patient where we are slow to understand, allow us to go over the hard parts as many times as we wish, and are never critical of our lapses.

– Carl Sagan in The Demon-Haunted World: Science as a Candle in the Dark; (The Demon-Haunted World Quotes, n.d.)
do not read books as much as they could is a lack of time. (KTN News Kenya, 2018)

Additional brief research was in alignment with the statements of the news segment. A general impression seemed to be that books and reading are not made use of as much as they could be, especially for providing joy and value in people’s lives.

Further, despite local news stations picking up the topic occasionally, formal research on the reading behavior of Kenyans is scarce. The research conducted is often limited to studying literacy in primary and secondary school students in rural or slum areas and is frequently dominated by foreign interests (more in chapter 3.3).

It was interesting to notice that young adults that have left or completed their primary or secondary education, however, are rarely addressed in formal research. This observation is surprising as reading and writing skills are crucial for entering and leading an independent adult life. In general, reading is an essential activity during any stage of life and is proven to be influential for personal and professional development, which becomes especially relevant for facing unemployment. Further, as reading skills change over time, if not used frequently, a formal interest in the (changing) reading behavior and skills of adults should be assumed.

Fredrick Otike, a Kenyan researcher interested in local reading culture states that

little is known about the millions of literate adults who rarely pick up a book or open a magazine or about school children for whom reading has come to mean textbooks and little else. The causes of this phenomenon are still difficult to determine because there are many kinds of reading. (Otike, 2011, p.2)

Otike (2011) touches many relevant topics such as that literacy does not automatically mean that people know how to read correctly for their personal development and joy and that indeed there is a lack of understanding about this group of adults. Literacy numbers do not reveal enough about reading behavior. Further, reading is a broad term. Even more so today, there are numerous reading formats, materials and ways of access, which makes it a complex topic.

The public discussions available about how (much) Kenyans read seem to suggest that Kenyans do not read much. However, since the impression arose from a few online sources only, this impression needs to be formulated as an assumption. This assumption then forms the starting point for developing the research plan for the field research on site in Nairobi and it should be proven right or wrong throughout the thesis research.

1.3 / Scope and objectives

The initial scope of the thesis project is defined based on the first brief online background research, identified gaps, possible opportunities that already stood out and available master thesis resources. That said, the thesis sets out to understand the experiences, behaviors, and attitudes regarding reading in general and
INTRODUCTION AND BACKGROUND

reading books specifically, for younger Kenyan adults in Nairobi.

These younger adults have left or completed their educational path, and they are approximately 25-35 years old. This particular group is studied for three reasons. First, their reading behavior has not been the focus of research, as research focuses mostly on children and the early education system. Second, despite this, their development and success does matter for the future of Kenya and plays a key role. Third, most of these young adults will become parents, or already are, and thus have great potential in influencing their children when it comes to reading and cultivating an appreciation for reading and books.

In the course of the field research, it becomes apparent that most of these young adults have gone through (or parts of) the Kenyan 8-4-4 educational system. This system has been sharply criticized for being too grade-centered and counterproductive in supporting students in developing a culture of reading. Thus, the target group for the design project is narrowed down to younger adults that were part of this Kenyan 8-4-4 school system.

The urban setting of Nairobi was selected for practical reasons, but also because most reading research conducted in Kenya, which is not much to begin with, focuses on rural Kenya. However, Nairobi is a significant hub for the country and region, which attracts many young people from rural areas on the search for jobs and opportunities. Further, if the culture of reading can be strengthened in the city, where visibility is higher for relevant stakeholders, might there be a slight chance that it could also spread from there?

The objectives of this thesis project are threefold. The first objective is a research objective and the second and third are design objectives.

Objective 1: Studying and understanding young Kenyan adults’ reading experiences, beliefs and the system around them, as much as possible.

Objective 2: Identifying possible design intervention points and opportunities to support younger Kenyan adults in finding joy, meaning and value in reading books.

Objective 3: Elaborating one opportunity into a design concept.

These thesis objectives lay the ground for developing research questions for the primary qualitative research on site in Nairobi. They will then guide and complement secondary online research.

1.4 / Research questions and reading focus

The first preparatory online research revealed that a comprehensive understanding of younger adult Kenyans’ reading behavior and perception about the activity is not available, even though some research and related public discussions around the reading behavior and culture of Kenyans exist. The assumption that Kenyans do not read enough was used as a starting point for the thesis project’s research. To narrow down the exact design challenge,
this statement’s truth, including the system around it that forms it, would have to be proven right or wrong and be first and foremost understood. Only once the challenge is clearly defined, the problem-solving process can begin.

Two research questions guide the field research in Nairobi:

1) What are participant’s experiences, behaviors, attitudes, and beliefs about reading, books and reading culture in Nairobi?

2) How do the environment and Kenyan culture influence the research participants in their behavior and attitude towards reading in Nairobi?

Once a need for supporting Kenyans in Nairobi to read more started to emerge, additional research questions were added for identifying design opportunities:

3) What are the potential points of intervention for supporting adult reading in Nairobi?

4) How can the discovery of meaning and value in reading books be initiated in young adults in Nairobi?

5) How can the experience of joy in reading books be cultivated for young adults in Nairobi?

The formulation of these research questions and their application in the field was kept broad and flexible on purpose. This allowed to stay open-minded and avoid imposing assumptions on the research participants, which could bias participants’ answers, especially since most research was conducted in semi-structured face-to-face interviews. Further, since the exact problem statement would only be defined after the field research, the on-site-research needed enough leeway to explore a variety of (design) directions, before narrowing down to one particular challenge.

As mentioned earlier, the term reading can imply a variety of different reading formats, materials and ways of access. Therefore, the qualitative field research needed to take place first in order to narrow down the type of reading. This process helped to see what would be relevant for the specific context and which kind of reading would hold the biggest potential. Although it may seem risky to not define the term reading earlier, it was yet necessary to avoid meeting the research participants with a narrow mind. Nevertheless, based on the research questions a focus was set on readings that could be joyful and meaningful to the participants and support them in developing themselves. This was open to include fiction or nonfiction, short to long form, as well as analog or digital access to reading material.

When researching a design project like this, with a variety of possible outcomes, it seems relevant to define what is meant by design first.

1.5 / Design approach

To define the design approach that will be applied to this thesis project, some relevant conceptions of design will be considered.
The Merriam-Webster online dictionary offers two noteworthy definitions for design. First, design is described as “a method worked out in advance for achieving some objective”. Second, and a very common association with design, it is “the way in which the elements of something (as a work of art) are arranged” (Design, n.d.).

Next to more historic understandings of design (such as fashion and furniture design), today design is commonly recognized as a problem-solving practice:

_in general, the word ‘design’ is defined and based on how an object or concept balances three attributes: aesthetics, function and cost. . . . There is, however, another definition of design as intentional problem-solving_ (Smith, 2007, pp. 5-6)

That means that design practice aims to understand what is, but then continues to equally focus on imagining what might be, such as improved futures (where initial problems are no longer present) and the production of artifacts to visualize, test and create these futures. (Koskinen, Zimmerman, Binder, Redstrom, & Wensveen, 2011)

In her dissertation titled Design as Freedom, García (2017) offers another and more ethically-focused function of design. She describes that purposeful or “good design might contribute to freedom and justice-making” (García, 2017, p. 146) and that “nowadays good design is complex, collaborative, and empathic.” (García, 2017, p. 47). Based on contemporary discussions around what good design should deal with, García (2017) names social innovation and design for well-being as examples. The complexity that comes with modern design challenges like that, however, requires new forms of collaborations between a wider variety of disciplines and actors. In the face of that, designers must be prepared for these new and tricky challenges and should, as per García, be therefore involved earlier in the process, such as during the problem definition phase.

The borders of design remain blurry. The design process and mindset (or Design Thinking) are applied to all fields of industry and life, which has also started to include so-called "wicked problems". These are social system problems that deal with a variety of groups of people and decision-makers. They are hard to describe and come with confusing implications for information and systems thinking and have rarely one obvious solution. (Rittel & Webber, 1973) The "wicked problems" approach in design was first formulated by Horst Rittel in the 1960s and claims that most design problems are in fact indeterminate and therefore difficult (Buchanan, 1992).

Another relevant consideration describes design as a practice that should focus on truly understanding a given problem. This includes dismantling the problem and considering it in a systemic context, instead of rushing to find a solution (Beirne, 2014). This approach seems logical considering that the world has become extremely complex, where even seemingly similar things can be perceived in contrary ways by merely applying a different meaning to objects, events or people, which goes back
If you want to fix something you are first obliged to understand . . . the whole system.
- Lewis Thomas (as cited in Stroh, 2015)

to human beings being extremely complex beings themselves.

While science is aiming to understand and discover what is, and art is aiming to create something new and what could be, it seems that design could be found right in between. The design definition applied in this thesis thus refers to a practice that focuses, and then actively builds, on understanding and discovery. It strongly longs (through the designer) for exploring and testing these creations creatively. It is a problem-solving practice that addresses challenges that can range from the individual to the societal level, which thereby also includes addressing more complex and "wicked" problems.

The process of deeply understanding people and context and only then specifying the challenge are focused on in this thesis. This aligns, for example, with the exploratory user research practice that is conducted by the Emerging Futures Lab, who see fieldwork (understanding) (Figure 1) as a foundation for implementing projects in new or unknown environments (Exploratory User Research, n.d.).

In many projects, designers are often not part of this early problem-crafting process. However, it seems essential to learn about the root causes of a challenge to understand what triggered that unfavorable situation. Only based on this knowledge should possible (design) solutions be created and then placed at the right point in the existing system, to not worsen the situation. This requires a high degree of sensitivity and awareness. Hence, the design practiced in this thesis should be of an empathic, system-focused and optimally collaborative nature.

1.6 / Research process

The research process (see Figure 2) comprises of a qualitative case study in Nairobi and thorough analysis and synthesis intertwined with literature reviews and secondary research, which then leads to and informs the design process.

The study began in mid-June 2018 with desk research on reading and public discussions on reading and reading culture in Kenya.

In July, first literature reviews on designing for behavior change and intervention design complemented this process. Further, research questions were finalized, and preparations for

Figure 1. The design pyramid by Emerging Futures Lab. Drawn by Sara Gottschalk.
Figure 2. The thesis research process, with continuous lines representing the main flow and dotted lines representing side flows.

From mid-July to mid-August, the 4-week field trip took place. Empirical data concerning reading and the local reading culture were collected from local research participants, and the local environment was observed and documented. Emphasis was placed on individuals and the influencing factors to their reading experiences. First design opportunities were identified, and relationships between actors were mapped.

Chapter 1 and 2

Thesis foundation

<table>
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<tr>
<th>Topic and preliminary desk research</th>
<th>Design approach</th>
<th>Secondary research methodology</th>
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<td>Preliminary setting, Kenyan history, educational system, mobile in Kenya</td>
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Chapter 3, 4 and 5

Research & sense-making

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<th>Primary research on site in Nairobi</th>
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<td>—state of reading in the world, Kenya and Africa; Change; Philosophical approach; Reading</td>
<td>—on reading behavior and what people read; Beliefs, perceptions and attitudes of reading and books; Key influences on reading perceptions and behaviors; Reading culture status quo</td>
</tr>
</tbody>
</table>

Revised design challenge and design guidelines
After a phase of repose, September and October of 2018 were dedicated to digitizing, analyzing and synthesizing field data. Findings were complemented with suitable literature and desk research. A slightly adjusted version of affinity diagramming was used for this process.

In November, the gathered insights were merged with already collected ideas and explored in an ideation and exploration phase. A design direction was set, and concept ideas were explored and evaluated.

After further literature reviews in December, a design concept was developed, shared for feedback, revised and finalized in January and February.

1.7 / Thesis structure

The thesis is structured into seven chapters (see Figure 3).

<table>
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<td>Design Result I: Nairobi reading culture vision 2030 and strategy</td>
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<td></td>
<td>Evaluation and feedback rounds</td>
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Chapter three presents the first round of secondary research, which was mainly conducted to support the project’s analysis and synthesis phase. The chapter provides an understanding of the development and state of reading in the world, and then specifically in Africa and Kenya.

Chapter four summarizes the insights found during the field research, which were enriched by the first and partly the second round of sec-

Figure 3. The thesis book structure.
ondary research to arrive at a more comprehensive understanding. Based on the insights, the chapter continues to present a refined version of the design challenge, including the reading focus and target group. Finally, specific design objectives are introduced and clear guidelines for the design phase are listed.

The fifth chapter describes the second round of secondary research, which mainly complements and supports the thesis project’s design process. Topics such as how change is initiated, the role of values in design, systems thinking and paradigms are studied. Next, a brief philosophical excursion on pedagogy and education opens up the whole thesis and provides a broader perspective. The chapter closes with presenting research on reading purposes, strategies and further perspectives, which form the base for the content development for the second design result.

Chapter six focuses on outlining the design process, stressing its iterative and creative and explorative character. Methods and different stages of the design process are presented and detailed. The second part of the chapter showcases the thesis project’s design results, which include a Nairobi reading culture vision and strategy, as well as a short mobile journey named *Nairobi reads*, targeting individuals.

Chapter seven closes the thesis by discussing the process, thesis objectives and results. After listing limitations and further research, the thesis is completed with a conclusion.

1.8 / Study setting: Nairobi

The study takes place in the capital city of Kenya, Nairobi. Kenya shares borders with its East African neighbors Tanzania to the south, Uganda to the west, South Sudan and Ethiopia to the north and Somalia and the Indian Ocean to the east.

In May 2019, Kenya counted a population of about 52 million people with around 3.5 million living in Nairobi and about 6.5 million including the suburbs (Kenya Population 2019, 2019). The population of Kenya is very diverse with over 42 communities or tribes, Kikuyu being the most represented with 17% of the population, followed by Luhya, Kalenjin, Luo, Kamba. Official languages include English and Kiswahili. The most practiced religion is Christianity with about 83% of the population (Kenya Population 2019, 2019).

Nairobi is the home of one of the largest
slums in the world and about 22% of Nairobi’s residents live in poverty (Nairobi Population 2019, 2019). As all of Kenya, Nairobi consists of a highly diverse population, with all major ethnic groups being represented, as well as a large number of expatriates. In the north-central, southwest and southeast areas, most lower-middle and upper-middle-income neighborhoods are located. The low and lower income estates are mainly located in the east part of Nairobi. The Kenyan population below the poverty line was 36.1% in 2016 (Africa :: Kenya, 2019).

Kenya has a comparatively high literacy rate due to free primary education since 2003. 79% of adults over 15 years old are literate (UNESCO, 2015). About 80% of the school-age population for primary school were enrolled in 2012; about half for secondary school were enrolled in 2009, and about 11% were enrolled in a tertiary university in 2016 (UNESCO UIS, n.d.).

In Nairobi, the practice of design is still shaped by artisan work, graphic design or fashion design, although digital design has been growing. However, the usage of, for example, human-centered design to tackle complex problems in any industry is only slowly emerging. Therefore, conducting design research and implementing a design project in such a setting poses an attractive challenge.

1.9 / Brief Kenyan history, current issues, and African megatrends

In 1885, the land known as Kenya today came under British control when the European powers divided Africa among themselves at the Berlin Conference. After the establishment of the railway in 1901, more and more British settlers landed in Kenya, taking the best land and displacing natives onto reservations. While schools were established and Kenyans became better educated, they still were treated as second-class citizens. Their resentment led to the Mau Mau formation in 1952 which marked the beginnings of the movement towards independence. It was gained on December 12, 1963. Jomo Kenyatta became the founding father and first president of the Republic of Kenya in 1964.

Over the past decade, Kenya has made substantial political, structural and economic reforms that have created economic growth, social development, and political gains (The World Bank in Kenya, 2019). Spending on health and education have increased and some Millennium Development Goals (MDGs) targets were reached, such as lower child mortality, almost universal primary school enrolment, and decreased gender gaps in education. As per the World Bank, Kenya has the potential to be one of Africa’s success stories from its growing youthful population, a dynamic private sector, highly skilled workforce, improved infrastructure, a new constitution, and its pivotal role in East Africa (The World Bank in Kenya, 2019).

Nevertheless, development challenges still include poverty, climate change, inequality, governance, skills gap between market needs and the education curriculum, low investment and firm productivity, and the “vulnerability of
The economy to internal and external shocks.” (The World Bank in Kenya, 2019). Further, Kenya suffers from high corruption (ranked 143/180) (Corruption Perceptions Index 2017, 2018), safety issues related to terrorism and traffic accidents as well as political unrest.

Uhuru Kenyatta, fourth president of Kenya and son of Jomo Kenyatta, presented a “Big Four” plan for economic development in his second administration. It includes goals of universal healthcare, food security, affordable housing, and expansion of manufacturing (The World Bank in Kenya, 2019).

In general, Africa is facing several megatrends, as per the World Economic Forum (Bickersteth, 2015). They are a rapidly growing population (which challenge already existing high youth unemployment rates), stronger and more empowered individuals (asking for more transparency and participation in government), enabling technology, an interconnected global economy, a need to control public debt, climate change, availability of resources and urbanization.

1.10 / Kenyan Educational system

The activity of reading is often linked to education and therefore this section contains a brief introduction of the Kenyan educational system. Understanding the circumstances of the public education system in Kenya and the (school) environment in which many Kenyan children have grown up and are learning (to read) is vital. This public school system differs significantly from the private and international boarding school systems, which run on the British curriculum and to which most wealthy and influential Kenyans (such as political leaders) send their children.

The educational system in Kenya was initially established under British rule. After independence, a restructuring of secondary and higher education occurred to train Africans for government services, the commercial and industrial sector. In 1985 the latest system of education was introduced. The so-called 8-4-4 system comprises of 8 years of primary education, four years of secondary education and four years of college, with the language of instruction being mostly English. In place for more than 30 years, the system has been criticized for being too examination-centered and demanding.

In 2003, the Kenyan government passed free primary education to fight illiteracy, something which had been promised since 1963. However, challenges have remained such as poor working conditions, understaffing, inadequate funding, the primary education system, acquisition of literacy and a lack of school libraries (Otike & Kiruki, 2011). Due to free primary education, enrollment percentage in primary schools are very high. However, because of the challenges remaining and a lack of resources, quality education is not ensured in Kenyan public schools.

Since 2010, an education system reform has been underway. The 8-4-4 system will be replaced by the new 2-6-6-3 system, which is still tested in several selected schools. The 2-6-6-3 competency-based curriculum consists of two years of pre-primary, six years...
of primary education, six years of secondary education and three years of tertiary education, with students able to specialize in secondary school under either one of three categories: Arts & Sports, Social sciences or STEM (Basic Education Curriculum Framework, 2017). The new curriculum promises to focus on learning outcomes and provide more time for the student to interrogate and explore. However, critics are afraid that the new system might not bring enough change due to the same infrastructure it builds on, and a seeming lack of proper funding (K24TV, 2018). Due to political pressure, the new system seems once again rushed and compromised, while flaws already become apparent (Wesonga, 2018).

1.11 / The importance of mobile in Kenya (and Africa)

With Nairobi being one of the fastest growing cities in Africa, the city has seen considerable economic growth with an especially booming tech startup scene. This was triggered by the highly successful mobile money system MPESA gaining traction in 2010 and the influence of Erik Hersman, a top thought leader and explorer of tech opportunities in the continent, who, around that same time, founded initiatives such as iHub, a tech community, building and coworking space in Nairobi, which laid the ground for many more (Pasquier, 2014).

The mobile sector has seen steady growth since the uprise of MPESA. As per the Communication Authority of Kenya, the number of mobile subscriptions in the country has risen to 40.2 million with 29.6 million internet subscribers, reported in 2017 (Mwangi, 2017).

For Kenyans, most internet traffic goes through the mobile network, and even the illiterate part of the population owns mobile phones (Itosno, 2014). Mobile has been considered as the seventh mass media, which was established in the 2000’s “after Print, Recordings, Cinema, Radio, Tv and Internet, and now is used as a Camera, for Mapping purposes, Banking, Credit, Computers, Telecoms, Print, Broadcast, Social Media and all the rest that anyone can think of” (Itosno, 2014).

Overall, the uprise of mobile phones and mobile internet access has provided enormous opportunities in Africa (TedX Talks, 2015). The GSMA Mobile Economy report on Sub-Saharan Africa from 2018 states that individual mobile subscribers in Sub-Saharan Africa reached 44% at the end of 2017, which is below the global average of 66%. The penetration rate has been predicted to reach 50% by the end of 2023 and 52% by 2025 (GSM Association, 2018).

Having looked at the importance of mobile in the Kenyan ecosystem, the Kenyan educational system, and its history, this knowledge provides the first foundation for comprehending the local context and its possibilities. Next, the research methodology is presented.
This chapter describes the research methodology of the thesis. First, design ethnography is introduced, and the ethnographic techniques applied in this research are described. Second, the constructive design research approach is presented as well as the disruptive design method. The chapter continues with describing the research participants and opens up the field research process. The chapter closes with an outline of the analysis and synthesis phase.

This thesis applies a methodology that considers the complexity of a theme such as studying a reading culture and a specific group of people within it.

A mix of design ethnography, constructive design research, and disruptive design was applied. This mix allowed for an in-depth understanding ranging from an individual to systems level, but at the same time also made room for imagination, playing and the construction of ideas. Further, it created space for testing angles of the study to unravel and construct the type of value that is fitting considering the scope of the thesis.

2.1 / Design ethnography

As per the Merriam Webster online dictionary, ethnography is “the study and systematic recording of human cultures” (Ethnography, n.d.). Its literal meaning is the description of people.

Traditional ethnography finds its origins in anthropology and sociology and is often understood as fieldwork. For example, the researcher immerses themselves into a community or social group to study a cultural phenomenon from the point of view of the community members. The ethnographer documents the behaviors of the community members through various methods. However,

“research methods in design should do more than lead to a thorough understanding of the matter of study, they are also means of inspiration of innovative ideas”

(García, 2017, p. 56)
it is not only essential to understand what is done, but also why it is done and why in that specific way.

Ethnography for design purposes was first applied in computer development at Xerox Palo Alto Research Center in the 1970s. Today it is an established practice which is applied by academia, industry and design organization worldwide. As per Van Dijk (2010), “Design ethnography is ethnographic qualitative research set within a design context. It delivers results that inform and inspire design processes” (p. 69). Design ethnography focuses on understanding the potential users of a new or improved design and it is strongly intertwined with the creative design process. It includes thorough communication with design teams and the facilitation of conversations between users, designers but also other stakeholders that are involved in the new design.

This thesis employed ethnographic research on site in Nairobi. It informed on participants’ relationships to books and reading and on the environment around them, which influences that relationship. Understanding the research participants and the status quo of the reading culture in Nairobi was prioritized. Only with time and after identifying the specific design challenge it became possible to generate well-informed potential design opportunities. No type of design result (such as a service or product) had been specified beforehand. Therefore, the main aim of the field inquiry was to feel one’s way into people’s lives and their context and provide space for them to express themselves and share their perspective and experiences. For most of the inquiry, quantitative data was not sought after.

The ethnographic techniques applied in this thesis are described below:

**Interviews and focus groups**

All interviews were conducted in a semi-structured manner. This allowed research participants to share their experiences freely and provided room for them to touch on topics which mattered to them and could not have been anticipated before.

**Expert interviews**

Interviews were conducted for four weeks with Nairobians that actively participate in influencing the reading culture in Nairobi, such as social and digital entrepreneurs, independent publishers, book club initiators, and passionate library restorers.

Before and after the field trip, two Finns with experiences in Nairobi and East Africa have been consulted for another perspective on the context in which this design project takes place.

**Focus group sessions**

Focus group sessions were held with potential representatives of the target group. These sessions included two to five participants at a time and allowed for an exchange of thought guided by questions prepared for each session. These questions (appendix 1) were usually

*[For design ethnographers] first-hand experience of context is typically more important than fact finding or even careful theoretically informed interpretation. (Koskinen et al., 2011, p. 70)*
slightly adjusted from session to session to develop the understanding.

**Ad-hoc interviews**
At times, it was possible to meet target group representatives or experts in unforeseen situations. Several conversations led to spontaneous exchanges about the thesis topic. These conversations were thoroughly documented afterward. These ad-hoc interviews often confirmed notions that had been encountered during the more formal interview sessions.

**Observation / Shadowing**
Understanding a reading culture as well as participants’ experiences, attitudes, perceptions and behaviors regarding reading also required to feel one’s way into the surrounding and environment in which younger adults in Nairobi are asked to read. Three of the most popular book stores in Nairobi were visited, observed and experienced from a visitor’s point of view. The Kenya National Library and the newly restored McMillan Memorial Library were visited. The city center streets and the atmosphere were studied, including its second-hand booksellers. Public transportation was used, passengers and its environment observed and its suitability for reading tested. Homes of locals were visited and parts of their daily lives observed. These observations allowed for a more visual and experiential connection to the stories shared during the interviews. Even more so, it allowed becoming part of Nairobi with its many unique positive but also challenging sides, which create daily interruptions for inhabitants.

**Observing Social media**
Complementary to observing the physical surrounding in Nairobi, it was relevant to observe the virtual environment which today equally shapes people’s beliefs and attitudes. Smartphones have become accessible to almost all socioeconomic classes in recent years, and the usage of social media is essential for most. The digital space plays an important role and acts as a gate to the world and one another. Where poor infrastructure and expensive transportation is limiting people, the digital space provides instant access to anything. Therefore, during and after the field trip, conversations, discussions, and social media content were observed. This supported the research but also supported the sense-making sessions later.

Besides applying ethnographic techniques in the field, more contemporary research methodologies were added to allow for a first playing around with ideas and possible design directions.

> “Designers trained in the arts are capable of capturing fleeting moments and structures that others find ephemeral, imaginative, and unstable for serious research. They are also trained in reframing ideas rather than solving known problems. Above all, they are trained to imagine problems and opportunities to see whether something is necessary or not.”

(Koskinen et al., 2011, p. 8)
2.2 / Constructive design research

As per Koskinen et al. (2011), constructive design research methods allow for the fieldwork to become an exercise of imagination. Design and research are merged to imagine, build and explore new and better futures and to construct knowledge through designing and testing. In order to flourish, “constructive design researchers need methodological and theoretical flexibility” (Koskinen et al., 2011, p. 30), because “[i]f parts of the human world are non-rational, methods should be too.” (Koskinen et al., 2011, p. 93).

Constructive design research allows for design researchers to craft (design) visions and explores these together with the people that are studied. It is investigated how these visions could manifest into tangible designs that can improve people’s lives in their specific context (Koskinen et al., 2011). In fact, through constructive design research, knowledge is collected through the construction of arguments, concepts or prototypes (Koskinen et al., 2011) which explain the opportunities identified. Koskinen et al. (2011) argues that “if hypothetical designs are successful, they may change the ways in which people think about material and social reality. They can open up possibilities and prepare action.” (Koskinen et al., 2011, p. 45).

The practice of constructive design research has the potential to provide more awareness about what is possible and can limit something called “conservative fallacy: thinking that what exists today cannot be improved. Wake-up calls are occasionally needed.” (Koskinen et al., 2011, p. 47).

While no prototypes were constructed during this thesis’ field study, possible components of a future reading culture were imagined together with the research participants and stakeholders, and their relationships were mapped and scenarios were sketched and played out.

Personal intuition and design experience were used to connect with the research participants, which is also an integral part of this type of research (Koskinen et al., 2011), and to make sense of the collected data. This was then balanced with a more traditional analysis and reasoning process.

Further, in design projects like this, the research collected is very sensitive to the period of inquiry, as circumstances rapidly change (Koskinen et al., 2011). This means that the collected data can only inform about that specific window in time and space, which needs to be reflected upon for the development of any design.

2.3 / The Disruptive Design method

A valuable addition to traditional research techniques was the Disruptive Design Method. Developed by Leyla Acaroglu (2008), it includes three perspectives: systems, sustainability, and design, and is based on a 12-part methodology that makes use of cognitive science, systems thinking and gamification, amongst others. According to Acaroglu, this method provides guidelines for “exploring,
identifying, and creating tactical interventions that leverage systems change for positive social and environmental outcomes . . . a way to empower action and turn problems into opportunities for making positive change happen” (Acaroglu, 2008, p. 3).

The method embodies a problem and solution-driven approach with a clear focus on the systemic level of challenges. This aligns with the objectives of the thesis and supports the research in considering the greater context as much as the perspectives and beliefs of individuals.

In concrete steps (see Figure 5), the disruptive design method guides the designer from

- deeply investigating the elements of the problem (mining) by making use of “unstructured data, interviews, focus groups, subjective conclusion, observations” (Acaroglu, 2008, p. 74),

- to drawing connections between the elements (landscaping) by identifying “networks made up of nodes or agents that are linked in varied and diverse ways.” (Acaroglu, 2008, p. 74),

- to eventually designing viable interventions (building) by identifying a “physical or conceptual place within a system where you can put pressure to disrupt the status quo and push for change” (Acaroglu, 2008, p. 74) with optimally testing them.

Acaroglu (2018) explains that a disruptive designer often explores and develops solutions in “nonlinear, divergent, and often, counterintuitive ways” (p. 8). Thereby the following basic six concepts are utilized:

- Everything is Interconnected;
- Change is Constant;
- The Future is Undefined;
- All Change Should be Sustainable;
- Challenge is Part of Reward
- Change is Iterative (Acaroglu, 2008, p. 9)

For the primary thesis research on site in Nairobi, especially the systems and design lens of this method were helpful to identify intervention points. The systems perspective creates a
deeper understanding of the key players and interconnections within the reading culture in Nairobi. The sustainability perspective is a reminder to apply an earth-inclusive view on the challenge, and the design perspective focuses on the specific needs of the target group.

All three phases (mining, landscaping, building) have been thoroughly considered and have been party carried out during the field research. They have also provided guidance throughout the design process. Whereas the initial aim was not necessarily to disrupt, the method did create a broader perspective for the thesis topic and research. Furthermore, it emphasizes that it is necessary to “actively work on suspending the need to solve until . . . a tacit understanding of the problem set” (Acaroglu, 2008, p. 20) is given.

2.4 / The participants

In order to understand the reading context in Nairobi and individuals who have been brought up in it, several younger to middle-aged adults were interviewed in Nairobi. With some of them potentially fitting the target group, others contributed valuable insights about their lives, thoughts and feelings and by that, supported the understanding of the bigger system.

The research participants in Nairobi were mainly found through personal connections, referrals from the thesis advisor and supervisor, and online research.

Overall, 11 people outside the target group and 14 adults in their twenties and early thirties fitting the target group were involved. The participants outside the age target group included writers, publishers, social entrepreneurs, researchers, book club founders, reading initiatives founders and a digital strategy expert. The target group participants comprised of young adults between 25-35 years old, working in low to middle-class income jobs.

Interviews took mostly place in local coffee shops and partly in the offices of participants, depending on their convenience. Two focus group sessions with potential target group members took place in their work surroundings, as they were reached through the founders of these two businesses, who were my personal contacts. The third focus group session took place at a community center which supports community members and allows them to engage in activities. Ad-hoc interviews took place during informal social gatherings or meetups.

A right amount of categorized questions was prepared for each interview and focus group session. These questions were to provide an understanding of the personal experiences of research participants with reading and books, their beliefs, attitudes, and perceptions towards reading and how they arrived at them, and what they would wish for the future concerning their reading environment. Based on these
questions, often new topics for discussion developed, depending on the interviewees or their backgrounds and interests. Especially during the focus group sessions, conversations went sometimes off-topic, which allowed an interesting glimpse into people’s thinking and feelings. Usually, all prepared questions were covered during the interviews and brief notes were taken. Each interview session was voice-recorded with a dictaphone after the participants gave permission.

After the interviews and sessions, participants expressed that the discussions and talks had raises their curiosity and interest in the topic. They enjoyed being inspired by another’s thoughts and book recommendations, which were given at times. Actively thinking and talking about books and the activity of reading, about possible benefits and why one might not engage in it as much as one might wish, seemed to create awareness about the power of a seemingly “dull” activity like that.

Side note:  
2018 was an exciting year for this project, as the educational curriculum in place since 1985 was in the process of being replaced with the new 2-6-6-3 program, as mentioned earlier (see chapter 1.10). The Ministry of Education and the Kenya Institute of Curriculum Development (KICD) selected about 500 schools where the new curriculum began to be tested in 2018. This turned out to be a good topic for discussion as research participants had an opinion about the old and coming new system and how their (reading) experience related to it.

Figure 7. Observing Nairobi: A man reads at Java House coffee shop. Photo by Sara Gottschalk.
2.5 / Field research process

During the four weeks of field research in Nairobi, I stayed north of Nairobi which meant a minimum of 30-minute-commute into the city center and other popular areas to conduct interviews. Sometimes this commute could increase to up to an hour due to heavy traffic, which has a significant influence on people’s lives and productivity. Several interviews and focus group sessions took place in the western or southwestern parts of Nairobi, which at rush hour meant up to 3,5 hours commute, one way. This influenced and limited the number of interviews and places that were possible to visit for observations. Luckily, almost no agreed-upon interviews were postponed or canceled, which would not have been uncommon for the hectic and busy city of Nairobi.

Most interviews were arranged through personal contacts, referrals but also contacting people online. The medium of communication was almost exclusively social media channels, such as WhatsApp or Facebook. This is common as a lot of business communication takes place on WhatsApp. This channel works well in the local ecosystem because of the high saturation of mobile phones and common usage of mobile money transactions, which is a convenient way of paying for goods and services in the formal and informal sector. To contact businesses via social media (as well as calls) results in speedy responses, whereas e-mail correspondence may never generate an answer. English is an official language in Nairobi and, therefore, all communication took place in that language. It prevented potential problems that could have emerged due to translation issues.

Based on interviews and online research, places of interest related to the reading culture were visited in Nairobi. Next to obvious places such as bookstores and libraries, several restaurants or similar places were visited by me which participants had suggested. These places often included bookshelves

Figure 8. Focus group session. Photo by Mark Kaigwa.
for guests to explore. Taking public transport every day also allowed to feel the burden of it, and imagine how infrastructural issues such as traffic, or dangerous streets could affect a feeling of safety, which is often required for losing oneself in a book. During the field research period, I enjoyed the hospitality of a friend and experienced the local type of middle-class living. This made for another wonderful way to experience Nairobi and its reading culture and helped to relate better to some of the experiences reported by research participants.

All observations in public and private places like that, as well as feelings, were recorded in several notebooks, from bigger ones that were used while resting in a café or at home, to smaller more subtle ones, which were used to take notes in crowded places on the street. Further, every day in the evenings, thorough summaries were written about the day, including extensive exchanges with my local flat mate, who was keen on hearing about the research and added his local perspective on it many times.

After a few interviews, encounters and experiences in the city, first connections (also between actors) were mapped and ideas started to pile up in the form of sticky notes. In that process, important actors relevant to the existing reading environment and culture were noted, and their relationships to another, as well as their influences, explored. These first brief pieces of understanding were sometimes implemented into upcoming interviews to continually extend, confirm or question the reading culture picture that slowly emerged.

Due to my personal experience in Nairobi in 2015/16, luckily many of the potential risks (such

Figure 9. The variety of notbooks used for research and field notes. Different formats for different purposes. Photo by Sara Gottschalk.
opportunities as possible and to build an as thorough understanding of the local situation as possible.

Analysis activities that did take place during the fieldwork are listed below:

- Daily chats with a local friend about the research and daily observations
- Review of interview notes, ideas and

Figure 10. Observing Nairobi: at the Prestige book shop in downtown Nairobi. Photo by Sara Gottschalk.

Figure 11. First sense-making on site in Nairobi, in the form of sketches and sticky notes.
traction of first possible insights
• Daily journaling to document the subtle
details of daily life in Nairobi
• Collection of all ideas on sticky notes
• A first reading culture map, with stakeholders,
connections, and influences on readers
• First clustering of data in Excel

After four weeks of field research and a first
brief sense-making sessions, comprehensive
analysis and synthesis was conducted back in
Finland.

2.6 / Analysis and synthesis

The qualitative research data was analyzed
and synthesized using two main techniques:
1) affinity diagramming and 2) the disruptive
design method (see chapter 2.3) as already
applied during the field research.

Affinity diagramming has its origins in anthro-
pology and social sciences and is used to
organize and make sense of large amounts
of qualitative data (Hartson & Pyla, 2012). It
is often applied to analyze contextual inquiry
data, cluster data, user attributes or require-
ments and to engage in problem framing, idea
generation and prioritizing (as cited by Lucero,
2015). The way the method works is to capture
research-backed insights, observations,
concerns, or requirements on individual sticky
notes, so that the design implication of each
can be fully considered on its own. Notes are
then clustered based on affinity, which form
into research-based themes (Hanington &

As the initial scope of this thesis was rather
broad (from systemic cultural level to individual
level) and the collected data comprehensive,
the affinity diagramming method provided the
right framework. However, to avoid extensive
use of sticky notes and to allow for a more
effective way of working (especially since
there was no team), affinity diagramming was
performed digitally making use of different
ordinary non-designer software (e.g. Excel,
Scrivener). Finding that this slightly adjusted

Figure 12. Analysis and synthesis: sketching to connect the dots, identify relationships, and detect
intervention opportunity.
way of working with the affinity diagramming method work for me made the analysis and synthesis process easier and showed that there can be flexibility with these methods, which was an interesting learning as well.

The analysis process started with the transcription of the interviews and focus group sessions. Next, the transcripts were studied in detail to extract critical thoughts, ideas, themes, and quotes. The same extraction process took place for the daily diary entries and the observational notes that had been digitized. After that, research findings and highlights that had emerged were clustered and categorized. Key themes emerged naturally, which also revealed research gaps. These gaps were then filled by secondary research (chapter 3 and 5), which included online research but also literature reviews. Additionally, new questions related to the research data but also the thesis topic emerged during the synthesis process which needed to be included. Finally, the synthesis process produced key insights, which were gathered in a themed manner, a list of open questions, and a list of design opportunities and ideas. These synthesis results were discussed with the thesis advisor which resulted in the design direction for the thesis project.

As the last step and in preparation for the design phase, the initial research assumption was reconsidered, the definitions of reading and reading culture clarified, the target group specified, the specific design challenge phrased, and design requirements and guidelines based on the thesis scope listed.

Figure 13. Gathering cluster topics of the research findings on sticky notes.
Chapter three presents the first part of the secondary research conducted in this thesis. The chapter opens with exploring definitions of reading and reading culture which are followed by a brief analysis of the current state of reading in the world and in Africa. An outline of the development of reading is presented as well as the World Most Literate Nations rank. Next, reading perspectives from Nigeria and South Africa are introduced. Further, the state of reading in Kenya is explored with inquiry into reading research in Kenya, the promotion of reading in Kenyan culture and public discussions on the topic in the local media. The chapter closes with a conclusion on the secondary research findings and their relevance.

This first round of secondary research was conducted in rotation with the analysis and synthesis of the empirical data. This was necessary to complement and acquire a better background understanding and fill any gaps. After a brief consideration of definitions, the chapter dives into the development and state of reading in the world, Africa and Kenya.

3.1 Definitions: reading and reading culture

The term reading can be understood in many ways. While it has not been specified for this thesis context yet, a few potentially fitting definitions, also for other heavily used terms such as culture and reading culture, are considered, to support the process of clarifying these terms for the thesis.

The Cambridge English dictionary describes reading as “the skill or activity of getting information from books” or “from written words” (Reading, n.d.). The verb read is explained as “to obtain meaning or information by looking at written words or symbols” or the “intention” of it (Read, n.d.a). The Merriam-Webster thesaurus explains to read as “to go over and mentally take in . . . content” (Read, n.d.b). These definitions capture the meaning of reading which might be most relevant for this project and relates to reading as something from which one can potentially learn or gain new understanding.
Nowadays, a wide spectrum of reading materials is available. These range from short to long form, fiction to non-fiction and are available in a variety of genres. Reading materials can be published and accessed in handwritten, printed or digital formats. Digital formats can be made available online or offline and accessed on many different devices.

Independent of what reading material is accessed, how the reading material is worked with, understood or applied depends entirely on (the preferences of) the reader and their reading approaches and strategies.

The type of reading that is addressed in this thesis is not concerned with reading as literacy. It is concerned with reading as an activity to develop the self, where words and contents are absorbed, related to, and thought about. This process optimally leads to a new understanding.

However, it is recognized that for each person, the type, depth and quality of content consumed, as well as how and where it is consumed and embraced, play a unique role in how effective the activity is for creating new understanding for that person.

In order to understand the term reading culture, culture has to be addressed alone first. The Merriam-Webster dictionary, for example, explains culture as “the customary beliefs, social forms, and material traits of a racial, religious, or social group” as well as “the integrated pattern of human knowledge, belief, and behavior that depends upon the capacity for learning and transmitting knowledge to succeeding generations” (Culture, n.d.).

In anthropology and behavioral science, the term culture describes a broad range of
learned human behavior patterns. The English Anthropologist Edward B. Tylor refers to culture as a “complex whole which includes knowledge, belief, art, law, morals, custom, and any other capabilities and habits acquired by man as a member of society.” (Tylor, 1873, p. 1).

Based on these definitions, reading culture could then be understood as the different behaviors, habits, attitudes, and beliefs related to reading as an activity by an individual or a group of people. Further, it includes the objects associated and needed for it, such as books, newspapers, and on a societal level the institutions relevant for it such as schools and libraries. It must be noted that some level of reading culture is usually introduced in early age and cultivated, most often through family or school. Nevertheless, this can often also mean a complete lack of reading culture and cultivation.

3.2 / State of reading in the world and Africa

For 99 percent of the tenure of humans on earth, nobody could read or write. The great invention had not yet been made. Except for firsthand experience, almost everything we knew was passed on by word of mouth. As in the children’s game “Telephone,” over tens and hundreds of generations, information would slowly be distorted and lost. Books changed all that.

- Carl Sagan in The Demon-Haunted World: Science as a Candle in the Dark; (Popova, 2017)

3.2.1 Development of reading

The printing press was invented by Johannes Gutenberg in Europe around 1440. This significant event consequently led to the beginnings of mass production and consumption of books (Roser, 2019). The advantages of storing knowledge in a written form, as opposed to passing on knowledge by word of mouth, caused a considerable increase in development. Information was now accessed and passed on much more efficiently, but also processed and developed in new kinds of ways. This created enhanced abilities for planning and thinking strategically:

In industrialized nations . . . the writings of others—distant in history, geography, and profession—provide information, recommend actions, and promote political and philosophical orientations. Having access to such knowledge and being able to display it in appropriate oral and written form suggests that an individual is in control and has power. (Barr, Kamil, Mosenthal & Pearson, 1996, p. 3)

While books and written material became a standard for passing on information between generations and nations in industrial countries, in Africa knowledge was still mostly passed on orally and especially through sophisticated ways of storytelling. “Since ancient times, storytelling in the African culture has been a way of passing on traditions, codes of behavior, as well as maintaining social order.” (Utley, 2008). Only when foreign settlers reached Africa and imposed their ways of doing and culture onto the locals, books became relevant. Further,
There is a sense in which we moderns are inundated with facts to the detriment of understanding. One of the reasons for this situation is that the very media we have mentioned are so designed as to make thinking seem unnecessary (though this is only an appearance). . . . The viewer, listener, or reader does not make up his own mind at all. Instead, he inserts a packaged opinion into his mind.

(Adler & Van Doren, 2014, p. 4)

Languages that the European settlers brought with them were introduced and governments and schools were established. Reading and writing became a necessity.

While word of mouth and printed materials mark the beginnings of accessing and sharing knowledge and information, during the last centuries more media formats emerged. For example, many decades ago, Mortimer Adler pointed out how new media started to displace books and the interest in the written word:

There is some feeling nowadays that reading is not as necessary as it once was. Radio and especially television have taken over many of the functions once served by print . . . Admittedly, television serves some of these functions extremely well. . . . But it may be seriously questioned whether the advent of modern communications media has much enhanced our understanding of the world in which we live. . . . Perhaps we know more about the world than we used to. . . . But knowledge is not as much a prerequisite to understanding as is commonly supposed. . . . too many facts are often as much of an obstacle to understanding as too few. (Adler & Van Doren, 2014, p. 3)

This seems to apply to today’s world even more so, where television and radio have in return started to be replaced and transformed by digital media and the rise of the internet, which became increasingly and widely available in the early 1990s.

Since 1984, four comprehensive volumes of the Handbook of Reading Research have been published, mostly addressing reading in western societies. The research collected is elaborate and detailed and covers a big range of topics related to reading. Changes that have been prominent throughout the last century are discussed and in the latest volume from 2011, reading research that goes beyond the western nations has been included as well. This reveals an increase in interest in how reading is practiced in non-western societies.

The exponential growth and popularization of technology, especially in the form of personal computers and smartphones, have transformed how people consume information and knowledge. While increasingly more content is available and consumed, it is, however, often consumed in less depth and in shorter bits throughout the day. The generation called digital natives, who have grown up in the digital age, generally demonstrates a lower attention
and concentration span, which has made focused long-form reading harder. Thus, the increase in content and the growing variety of media formats have also caused a negative influence on people’s capacity to understand the written word.

A lot of the new media content today doesn’t challenge critical thinking, which might or might not be intentional (Adler & Van Doren, 2014). Alone the sheer amount of available content, especially in the digital realm, often inhibits the questioning of the read, heard and seen. It overwhelms the potential reader and often fails to inspire critical thinking and alternative ways of seeing and understanding the world. However, books still require the reader to digest information actively. If the activity of reading is performed intentionally and in order to find answers, books still provide a unique space. Thinking, understanding and learning can happen at an individual pace, where coming back to the material is easy, anytime and anywhere.

Considering the general trend of digitization, also backward trends have developed in the last years. For example, in the UK book sales have gone up in the last years and physical books have regained popularity (Frost, 2018). In contrast, ebook sales have started to decrease as readers seem to, among other reasons, find increasing pleasure in physical books as a retreat from their otherwise busy digital lives (Cain, 2017).

### 3.2.2. Literacy

Although literacy is not focused on in this thesis work, it must still be considered briefly. In order to read effectively, an individual needs to be able to recognize words and make sense of them. Literacy has been a big development focus by organizations and nations for centuries and is often used as a measure for evaluating a people’s state of education, especially in the global south.

Considering the world population, literacy levels “have risen dramatically in the last couple of centuries. While only 12% of the people in the world could read and write in 1820, today the share has reversed: only 17% of the world population remains illiterate.” (Roser & Ortiz-Ospina, 2018).

However, taking a closer look at sub-Saharan Africa and comparing it to the rest of the world, it becomes apparent that inequalities remain. African countries like Burkina Faso, Niger and South Sudan are ranked the lowest, with literacy levels still below 30% (Roser & Ortiz-Ospina, 2018). In Sub-Saharan Africa, 63% of adults had basic literacy skills in 2015, compared to 57% in 2000 (UNESCO, 2015). In comparison, the average adult literacy rate for the world was 82% in 2015.

There are 781 million illiterate adults in the world, and the adult literacy rate has only fallen by 23% since 2000 . . . Nearly two-thirds of the illiterate population are women. Half of all sub-Saharan African women are illiterate. (UNESCO, 2015)

While literacy levels can be measured, they do not provide an understanding of how people use these abilities throughout their lives. Re-
search confirms that an individual's literateness is not a stable phenomenon (Barr et al., 1996) and highly depends on “an essential harmony of core language behaviors and certain critical supporting social relations and cultural practices.” (Barr et al., 1996, p. 6).

A big amount of people today acquire basic literacy in school. However, considering the history of literacy in the industrial nations, it was discovered that “a sense of being literate rather than simply acquiring the rudimentary literacy skills of reading and writing entailed far more than schools alone could give.” (Barr et al., 1996, p. 6). Being able to read and to understand how to engage and make use of various reading materials may be opposite ends of a potential scale of literacy. Also Kamil, Pearson, Moje and Afflerbach (2011) state that literacy does not equal reading and must be distinguished.

For a context like Kenya, developing literacy often means acquiring languages that are not people’s natural mother tongue, which are their tribal languages. Learning and studying in languages which were established only during colonial times, such as English and Kiswahili, and are different to the languages spoken at home, creates an entirely different and more challenging starting point for children than in most western countries.

When considering literacy in relation to education, Scribner and Cole (1981) further illustrate that literacy does not ensure a state of being educated. In the same way that actual literacy can be hard to measure, the same counts for quality of education. Educational levels are often measured in terms of access, teacher/student ratio or education investment, which, combined with often limited data, informs only little about the actual skills and knowledge of students (Roser, Nagdy & Ortiz-Ospina, 2019).

Linking the art and activity of reading automatically to literacy should, therefore, be treated with care. Instead, more focus could be placed on the abovementioned sense of being literate.

### 3.2.3. World Most Literate Nations rank

A newer undertaking to assess literacy and the way people make use of it has been The World’s Most Literate Nations (WMLN) rank. It was last published in 2016 and measures “population’s literate behaviors and their supporting resources” (World’s Most Literate Nations, 2016). It takes a more holistic approach to literacy and its effects. For the ranking, so-called literacy achievement tests were conducted and looked at, as well as literate behavior characteristics. These include numbers of libraries, newspapers, years of schooling and computer availability and considers the size of populations (World's Most Literate Nations, 2016). While the study initially aimed to consider data from 200 countries, including from UNESCO and PISA, only 61 countries were ranked “due to lack of relevant statistics” (World's Most Literate Nations, 2016). Only 3 out of the 61 ranked countries are African countries. The Nordic countries rank at the top, with Finland on rank 1, and Botswana (61.), Morocco (58.) and South Africa (56.) at the bottom (World's Most Literate Nations Ranked, 2016).
John W. Miller, who conducted the study, reasons the Nordic success to their monolithic culture, which values reading (World's Most Literate Nations, 2016).

This WMLN rank shows the lack of data for many African countries when it comes to literacy, reading behaviors and quality of education. Its interpretation by the author also highlights the differences in history and culture for African and western countries, which supports a possible understanding of the state of reading in Africa.

When it comes to reasoning the success of Finland, Finnish author Aki Ollikainen suggests equality as an essential factor: “The most important thing is that schooling is equal, reading and educating have been appreciated also by working class and that the profession of teaching and education is also appreciated.” (World's Most Literate Nations, 2016). The capital city of Finland, Helsinki, also opened doors to a brand new library in the heart of the city in December 2018. Next to books, visitors are also invited to come and use multiple work and event spaces, which make the library a community space at the same time (Oodi Central Library, 2018). Mayor of Helsinki Jan Vapaavuori explains that the new library with the name Oodi “symbolises the core values of our society, such as education, culture, equality and openness” (Oodi Central Library, 2018).

This cultivation, celebration and partly reinvention of the local reading culture and its institutions such as libraries and schools are major characteristics of Finland. It shows how active development is necessary to keep the reading culture alive, no matter how deeply it is rooted. Otike (2011) truthfully states that “[p]romoting a reading culture has long been a major theme of various countries in the world yet despite the all these efforts one common threat emerges: no country is satisfied with the number of active readers among its population.” (p. 2). Especially with new media constantly competing with traditional reading, also in Finland and especially with the youth, an active reading culture cultivation and promotion must continuously take place.

3.2.4. Reading perspectives from Nigeria and South Africa

Shifting the view to Africa again, two perspectives on the state of reading and reading culture in Nigerian and South African are highlighted next.

Nigeria is the most populous country in Africa with the largest economy on the continent. In a commentary on Nigerian reading culture (The Internet And Africa's Reading Culture, 2015), the author notes how African storytelling has been the primary means for preserving historical experiences. Reading and literacy were established to please and keep up with the white settlers, which led to a “patronizing [of] the western education” (The Internet

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1 monolithic culture: “a society where everyone shares the same belief system, the same kinship-based myth of tribal origin, the same language, and the same general worldview, with little or no cultural mixture and very few or no minority subgroups in the same geographic region — or if minorities do exist, they are isolated and segregated in their own geographic enclaves.” (Galba, 2016)
And Africa’s Reading Culture, 2015), and commenced the sharing of experiences through writing. Even though the practice was brought from outside, the author recognizes how writing and books are nonetheless “an effective tool towards growth and social development” (The Internet And Africa’s Reading Culture, 2015).

The author continues to explain that with the rise of the internet, Africans seem to read and value reading less than when books were still more common. Although people still read, quality and relevance of the content consumed seems to be the worrying factor. With the commentary defining reading culture as “the idea of developing the habit and patience to read”, the article ends with an important question: “Internet use in Africa is largely increasing but just how much has it promoted Africa’s reading culture?” (The Internet And Africa’s Reading Culture, 2015).

Overall, Nigeria’s reading culture is low and must find a priority in society, which is also stated by other sources (Promoting Reading Culture In Nigeria, 2012; Okogba, 2017).

Moving further south to South Africa, the country has the second-largest economy in Africa and is known for its highly multi-ethnic society. The country has been facing a longstanding reading crisis, as per Ingrid Willenberg, Senior Lecturer in Education from the Australian Catholic University (Willenberg, 2018). South Africa ranked last in the 2016 Progress in International Reading Literacy (PIRLS) study, where 78% of South African young students at a specific level were not able to read for meaning. Several improvement strategies were proposed amongst which were the promotion of a culture of reading and the encouragement of parents to read to their children. Inadequate reading instruction, however, was named the root cause of the problem (Willenberg, 2018).

Concerning the promotion of a reading culture, Willenberg notes that it does “presuppose that older children and adults are able to read.” (Willenberg, 2018). As for the parental involvement into their children’s reading activities, obstacles come in the form of poverty levels and survival concerns, which are high, and positive reading experiences and educational levels are low. This results in a lack of awareness about the importance of the involvement of parents in their children’s literacy development.

Willenberg argues that “the ultimate responsibility for educating South Africa’s children lies with the school system” (Willenberg, 2018) but that changes “will take time and will not help the learners currently in the foundation phase of schooling” (Willenberg, 2018).

Other sources confirm this perspective on South Africa’s state of reading (South Africa has a reading crisis, 2017; Wilkinson, 2017)

These two brief perspectives name several factors and influences on the local reading cultures in Nigeria and South Africa. While internet access has become largely available in Nigeria and provides a lot more content, a culture of reading, where people value and appreciate the activity and benefits of reading,
is not automatically provided by that. Further, through the South African (although more foreign and academic) perspective, it became apparent that the establishment and maintenance of a local reading culture require active cultivation and cannot be left to chance. It takes a considerable amount of time as well as collaborative efforts from various stakeholders.

While access to reading material has generally become easier through the internet, an understanding and appreciation for quality reading as a beneficial activity is something that needs to be promoted. Establishing and cultivating such an understanding and a reading culture in Nigeria and South Africa is, however, an enormous undertaking, especially considering that reading is less rooted in their traditional cultures.

3.3 / State of reading in Kenya

Kenya is among the most literate nations on the African continent, with free primary education since 2003. As noted before, however, numbers on literacy and education alone do not represent actual levels of literacy, quality of education or how students apply their literacy skills and education in life once they leave their formal education.

3.3.1. Reading Research Kenya

Overall, formal reading research in Kenya, and even more so for Kenyan adults, is scarce. In the following, two organizations that conduct reading research in Kenya are presented.

Uwezo

Uwezo is a five-year initiative that aspires to improve literacy and numeracy competencies among children aged 6-16 years old in Kenya, Tanzania and Uganda. The Uwezo initiative focuses on understanding children’s learning outcomes in relation to reading (English and Kiswahili) and numeracy, recognizing that numbers on basic literacy, school enrollment or participation do not provide a complete picture (Uwezo, 2016).

When considering our education system we tend to assess, and in many cases prioritize, the more visible and apparent indicators around school facilities and infrastructure, the data on enrolment and attendance. But the truth is that while these speak to the learning environment and present important findings about our education system, many of them do not relate directly to learning outcomes. (Uwezo, 2016)

The latest Uwezo report on Kenya, titled Are Our Children Learning (2016)?, publishes results on data collected throughout 2015. The results presented in the report highlight a learning crisis which is said to persist since 2010. It is stated that “budgets and other inputs to learning have been increasing steadily”, but that “learning outcomes have remained essentially stagnant” and are “extremely inequitably distributed across geographic areas, socioeconomic strata and types of schools.” (Uwezo, 2016). The report further stresses that the role of parents, teachers and local communities greatly influence learning outcomes for children. On that note, the report ends with a
“call to all citizens to play a role in improving learning.” (Uwezo, 2016).

The work of Uwezo aims for a more holistic approach for assessing the ability and skills of children in Kenya. After all, what matters is if children learn and are able to understand new material and can apply what they understood and learned in their own contexts. Reading does not matter if people do not know how to apply what they read.

**Worldreader**

Worldreader is a US non-profit organization with a focus on mobile reading and the mission of "Creating A World Where Everyone Can Be A Reader." Founded by passionate readers themselves, the organization offers numerous reading programs (from pre-reading to lifelong reading) as well as a mobile application “that supports the development of reading habits among youth and adults”. It features a big digital library which focuses on quality and local content for children, students and adults (Worldreader, 2017a).

Through close collaboration with Opera (a web browser), the systematic use of technology and increasing numbers of smartphones and internet access, Worldreader collects invaluable data on mobile reading behavior to understand when and how people read. For example, in their annual report from 2017, they state that “in 2017 over 45 million people read for an average of 9 minutes each” (Worldreader, 2017a, p. 2) In their latest report from 2017, Worldreader notes that “seven million people read local and international books on mobile devices around the world” (Worldreader, 2017a, p. 1).

Further, as per Worldreader and Opera, in 2018 Africans spend over 4 million hours reading books on mobile phones, which was an increase of 32% to the previous year (Africans spend over 4 million hours reading books on mobile phones in 2018 so far, 2018).

Through the data and knowledge collected through the Worldreader mobile application, Worldreader’s partners such as publishers, learn what people want to read, or school and library partners learn what materials work. “We can even see what books are being read during the day and what books are of interest for home reading.” (Worldreader, 2017a, p. 3), founders Risher and McElwee add. With this type of information also the readers can benefit by discovering new books that could potentially improve their lives (Worldreader, 2017a, p. 3).

In Kenya, Worldreader is active through various reading programs. For example, there is the Libraries, e-Reading, Activities and Partnership (LEAP) 2.0 program (Worldreader, 2018), which fosters libraries in Kenya, or the Anasoma program (Anasoma, n.d.), which empowers women to read.

Concerning positive influences for reading, Worldreader found that “immediate friends and family are the biggest influencers along with community members such as librarians and teachers, with some influence from social media and current trends” (Worldreader, 2017b).
Summing up, when it comes to reading research in Kenya, data remains scarce. Single private or non-governmental organizations are creating efforts to understand reading behavior but collecting data is time and cost-consuming and comes with various other challenges. Research that is done focuses on children and younger students, often located in rural areas. Adult reading is hardly addressed. It must also be mentioned that foreign initiatives and actors are often the drivers of the existing research efforts. However, more local groups are pressing for a better formal understanding of reading behavior among Kenyans.

3.3.2. Promotion of reading (culture) in Kenya

Researchers, NGOs, the book industry and international organizations have been advocating for the development of a reading culture in the world (and in Kenya) for several decades. A large number of papers (for example Sénéchal & LeFevre, 2002; Nalusiba, 2010; Doiron & Asselin, 2011;) and other sources (for example U.S. Department of Education, 2018; Pennington & Waxler, 2017) have been published worldwide, stressing the importance of (early) reading and including guidelines on how to promote reading and build a culture of reading. Big focal points thereby have been school and library environments but also early reading at home.

When it comes to the Kenyan perspective, the researcher Fredrick Otike, from Kimathi University College of Technology, addresses the Kenyan reading culture, cultivation and its promotion among students. While he focuses on young learners as well, he additionally considers the bigger system. In his paper from 2011, he analyzes the status quo of reading culture and presents ways of how a reading culture in Kenya could be cultivated and promoted.

Otike describes reading culture as “an activity that is meant to popularize reading and make it a lifelong hobby” (Otike, 2011, p. 1) and as something that needs to be initiated. He states that the absence of a reading culture in Kenya has not allowed Kenyans to find appreciation in the value of reading and books.

Having analyzed various literature, Otike (2011) explains that in order to enable a population to appreciate reading, a thriving publishing industry and distribution system must exist. This must be combined with appropriate educational programs that provide sufficient and early introductions to young students and provide strategies for effective and lifelong reading (Otike, 2011). Otike highlights that reading would have to become as important as other leisure activities which are promoted in Kenyan culture. These are, for example, socializing at sport clubs, bars and restaurants, churches, and mosques. In order to establish such a culture of reading, it would require all parties in the educational and private
sector to collaborate and work toward the same goal (Otike, 2011). Otike continues that enjoyable reading material which motivates people to read should be present as well as an awareness of how books can contribute to personal mental growth and the national economic growth. He highlights the necessity of providing easy-to-read, interesting and culturally relevant and acceptable books to the population (Otike, 2011). Otike claims that “[o]nce people develop a reading habit, they will pass it on, the demand for books will grow and the citizens of a nation will be able to realize their ambition.” (Otike, 2011, p. 5).

In regard to the Kenyan educational system, Otike (2011) describes a lack of policies which has led to low numbers and poor quality of school libraries and librarians. On top of that, the cultivation of reading is often left to teachers alone, who are not supported with the right or enough resources. As reading is mostly poorly introduced in schools, in an unexciting and pressured manner, students come to associate reading and books with something involuntary and stressful, which prevents them from really grasping the value of books for themselves beyond school (Otike, 2011).

"It is important to encourage a reading habit so that people grow up mentally to be able to fulfill their potential at every level from village to university."

(Otike, 2011, p. 5)

In conclusion, the promotion of a reading culture to foster appreciation and value in books and reading in Kenya is a great endeavor, especially when the appreciation for books is not deeply rooted in the local culture. This aligns with the perspectives on Nigerian and South African reading cultures as presented earlier in this chapter. Otike stresses that a shift in such a complex system requires close collaboration efforts between the various stakeholders. Nevertheless, to enable a population to make use of their potential, addressing the establishment and cultivation of their reading habits can still provide numerous opportunities in the meantime.
3.3.3. Recent public discussions

In understanding the present Kenyan reading culture it seems relevant to consider local media outlets and recent discussions on the topic.

In an online article published in August 2018 and titled “Kenyan youth don’t read - True or False?” (Kahongeh, 2018). The Daily Nation (Kenya’s most popular independent newspaper) author James Kahongeh states that it is not a new topic that young Kenyans do not read and that the ones who do read, read for academic reasons. He investigates why young Kenyans might not read for recreational purposes by interviewing five Kenyan literature lovers. Insights into their habits and their joy for reading are shared next to the problems they see regarding reading in society. Social Media is named as a disruptive force as well as a lack of originality and quality in produced reading material which makes it unappealing. Further, a lack of priority in society for reading as a valuable activity is mentioned, a lack of writing culture and its appreciation as well as incentives to engage in qualitative storytelling in the written form. To increase readership among Kenyan youth, the interviewees have recognized a need in reading platforms such as mobile book apps and book club start-ups and similar support initiatives. There also seems to be a desire for reading to become more social (as in group reading). Finally, it is highlighted that books are a reflection of society and do play a critical role in promoting peaceful coexistence among people (Kahongeh, 2018).

Another commentary comes from the quarterly journal named WAJIBU, which was founded in Nairobi in 1985. In his highly elaborate and eloquent essay about why Kenya has not yet established a reading culture and priority for reading, author Justus G. Mbae thoroughly takes Kenyan history and culture into account (Mbae, n.d.). He strongly advocates the importance of reading and ends on the following note:

Everyone must take responsibility for his/her own attitudes, strengths, weaknesses. It is all too easy to blame the school and the teachers for not teaching us to enjoy reading. We can easily blame society for not playing a more positive role in ensuring a more positive reading culture. However, our life is our own and each one of us must, in the final analysis, take responsibility for our situation (Mbae, n.d.).

3.4 / Conclusion

This chapter aimed to provide a first understanding of the development and state of reading in the world, and specifically in Africa and Kenya. While plenty of reading research is available for many western countries, reading research in Africa and Kenya is still scarce. A reading crisis has been observed by many and numerous needed actions have been identified. However, the establishment of a culture of reading in African countries like Nigeria, South Africa and Kenya need adjusted and more inspiring approaches as reading and books are not deeply rooted in their traditional cultures. People generally know of the importance of books and reading in today’s world, but the environment does not support them in
practicing this activity for their own benefit. The establishment and cultivation of a culture of reading in society require strong commitments from all actors and stakeholders and a collaborative effort to make it a priority.

This round of secondary research helped to make sense of the empirical data collected in Nairobi. While it added new perspectives at times, it often confirmed, complemented and enriched the empirical research. Overall, triangulation allowed to gain a solid understanding of the current state of the reading culture in Nairobi. The primary research findings and insights of this thesis are introduced in the next chapter.
This section presents a summary of the most important and relevant field research findings and insights, which were enriched by the secondary research from chapter three and five. The chapter opens by introducing how the field research data was worked with, analyzed and synthesized. Next, the primary research findings and insights are explained and supported by quotes of research participants. The refined design challenge of the thesis is presented which includes a specified reading focus, target group and adjusted design objectives. Finally, guidelines for the design phase are listed before linking to the next chapter.

4.1 / Making sense of field research data

The analysis and synthesis phase was started by thoroughly reviewing the field research notes, interview transcripts and visuals. This was done in several iterations whereby affinity diagramming played a significant role. The method produced 20 clusters with detailed findings collected under each. These clusters were then merged into six key categories. Additionally, open questions and ideas (which were later clustered as well) were gathered. Eventually, the research findings naturally revealed research insights, which equally concern individuals as well as the overall reading culture in Nairobi. Although individuals are influenced by the reading culture and vice versa, at times both perspectives needed to be analyzed separately.

The guiding questions for clustering and categorizing the data were:

For Individuals—to understand the potential targeted group:

- What have they experienced related to
4.2 / Research findings and insights

The research findings of this thesis entail relevant observations and reported behaviors and experiences with reading and the reading culture by the participants. Findings also inform on the reading culture itself. From that basis and complemented by the secondary research, research insights emerged from the synthesis process. These insights should provide a greater understanding of the participants’ experiences, beliefs and their context, forming the foundation for design opportunities. The summary of research findings and insights will be presented in the following, supported by quotes of research participants which are kept anonymous. The detailed list of research findings can be viewed in appendix 2.

“Insights can be ideas, opportunities, possibilities, provocations, problems, conundrums, consequences, causes, relationships, probabilities, hopes, challenges, and anything else that was not obvious before you started to explore the problem arena.” “Insights can be defined as the observations that emerge from the exploration you do.”

(Acaroglu, Leyla, 2008, p.74)

On reading behavior and what people read

The type of reading behavior practiced by individuals in Nairobi is in high correlation to their socioeconomic class. Depending on it,
people are exposed to books and pleasurable reading early on, have access to diverse reading material, are exposed to reading and books in their family and school environment and prioritize reading and books.

After the educational path ends, individuals are responsible for the maintenance and development of their reading skills and behavior. Therefore, the formative introduction to books and reading in the family and school environment is crucial. Participants that came from an environment that did not favor books struggled to pick up reading. If they did pick up reading again, it was mostly for work but rarely for pleasure.

“*I have friends who read just for leisure, and they read, they love it, they have maintained it, but that’s quite rare.*”
- Research participant

Based on the research, younger to middle-aged Kenyans read mostly on their (smart) phones. This includes any type of reading and reading material, such as the reading of text messages, online news, blogs or social media content. While some of this content can be long-form, such as special blog posts, most consumed content comes in bits and pieces. Any long-form content is perceived as a struggle (e.g. due to a lack of concentration).

“*You even find that in the homes, everyone is on the phone, and they are not reading. They are flipping through so many things. Even me, I am telling you, it took a culture change.*” - Research participant

Regarding books, pirated books in pdf-format are easily accessible and highly popular, especially in lower socioeconomic classes. Some research participants of higher socioeconomic classes reported reading on Kindle. The reading lovers amongst them also buy expensive physical books. Educational textbooks for school are mandatory buys and reads and make up the biggest percentage of the Kenyan book market due to free primary education and high numbers of enrollment. Other popular genres are news (newspapers), self-help, biographies, and the bible and religious content. Especially political topics are best-selling, as ethnic tensions characterize Kenyan politics.

In Kenya, a book called popular or bestselling is usually one that sells 1000 copies. This is a small figure compared to international standards.

“It’s a cultural thing as opposed to an affordability thing” - Research participant

Overall, affordability is not an actual issue for most. Spending money is prioritized on other leisure activities (e.g. going out socializing/bars). People often know how to access books online (online piracy is an issue). Affordability is often recognized as an excuse as it seems to be a matter of perceived value for price and a set of cultural priorities instead.

LEARNING:
Nairobi has a newspaper reading culture. However, while there is many younger adults that love books and reading and know how to apply it for their personal development, social media, games and video content still compete
with their attention. The greater number of young adults has not been introduced to reading books as a rewarding experience, quite the opposite. Thus, they prefer interactive and social media, perhaps combined with free (pirated) versions of book in pdf format on their phones, or no books altogether as the value is not clear.

Reading online and/or on smartphones has the most significant potential for this thesis, based on this research but also due to the high mobile phone distribution in Kenya. Convenience, access, lower costs and a current underdeveloped infrastructure (for going to the library or booksellers, which are often further away) can be added as reasons. However, the reading of physical books generally leaves readers with a more satisfying experience and might trigger them to appreciate books more.

Beliefs, perceptions and attitudes towards reading and books

There are societal stereotypes about readers of books, which adds to the notion that books are not for everyone. Especially in less affluent areas, the stereotype remains that only girls read books (mostly love novels) and that men should only read newspapers.

"But it was easier for me, when I was in Nairobi, maybe in an affluent place, it was easier for me to get at my book and read. But when you are in some of our areas, low-income areas, when you are in a matatu [...] everybody will be like, why is he reading?" - Research participant

In general, the reading of books is strongly associated with school, exams and the pressure that existed in that environment. Research participants expressed that they do not feel confident in reading books due to fear of failure.

Some research participants explained that reading is important but that they do not practice it (much). This seemed to be partly due to a lack of experience and understanding of the actual benefits of reading books in regard to their immediate lives. Further, it may not fit into their self-concept (e.g. of being smart enough to read well), especially when they were only exposed to books and reading in pressurized school and study environments.

"I don’t want to read; it takes great effort to gain this knowledge while there is lots of other forms of entertainment!" - Research participant

There is this notion that reading needs to be done alone. However, people like to think of themselves as very social, something that is very culturally rooted. Reading books is often perceived as something isolating, which is another reason that makes people dislike reading.

Furthermore, there is a big focus on the west (due to colonial history, which has created identity struggles). A lot of the available reading material features western content, which emphasizes the impression that reading is something foreign. These books are also cheaper and promoted more effectively online. While initiatives push for more local
and culture-sensitive content, the existing local reading material can be of lower quality (in terms of production but also content quality), has smaller distribution numbers and less marketing funding. Overall, public appreciation for authors, books and reading is weak as well as a general reading culture, which could, in contrast, promote reading for joy, entertainment, understanding and curiosity. This truth shapes people’s beliefs about books. Finally, although local initiatives have produced more local quality material in recent years, quality content discoverability remains an issue.

“it’s not so much the content. It’s the discoverability” - Research participant

LEARNING:
Due to an unfortunate early introduction into reading for many adults, reading is associated with school, studying, exams and pressure and fear of failure. People recognize that reading is important, but they have not experienced this importance in their lives and thus do not go out of their way to read books or generally more challenging material, which could support them in their development. It is thus a matter of awareness, experience, motivation and perceived benefit regarding the powers of reading and books. A weak public reading culture misses to celebrate and promote reading, books, authorship. The lack of local quality material with cultural relevance hardens this.

There is a potential to introduce adults to the joyful side of reading by engaging them in understanding the value of reading and books for themselves, by simulating what it can do for them specifically and by providing them with simple ideas on how to get started in their surroundings. Optimally, this “playful introduction” will reach them via their phones.

Key influences on reading perceptions and behaviors

Social Class: In higher socioeconomic classes, parents have potentially more personal experiences and money and awareness to foster a habit of reading in their children. More (diverse) reading material is accessible and children most likely attend an international or private school that is equipped with libraries and trained librarians, promoting joy in reading from an early age.

"I've had the privilege of working with a few people from the other side. I have been going through 8-4-4, but even their way of thinking, because you see for us, we were being forced, you were just reading, you weren't understanding why. But if you look at the other system, they are actually doing projects and you are encouraged. There are even competitions, that means you find yourself researching, you come and present something and even the way you think, now it is motivated, so it becomes part of you. So that's the difference I have seen." - Research participant

Families in lower socioeconomic classes, however, may have to worry about making a living. They often struggle to afford to send their children to public school, where reading is much less of a pleasant experience. Other daily priorities and potentially an unawareness about
the importance of reading for their children prevail, even though “it has been proven, that children who read a lot regardless of social class tend to do better later in life, in terms of improving their social class.”

“most parents in that lower social economic class, they don’t tend to encourage their kids to read, or generally explore stuff in life” - Research participant

Parents, Childhood: Research participants that appreciated reading and books were unanimously introduced to reading for pleasure by their parents or family members in one way or another (for example leading by example, or reading with their children). This positively and greatly shaped their attitude towards reading and their reading behavior.

“I know I started to read before I went to school officially, mostly because my parents would buy books and my mom would read them to me” - Research participant

School: In school, reading often became a pressured MUST to pass exams. Reading materials were not introduced well and lacked diversity. Forced reading of unreasonable amounts of content and the mere studying of physical textbooks made reading a chore. Research participants stated that this caused them to avoid reading after their formal education ended.

"Like now, I just want to find something that does not force me to read, you see.” - Research participant

School has become a particularly negative influence after the implementation of the exam-focused 8-4-4 school system. This system included a lot of forced reads, also on colonial topics which had to be re-read again and again.

“the reason why I don’t read books, maybe, is in High School reading was this thing you had to do under supervision, or get into class, shut up and read, so it was really a culture of, they made reading look or seem uninteresting which is not the case.” - Research participant

Competitors of reading are in general other responsibilities related to busy family lives, work (making ends meets), a desire to socialize, leisure time with friends or “easy” forms of entertainment such as videos, social media, games, podcasts, TV and radio. Reading books is not perceived as a leisure activity but as something hard and a struggle.

“the majority of people that I know, if it’s not from interest, will not touch a book, simply because it’s not a priority. . . . reading is associated with work or education” - Research participant

Further, books have traditionally not been part of African culture and so reading is not deeply rooted in Kenyan culture. A culture of reading would have to be actively cultivated and in close relation to the local culture. However, in the light of urbanization and globalization, the culture of traditional African storytelling is slowly disappearing too, which also needs renewed cultivation and appreciation to strengthen Kenyans’ identity.
LEARNING:
The 8-4-4 school system has been a driver for reading aversion and created an urge for students to disassociate from it by not reading and not handling especially physical books. Digital media have provided a welcome escape. Key influences for developing an appreciation for reading are parents’ awareness, support and interest in their child’s reading in early childhood and optimally throughout school. Several research participants explained how they acquired their love for reading at an early age and through their parents.

"The more we instill the culture of reading in younger kids, future generations will love reading because it’s in them, for us it’s not" - Research participant, Storymoja

There is potential to spread awareness among younger adults about how and why people have come to dislike books and reading, and to use this new understanding to spark a wish to try reading books again, but in a more joyful and fun matter, on people’s own individual terms and preferences. This could then also influence them on how they raise their children when it comes to reading.

“I feel like in the future for things to take on a brighter perspective, we need to disassociate the two, reading is not studying. It doesn’t have to be, studying is part of reading, fun is part of reading, learning is part of reading, but also exploring new worlds, imagination” - Research participant, Storymoja

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Figure 15. Four levels of reading culture, from a personal reading culture to a country-wide culture of reading. By Sara Gottschalk.
Status quo of Nairobi reading culture

“There’s a cultural thing . . . there isn’t a place for story fiction in most people’s homes, there is no awareness, no appreciation of it. Then you go into a school system that again has no appreciation for the role of it, and in fact, there is a lot of discouragement.” - Research participant, publisher

Nairobi’s general reading culture is not well developed. The majority of reading that is done is related to school and educational reading. However, a culture of newspaper reading has been existing for many decades and is driven by older generations and people’s interest in politics.

There are numerous second-hand booksellers in the city center of Nairobi. They are called inama book shops by the locals, with inama being a Swahili word that means to bend over, as one has to bend over to reach for the books sold on the street. Their existence indicates that people buy and read these second-hand (but also new) books, which are mostly western novels and self-help books. A few sellers specialize in local content.

An increasing number of local initiatives try to promote the importance of reading. e.g. Storymoja, Book Bunk, Jalada, Enkare Review, The World Loudest Library (WLL), KEY, Worldreader, book clubs, Facebook and WhatsApp groups, and other blogs (see Figures 16 and 18).

Figure 16. Nairobi reading culture elements influencing locals, their perception of books and their reading activity. By Sara Gottschalk.
Figure 17. Nairobi field research locations and impressions. Photos by Sara Gottschalk.
Newly renovated and reopened Mc Millan Memorial Library

At the Bao Box restaurant

Text Book Centre book store

Newly renovated Kenya National Library branch

Inama book sellers

Kids books at the Text Book Centre
When it comes to the publishing industry, there is a general lack of government support as well as a lack of marketing budget to promote reading and local books. In general, due to a different culture, people interact with books very differently than in the west, which limits how local publisher can experiment with promoting more diverse books.

"95-98% of the book market is education, revision and textbooks; self-help and business books, which might be another 1,5%; the actual fiction market is really tiny, but for sure, that side is growing."
- Research participant, publisher

Overall, formal reading research and interest in that by authorities in Kenya is limited. Further, official numbers on book sales and related figures are not made public due to Kenya’s highly informal society and a big share of informal economy. With a lack of regulations, lots of

**Storymoja**

Storymoja is a Kenyan publishing company (since 2007) that focuses on authentic African children storybooks in the form of curriculum books, revision books, and career resources. Storymoja dedicates to promote reading with the mission to place a book into every child's hands. Their work includes research, pilot programs, and success stories such as the Storymoja Festival and Start a Library campaign.

www.storymojafrica.co.ke

**World’s Loudest Library - WLL**

WLL is an initiative that organizes parties where people listen to great music, exchange books, and spread them around town for other people to pick up and read. Today, WLL has a book shop at the Alchemist bar, a creative hub and popular party location in Nairobi.

FACEBOOK: @WorldsLoudestLibrary

**Book Bunk**

Book Bunk is an organization that restores existing public libraries and creates new libraries in public spaces in Nairobi. They actively promote reading through events and monthly public libraries tours.

www.bookbunk.org

Figure 18. Introducing three reading initiatives in Nairobi. Photos by Sara Gottschalk.
poor-quality reading material (in writing, producing but also because of piracy) exists and communicates that books are not that valuable.

“There is no reason why we don’t have research that shows us how many storybooks people have at home, there is no research as far as I can tell, there’s nothing available.” - Research participant, publisher

Two key problems for the reading culture situation were stated by one of the research participants who has been a publisher for more than ten years.

First, Kenya’s leaders are not in touch with the general public situation when it comes to education, which greatly affects the reading culture.

“the people who are upper middle class and above, who are the decision makers, who really are leading this country, many of them are just completely blind to this.” - Research participant, publisher

Second, citizens in general and parents especially are not angry enough about the state of the public educational system and the lack of responsibility from the leadership.

“And I feel until we own it, until we the locals own that challenge it won’t really be addressed, it will get sort of superficially touched.” - Research participant, publisher

Figure 19 (next page) shows how individuals in Nairobi who have been part of the 8-4-4 educational system have been influenced by the local environment when it comes to reading while growing up. Highlighted in red are negative and at times traumatic touchpoints which led people to avoid reading. In contrast, the green sections indicate forces that have been able to balance these negative impacts.

4.3 / Refining the design challenge

The initial assumption that Kenyans do not read much can now be revisited. Based on the primary empirical research as well as the secondary research, the assumption does not hold true. Even though the reading behavior has changed within the last generations, where older generations seemed to be more interested in reading books and newspapers, younger Kenyans nowadays read a lot of digital and short-form material. Students do read books for academic and educational purposes. Many adults read for news, professional development, life improvement and online reading for entertainment. However, while people do read, the length, quality and diversity of reading material consumed could be focused on. Due to a poor introduction into reading as a pleasant and beneficial activity, there is plenty of untouched potential for people to use higher levels of reading to develop themselves, something that is desired by them.

Before formulating the specific design challenge, it is necessary to define the type of reading that is focused on and also reconsider the target group, which will be done next.
Figure 19. Systemic elements and influences on an individual's reading culture in Nairobi while growing up and attending the 8-4-4 educational system, and their impacts. By Sara Gottschalk.
Young adults don't find reading literature (fiction, non-fiction) interesting, cool, beneficial, important, relevant. Small awareness on how to read for joy.

Other forms of entertainment are available, short-form reading, distractions:
- Video platforms
- Social Media platforms + messaging
- TV shows, radio
- Games

Other format are also more appealing:
- Audio books
- Blogs
but needs less concentration and focus

Young adults: Reading long form, books, fiction doesn’t benefit me, I find the same info elsewhere, I am not a reader, READING BOOKS IS NOT FOR ME

- little diversity in published content, only few book stores
- parents are often not very involved in their children’s education, often don’t read with them
- society, public discussion, media doesn’t talk a lot about books and importance of reading
- most libraries are not spaces of inspiration, curiosity or interest

+ more reading initiatives are emerging

community libraries, book clubs, etc.
4.3.1. Reading focus

The specific reading material focused on will be books, including fiction and non-fiction. Through the research, it has been shown that Kenyans do read various material, but that the length, quality and diversity of the material could be improved. A gap of appreciation for books due to unpleasant experiences during their educational path and new media being more entertaining, as well as a gap of awareness about the potential powers and benefits of reading might be depriving people of an opportunity to empower themselves to improve their lives, and consequently the lives of their children.

Chapter 5.3 analyzes the art and activity of reading books and its benefits in more detail. Nonetheless, it should already be mentioned that reading books alone might not bring the results one would hope for, such as an increased understanding about the world and others, increased critical and complex thinking or increased imagination, creativity, empathy or knowledge. There are many strategies for reading effectively to apply what has been read in one’s own life. This part is crucial and often needs to be learned.

This thesis, therefore, focuses on the intentional reading of non-fiction or fiction books. With intentional reading, states similar to deep reading are meant, where the readers consciously commit to a piece, and the reading material fully captures their attention. Through that it allows them to think deeply about the read, draw connections between the read and their own lives, or expand their perspectives and gain new understanding. For example, Waxler and Hall (2011) describe deep reading as the following:

\[D\]eep reading requires human beings to call upon and develop attentional skills, to be thoughtful and fully aware. . . . Deep reading provides a way of discovering how we are all connected to the world and to our own evolving stories. Reading deeply, we find our own plots and stories unfolding through the language and voice of others. (Waxler & Hall, 2011, p. 30)

Note that this reading focus does not dictate if books are read digitally or physically, because it is not pivotal in that case. Both mediums provide advantages and disadvantages, but, eventually, the readers in Nairobi (as anywhere in the world) should choose what they are more comfortable with and what is accessible and affordable to them, which can vary significantly as discovered during the research. People know how to access reading material if they are interested enough.

Furthermore, focusing this thesis on books and encouraging the target group to reconsider this type of reading material invites them to reconsider what they know. They will have to take the time to sit and read books intentionally. They will need to understand the benefits. They will need to practice concentration and immersion for the books they choose. In order to pick up the right books, they will need to become aware of their interests and limitations. They will have to discover how this content is different from other media content and how it can help them to exercise their brain and mind in ways that other media cannot.
4.3.2. Target group

During the research, it became clear that many adults that struggle with finding joy in reading books, and even reading in general, went through the 8-4-4 educational system (children that attended private schools with different international curricula seemed to be less averted to books and reading). Since that system was introduced in 1985, the oldest adults fitting into that category are now around 40 years old. As this thesis is targeting adults that have left their educational paths, the age margin for the target group is adults in their early twenties to their mid-thirties.

A reminder as to why these adults are targeted instead of children: Adults that have completed or left their educational paths are rarely considered by formal research because it is considered as even harder to influence them. The most sustainable positive reading intervention point is still during childhood and school. However, precisely because these adults are not considered and have often been given up on, this thesis aims to make a case for them (consider Figure 20).
"And I suppose fundamentally, honestly, if we can't seduce our children into reading, how are we going to do it with adults?"
- Kenyan publisher

Especially these younger adults are extremely relevant to the development of Kenya. They are often looking for work and opportunities to contribute to society and to make a living to support their families or start one. They are in big need of developing and accessing their potential to create the life they desire, which will also influence the lives of their children.

To sum up, targeting this group of Kenyans in Nairobi is a tough call. Nonetheless, it seems worth to consider and support them, so they can 1) make use of their potentials and 2) raise their children with a habit and interest in reading.

4.3.3. The design challenge and adjusted design objectives

The targeted group of adults in Nairobi, Kenya was not introduced to the joys and benefits of reading frequently, diversely and for pleasure. They were not provided with the freedom to explore their interests in books and to follow their curiosities. Strategies for effective and pleasant reading were often not provided. Today, due to their previous negative experiences with books, which was forced and heavy throughout their educational years, and the availability of “easier” and more entertaining media, they are now less motivated to give books another chance. However, the activity of reading books can provide big advantages for self-development, creativity and success, amongst others.

Therefore, the overall challenge is to develop a design (concept) that includes a brief, playful and culture-sensitive introduction to the power of reading books with a call to action. It needs to be brief to compete with other attention-hunting media. It needs to be playful to avoid associations with reading for study and school. Finally, it needs to be culture-sensitive to communicate that reading is not only something foreign but holds local value and can benefit anyone’s personal development.

The adjusted design objectives are:

1) Inform and create awareness of
   a) the benefits, joys and powers of reading books
   b) the current state of reading (culture) in Nairobi and where it could be
   c) the origins of people’s negative associations with books and reading

2) Provide support for discovering an interest in reading (even challenging) books.

What should be addressed is the awareness, beliefs and mindset of the target group mem-
bers, which will have the potential to affect
the personal reading cultures and optimally, in
consequence, their communities as well.

Next, a more elaborate guideline for the design
phase is defined, which includes possible
restrictions for the development of the design
due to the thesis scope.

4.3.4. Guidelines for the design
phase

The design needs to be strongly tailored to the
local context of Kenyan culture and the current
reading culture system. This may include
recognizing the highly informal society and
informal economic sector, plus a general lack
of trust within the society. Further, the design
must provide as much as possible for the
users, in the easiest way possible.

It must be stressed that there cannot be a
quick fix in a complex ecosystem like Nairobi's
reading culture. For the reading culture to
shift, encompassing solutions developed in
long-term collaboration between all relevant
stakeholders and actors would be required.
This needs to be taken into account, but none-
theless, a small and impactful enough design
should be developed. This should be easily
accessible, with low or no costs, and it should
not worsen the current reading culture state.

The design should optimally attract attention
and curiosity on a wider level. It needs to allow
people to better understand the current status
quo, participate in fostering a reading culture
and to work with their own surrounding. It
needs to provide information on why people’s
personal reading culture but also the societal
reading culture in Nairobi should be improved.

The design needs to somehow answer to
younger adults’ needs, who are also looking
for better (job) opportunities to build the life
they wish. The design needs to suggest how
this can be achieved by reading books. For
example, the design could communicate how
reading allows for personal and professional
development, for a competitive edge in finding
work, for personal growth and steps on how to
do all that (why read, how to read, how to know
oneself to know what to read, how to build
areas of passion).

Additionally, the design should emit a joyful
experience which would make the people
addressed feel positive and confident about
themselves, as well as hopeful that they too
can become readers.

Further notes (which were developed after
revisiting the research findings and insights
again) on what else could be considered when
designing for change in personal and public
reading culture are presented in Figure 21.

In this chapter, the design challenge, target
group and design guidelines have been clearly
defined. Similar to the analysis and synthesis
phase, which was accompanied by the first
round of secondary research, another round
of secondary research is conducted to support
and enrich the design process. Therefore,
before outlining the design process and
introducing the design results in chapter six,
the second round of secondary research is
presented in chapter five.
<table>
<thead>
<tr>
<th>Public reading culture</th>
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<tr>
<td>• Appreciation for the local culture.</td>
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<td>• An inspiring environment.</td>
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<tr>
<td>• Placing the design where people spend time already (to put books or raise awareness) to make it easy for them.</td>
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<tr>
<td>• Who inspires young people? Popular media could be used.</td>
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<tr>
<td>• Intervention early in life.</td>
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<td>• Parents need to encourage a balance for children when it comes to watching TV, using the internet and reading.</td>
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<td>• There is a need to raise awareness and start a dialog about this topic.</td>
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<td>• Another need is mainstream advertisement, the idea that reading books matters must be ingrained in people’s minds.</td>
</tr>
<tr>
<td>• Focus on the percentage of the population that already reads (40%): trickle-down effect to the other 60%.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal reading culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Give as much possibility in the easiest way possible.</td>
</tr>
<tr>
<td>• Little costs, but eventually, some might be good for value creation.</td>
</tr>
<tr>
<td>• Easy access -&gt; digitally or during daily life.</td>
</tr>
<tr>
<td>• As condense as possible. No more information overflow.</td>
</tr>
<tr>
<td>• Word of mouth will be needed.</td>
</tr>
<tr>
<td>• People need to see themselves in a story or message.</td>
</tr>
<tr>
<td>• It can take a culture change or an influential mentor.</td>
</tr>
<tr>
<td>• One needs to know oneself in order to know what is of interest, how one operates, whom one would want to be.</td>
</tr>
<tr>
<td>• One needs to know that hard work will pay off.</td>
</tr>
<tr>
<td>• People’s actions are currently on a MUST-HAVE basis. How to make reading a must-have?</td>
</tr>
</tbody>
</table>

Figure 21. Collection of notes on what needs to be considered when designing for change for personal or public reading culture.
Secondary Research II

Chapter five presents the second part of the secondary research of this thesis. The chapter starts out with researching change. Change theories are considered as well as literature on designing for behavior change and the importance of values in this. Further, systems thinking and paradigm change are explored. A brief philosophical and critical review on education is introduced next, considering the work of Ivan Illich and Paulo Freire. Finally, the chapter explores the topic of reading, aiming to understand how we read, reading approaches, what one should read, threats to reading, why reading is not enough and the importance of a learning mindset.

5.1 / On change

It became clear that secondary research is needed to understand how change of any kind can be initiated. In this thesis, change is relevant on the systems level, such as how to trigger changes in the reading culture in Nairobi, as well as on the individual level, such as how people can change their behavior or beliefs and attitudes when it comes to reading books.

Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has
– Margaret Mead; (Margaret Mead Quotes, n.d.)

5.1.1 Change theories

Numerous influential change theories have been developed in the last century. Six of them are briefly considered and outlined here, which should provide a basic understanding of the nature of change. While some focus on change in general, most of them are concerned with behavior change. Both kinds of change are relevant here, as change for the overall reading culture in Nairobi are considered, as well as change in the behavior and attitudes of individuals towards books and reading.

Lewin’s Three-Step Change Theory from 1951 begins with the unfreezing of the status quo, pushing the system into a movement towards the desired new state, and then refreezing the new state to stabilize and maintain it.
Throughout the process, the integration of new values plays a role. All in all, Lewin's theory essentially explains how powerful forces promote change and how inhibiting forces oppose change (as cited in Kritsonis, 2005).

Lippitt's Phases of Change Theory from 1958 is a seven-step theory which stresses the importance of the agent of change. The change process begins through the diagnose of the problem and continues to motivation and capacity assessment for change, implemented by the change agent. Next, action plans need to be developed and the role of the change agent needs to be identified. Then, change must be maintained and finally, the change agent should retreat. Optimally, this process of change is implemented in connection to relevant adjacent systems (as cited in Kritsonis, 2005).

The Change Theory by Prochaska and DiClemente, or also called the Transtheoretical Model of behavior change, was developed in 1977 and originates in health care. The theory understands change as a process of five stages: pre-contemplation, contemplation, preparation, action, and maintenance (Figure 22) (Hammond & Niedermann, 2010). In this theory, stage one and two recognize phases before individuals start to actively prepare for change. First, individuals can be avoidant to identify a problem and second, individuals may be aware of a situation but remain with a lack of motivation to actively start preparing for change. Overall, the Transtheoretical Model includes the potential exit and re-entrance of individuals at any stage of the process (as cited in Kritsonis, 2005).

Social Cognitive Theory, or previously called Social Learning Theory, began with Albert Bandura in the 1960s. As per the theory, behavior is shaped by three factors: environment, people and behavior (Figure 23). It can never be only one or two of them (University of Twente, 2004). Social Cognitive Theory also identifies that a change in behavior is mostly

![Figure 22. The Transtheoretical Model by Prochaska and DiClemente (1977).](image)

![Figure 23. Overview of social cognitive theory by Pajares and Schunk (2001).](image)
determined by an individual’s possession of self-efficacy. Self-efficacy means that an individual truthfully believes in their ability to achieve goals. Three methods to increase self-efficacy are to have access to clear instructions, an opportunity for skill development or training, and the modelling of the desired behavior (as cited in Kritsonis, 2005).

Social Practice Theory was first shaped by theorists Pierre Bourdieu (1977) and Anthony Giddens (1984). The theory suggests that the agency for change lies within the influences of social conditions. How individuals participate in maintaining or shifting the status quo based on how they replicate or disrupt the norms of the day influences the overall change. Within the theory, the practice itself receives more attention than individuals or social structures.

Next to the theories above, understanding how attitudes can be changed is important as well.

Attitudes are basic evaluations in the form of beliefs and associations towards objects or circumstances, ranging from positive to negative. They are rarely stable nor predisposed to an individual and can change based on internal or external cues. Internal cues can be, for example, a motivation to avoid cognitive dissonance (two conflicting thoughts or behaviors) and external cues can be related to social environment and influences (Petty, Wegener & Fabrigar, 1997).

As per Zanna and Rempel (1988), attitudes develop and change based on three components: cognition (new knowledge or understanding), affect (emotion) and past behaviors (Figure 24). Although these components tend to be intertwined, a single new emotional information, for example, could overrule older information, which could instantly create change in an individual’s attitude.

5.1.2 Designing for behavior change

“behavior is not just an individual choice, it’s a dynamic relationship between experiential influences, internal perceptions, and value states.”
(Acaroglu, 2008, p. 66)

Plenty of literature has been published on the topic of designing for behavior change. Some influential models and methods are considered next, to understand how this field of design can be beneficial for the challenge of designing for younger adults in Nairobi and inspiring them to read more (books).

Captology (2003) and the Fogg Behavior Model (2009)

BJ Fogg has been a pioneer in discovering how computers can persuade people to take on different behavior, by making use
of behavioral principles. He coined the term Captology to describe this phenomenon. Since then, many companies and institutions have used behavioral principles and BJ Fogg's work to design products that captivate users and at times even manipulate them.

The Captology concept focuses on attitude or behavior change which results from human-computer interaction. The effects that are wanted are well planned and intentional. The concept differentiates macro and micro persuasion, where products exist so persuade and motivate on the macro level, whereas, at the micro level, only persuasive elements are used to achieve an overall goal (Fogg, 2003).

Fogg (2003) introduces a framework that shows three roles that technology can play in relation to the user or human. First, it can be a tool which increases a capability. Second, it can act as a medium in that it provides an experience for the user. Third, it can become a social actor, where a relationship is formed between the human and the technology. Depending on the role that is desired, different persuasion strategies have to be designed. Within Fogg's work, seven persuasive technology tools are introduced, four principles for technology acting as a medium and five principles for becoming a social actor. Other important topics covered are credibility, the internet and how mobility and connectivity support the persuasive powers of computing technology (Fogg, 2003).

The principles are summarized in appendix 3, with four highlighted principles identified as potentially relevant for the design phase of this thesis.

In 2009, BJ Fogg introduced a model for understanding human behavior and how to utilize it to design for behavior change. Named the Fogg Behavior Model (FBM), the psychological concept on which it is based identifies three

![Fogg Behavior Model Diagram](image)

Figure 25. Left: the Fogg Behavior Model (Fogg, n.d.). Right: the Fogg Behavior Model including the subcomponents, as per Fogg (2009).
factors that control if a behavior occurs. These three factors are Motivation, Ability and Triggers. The FBM model is presented in Figure 25 (left), where triggers are still called prompts as used in earlier versions of the model. It shows that in order for a behavior which requires high motivation to occur, the behavior needs to be triggered and easy to perform.

The three factors for behavior change as per Fogg (2009), also include subcomponents, which he describes as Core Motivators (which are pleasure/pain, hope/fear and social acceptance/rejection), Simplicity Factors (which are time, money, physical effort, brain cycles, social deviance, non-routine) and Behavior Prompts or later Triggers (which are facilitator, signal, spark) (Fogg, 2009). These are visualized in Figure 25 (right) as well.

While the Fogg Behavior Model focuses on influencing people’s behavior, it, however, does not address a change of attitude.

Nudge (2008)

“A nudge is any factor that significantly alters the behavior of humans.”
(Thaler & Sunstein, 2008, p. 8)

Another approach to influencing human behavior, but more concerning the decision making of groups or individuals, is a concept called Nudge. Based on behavioral science, political theory and behavioral economics, the concept proposes gentle and positive reinforcement and indirect suggestions as a means of influence. Although the idea of nudges has been defined before 1995, Richard Thaler and Cass Sunstein brought attention and popularity to it in 2008.

Thaler and Sunstein (2008) stress that the intuitive and automatic system of thinking (Automatic System) of humans almost always wins over the reflective & rational system of thinking (Reflective Thinking), and that especially the social environment poses an enormous influence on human behavior. In their work from 2008, they illustrate four occasions to which nudges are best applied. First, nudges are best applied to situations where humans are able to receive benefits immediately, but at a cost that comes later. In those moments they tend to make decisions that are not in their best long-term interest as they are guided by the immediate reward. Second, nudges are useful when a choice includes a certain degree of difficulty. And third, when humans have to make decisions that are coming at a rare frequency, they need nudges to decide what decisions are in their best interest. Fourth, nudges are needed when there is no previous experience with something and people are unsure if a choice would be to their liking (Thaler & Sunstein, 2008).

As per the Nudge concept, designing choice architecture includes the following steps:

- Apply incentives that fit the targeted people
- Understand mappings. Describe how a certain choice translates into a specific practical outcome, e.g. money or benefits.
For that, the method of RECAP can be used: Record, evaluate, compare, alternative, prices.

- Set defaults that are the best choice for the target group. People select usually the path of least resistance.
- Give feedback at all times, to not lose the target group.
- Expect errors and plan for them.
- Structure complex choices for easier understanding. The more complex a choice, the more structure is needed, step by step. (Thaler & Sunstein, 2008).

The Behaviour Change Wheel (2014)

The Behaviour Change Wheel (BCW) is a guide for identifying intervention opportunities and for strategically designing them.

At the core of the BCW lingers a model of behavior called COM-B. This stands for Capability, Opportunity, Motivation and Behavior, which recognizes that behavior is always “part of an interacting system involving all these components” (Michie, Atkins & West, 2014, p. 6). A valuable quality of this model is its thorough development from 19 carefully selected frameworks of behavior change by the authors.

Figure 26. The Behavior Change Wheel based on Michie et al. (2014). Drawn by Sara Gottschalk.
It aims to encourage “intervention designers to consider the full range of options and choose those that are most promising through a systematic evaluation of theory and evidence.” (Michie et al., 2014, p. 6).

The BCW can be utilized and applied to individuals as much as to groups, sub-populations and populations, which makes it a powerful tool for designing interventions. Michie, Atkins and West (2014) stress, however, that behavior is fluid and can change easily based on context and social influence. Even though the model has been based on scientific research, it is noted that there might still be gaps when applying it to “complex real-world problems” (Michie et al., 2014, p. 11).

The basic process of the BCW is to 1) understand behavior, 2) identify intervention options, and 3) identify implementation options. In order to evaluate and design interventions, seven criteria are provided. The so-called APEASE criteria are affordability, practicability, effectiveness and cost-effectiveness, acceptability, side-effects/safety and equity (Michie et al., 2014).

The visual presentation of the Behavior Change Wheel provides an easily understandable and accessible overview (Figure 26). The inner green circle lists different sources of behavior. The middle red circle presents intervention functions in relation to the former. And the outer grey circle arranges policy categories, also in relation to the former.

The Behavior Change Wheel is an impressive and multi-layered tool. In this thesis, it has been used for gaining a better understanding of intervention identification and design, which matched the thesis topic well of identifying design opportunities. Further, the BCW was used for evaluating the developed design concepts.

5.1.3 Considering value in designing for change

When designing for change, it is essential to be aware of the importance of values. That means, a designed innovation, for example, must align with people’s values as well as their cultural values present in that context.

In her book titled Innovation Design, Elke den Ouden (2011) investigates the role of values in designing innovations. Den Ouden (2011) analyses four levels of value—value for user, organization, ecosystem, and society—and illuminates value from four different perspectives. She compiles and presents these levels in the Value Framework (Figure 27), matched with four different perspectives, which entail the economic view, psychological view, sociological view, and ecological view. Each of these perspectives is further associated with a specific value concept, which is also implemented into the abovementioned Value Framework.

The purpose of this framework, which is an “integrated view on value from social sciences” (Den Ouden, 2011, p. 55), provides an easy reference for designers when designing and evaluating innovations. Den Ouden (2011) notes that innovation is “considered valuable if it addresses the four levels from all four perspectives” (p. 56).

As this thesis project does not intend to be an
innovation per se, only the psychological and sociological view are considered more closely in this brief review as they are most relevant for the thesis context.

"Values in the psychological perspective define what people strive for—the human values—as well as how these influence their behavior—the motivational values."

(Ch. Ouden, 2011, p. 31)

Within the psychological perspective, Den Ouden (2011) explains that motivational values can be differentiated by the type of motivational goals they express. The three universal requirements of human existence, for example, are biological needs, requisites of coordinated social interactions, and demands of group survival and functioning (Den Ouden, 2011). Den Ouden further endorses the ten motivational types of values as listed by S. Schwartz in 1996, where the ten central goals are names as power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security (as cited in Den Ouden, 2011).

In general, people’s assessment of their lives and thus their state of happiness and contentment depends on wealth and culture (Den Ouden, 2011). While these assessments are extremely subjective, Den Ouden (2011) notes that people often use what they find in their surroundings to evaluate their state, and that cultural norms often dictate how people feel in certain circumstances.

Due to this psychological view on values, Den Ouden (2011) reasons that (innovative) designs and solutions should provide pleasant experiences and address the values of the users, as well as communicate them properly. If they do, the users of the designs can then be expected to adopt the new product, which simultaneously often has great potential of increasing their life satisfaction. Den Ouden (2011) summarizes that it is crucial to understand people’s motivational values for designing solutions that are supposed to transform people’s lives, as people are “not likely to change their behavior in a direction that is not in line with their value orientation” (p. 32).

"The ultimate value of society is the greatest happiness of the greatest number of people"

(as cited in Den Ouden, 2011, p. 46)

The sociologists and anthropologists’ views onto values are focused on groups of people, relationships and the collective values shared in a society, for example. Den Ouden (2011) illustrates many values connected to this sociological perspective. This ranges from absolute and transcendental value (value system, culture) to sentimental and historic value, up to symbolic value (reciprocity, money and greed) (Den Ouden, 2011). Den Ouden (2011) defines the value system, as mentioned above, as “the system that guides the judgment of what is true, beautiful, good, proper or desirable in human life” (p. 38). Furthermore, she states that the human experience is greatly influenced by the social environment which comprises of culture, economics and politics. Additionally, societies can be divided into levels whereby the higher levels carry more
value. For example, the macro level can refer to populations or religion, the meso level can include, for example, a neighborhood, region or a political party, and the micro level usually entails individuals (Den Ouden, 2011).

Value systems can vary significantly from one culture to another and most often define people’s worldview (Den Ouden, 2011). Already at an early age, values are instilled into individuals and shape their judgment about their well-being in relation to their surrounding. Interestingly, den Ouden explains that “the Western society is the odd one out compared with the rest of the world because of the supreme value it places on individuals . . . and its focus on economic values. Other societies are more holistic.” (Den Ouden, 2011, p. 39).

At the user level of value, a sense of belonging is an essential factor that influences people’s happiness (Den Ouden, 2011). Actions that foster a sense of belonging, therefore, add to people’s wellbeing. These actions could be to buy a product that expresses belonging to a particular group or a desire to contribute to society overall. For societal wellbeing in general, this means that it increases when...
“as many people as possible contribute from their own strengths in a meaningful way” (Den Ouden, 2011, p. 46).

The following quote from den Ouden (2011) summarizes the importance of considering value in designing for (behavior) change:

*new products and services will only have an impact if they also address a change of behavior. This is not likely to happen if people need to sacrifice value they have become used to, or which has been on their wish list for some time. Changing behavior is much more likely to happen if people recognize the need for change, because it is a pleasurable experience, or because it is fun to do so. (p. 61)*

As for this thesis project, it is crucial to understand people’s personal values but also the cultural values. If reading books is not prioritized and seen as valuable in society, even more collaborative effort is needed to establish, foster and maintain public and private cultures of reading. Therefore, addressing people’s and society’s current values and connecting them to books and reading in a new way is necessary.

### 5.1.4 Systems thinking

While human beings are extremely complex, so are the systems around them in which they reside. In this section, it is investigated how systems work and how change can be initiated through this understanding.

The American scientist and writer Donella H. Meadows, an influential voice who introduced systems thinking to a wider audience, described a system quite simply as “a set of things—people, cells, molecules, or whatever—interconnected in such a way that they produce their own pattern of behavior over time.” (Meadows, 2008, p. 2).

Meadows (2008) notes that as systems become more complex, their behavior can become counterintuitive and astounding to humans. Likewise, the leverage (or intervention) points that need to be addressed to, for example, re-stabilize systems or to initiate change, can likewise feel far away from intuitive (Meadows, 2008).

In Meadow’s book titled *Thinking in Systems—A Primer*, she illustrates system structures and behaviors, and why systems are usually so effective.

System structures that produce common patterns of problematic behavior are called archetypes and are also referred to as system traps, which Meadows (2008) lists and explains including opportunities that arise from having noticed them. But understanding these sometimes “perverse” system behaviors are not enough. Meadows offers 12 leverage points (from least (position 12) to most (position 1) important/effective) for system intervention. The three potentially most relevant leverage points for this thesis are presented and briefly explained below (from least to most effective):

**Information Flows (position 6)**

Missing or incomplete information flows between all relevant parties of a system can cause a system malfunction. As human beings...
are imperfect, sometimes an avoidance of accountability for their actions and therefore an unwillingness to share relevant information or a lack of consideration of possible bigger effects can cause systems to fail (Meadows, 2008).

**Rules (position 5)**
Every system operates under certain rules, such as incentives, punishments, constraints. However, if these rules are only optimized for a specific group, the system can get out of balance considering another bigger system (Meadows, 2008).

**Paradigms (position 2 – second-most effective)**
Paradigms in this context are described as the “mind-set out of which the system—its goals, structure, rules, delays, parameters—arises” (Meadows, 2008, p. 162). Meadows recognizes that paradigms are extremely hard to change, more than anything else in a system. However, she still lists it as the second most effective leverage point because “there’s nothing physical or expensive or even slow in the process of paradigm change. In a single individual it can happen in a millisecond.” (Meadows, 2008, p. 162). On the societal level, paradigm changes are resisted more than anything else in order to maintain the status quo, Meadows notes. Nonetheless, they are not impossible and certain tactics can support that process.

**Transcending Paradigms (position 1 – most effective)**
As an extension to the previous point, as per Meadows (2008), the most effective leverage point is to transcend paradigms, which means to avoid being too attached to specific paradigms in the first place. The optimal state is to stay flexible, on an individual but also on a societal level (Meadows, 2008).

Meadow’s (2008) final collection of system wisdom encourages the application of systems thinking by providing concrete suggestions (see appendix 4).

* a mistaken belief that the way to optimize the whole system is to optimize each of the parts
  *(Stroh, 2015, p.23)*

In Systems Thinking for Social Change, author David Peter Stroh (2015) applies systems thinking to develop a framework which aims to specifically address social change. Stroh lists four common challenges of change and tackles them through the application of systems thinking. First, he argues that thinking in systems can motivate people. Second, it can catalyze collaboration. Third, it can focus people to work on a few key coordinated changes over time, and fourth, it can stimulate continuous learning (Stroh, 2015). Based on this, Stroh introduces the Four-Stage Change Process (Figure 28):

1. Build a foundation for change and affirm their readiness for change.
2. Clarify current reality at all levels of the iceberg and accept their respective responsibilities for creating it.
3. Make an explicit choice in favor of the aspiration they espouse.

4. Begin to bridge the gap by focusing on high-leverage interventions, engaging additional stakeholders, and learning from experience (Stroh, 2015, pp. 74-77).

Further, Stroh (2015) offers four screens for organizing gathered information about a system in order to map it. (These have been considered for example for the reading culture map presented in chapter 4.2.) The screens are:

- Listen for what is curious, confusing, or contrary among interviewees.
- Distinguish measurable data from how people interpret these data.
- Identify key variables, often thought of as critical success factors or key indicators.
- Look for recognizable story lines or archetypes (Stroh, 2015, p.94).

The theory and practical information on systems thinking provided by Meadows and Stroh, including how to apply it to activate change in any system, has been invaluable for understanding and (re)considering the thesis’ empirical and field research data. On an individual, societal and reading culture level, systems thinking has greatly fostered the understanding of Nairobi’s reading culture (as a system) and the identification of leverage points and thus design opportunities.

As this section already mentioned paradigms, it lays the ground for the next segment which explores the topic of paradigm change a bit more.
5.1.5 Paradigm change

“men do not share the world; that instead, what they share is the structure of their minds” (as cited in Garduño García, 2018, p. 77)

As per the Oxford Dictionary, a paradigm is a "typical example or pattern of something; a pattern or model" (Paradigm, n.d.), or a “world view underlying the theories and methodology of a particular scientific subject” (Paradigm, n.d.). While the first definition carries a broader meaning, the second one restricts paradigms to science.

A concept called paradigm shift was first identified by the American physicist and philosopher Thomas Kuhn in 1962. He described it as a "series of peaceful interludes punctuated by intellectually violent revolutions", where "one conceptual world view is replaced by another" (as cited in Dingli & Seychell (2015), p. 23). Kuhn focuses on paradigm shifts in relation to scientific theory, where step by step, one older theory is replaced by a new one, which in order to happen, needs to shift people’s entire ways of thinking about the world (Kuhn, 1970).

Today, the concept of paradigm shift has been adopted to many areas of knowledge, such as business, politics but also design (for example see Dorst, 2008; Wood, 2013). While these models of paradigm shift are far-reaching and encompassing, a perhaps lighter version of it might be relevant for this thesis: a shift that not so much exchanges complete world views but rather readjusts the existing paradigms of a person related to certain ways of doing and feeling about things.

By referring to Thomas Kuhn’s work, Meadows (2008) powerfully describes how paradigms can be changed:

"You keep pointing at the anomalies and failures in the old paradigm. You keep speaking and acting, loudly and with assurance, from the new one. You insert people with the new paradigm in places of public visibility and power. You don’t waste time with reactionaries; rather, you work with active change agents and with the vast middle ground of people who are open-minded." (Meadows, 2008, p. 164)

Meadows further mentions that paradigms can be changed by simulating the system and building a model of it. That way, an outside view can be taken, which allows to see new connections, which possibly make the viewer question the initial paradigm or system’s workings (Meadows, 2008).

Shifting or changing paradigms for groups or societies is a grand endeavor. Often, individuals need to change their personal paradigms first before they can become a critical mass that eventually influences the collective paradigm in order for it to shift. As mentioned by Meadows (2008) earlier, changing a personal paradigm can happen in an instant, if the right cues appear at the right time and align with the person’s general values.

An appealing explanation (see Figure 29) of how to change one’s personal paradigms comes from the founder of the Proctor Galla-
gher Institute, Bob Proctor. (While this source’s quality might be criticized, the content does not contradict related scientific findings.) Proctor explains that a person’s paradigms are formed during early childhood. Babies are socialized (or “programmed”) by being taught certain behaviors and by them observing their environment. By that, the baby subconsciously learns how to behave, think and even feel, which later translates in the young child’s thoughts, ideas and images, which then become more conscious to that human being (Proctor Gallagher Institute, 2015).

The human mind can be differentiated between the conscious and the subconscious mind, each with its own belief system, and it is the subconscious mind that directly influences the body and its wellbeing. The subconscious belief system, or paradigms, are much more powerful than the conscious mind and control most of our automatic behavior. This explains plenty of unwilling harmful behavior, such as smoking or overeating. Despite a conscious will to change this behavior, an underlying paradigm still finds that this behavior is beneficial, for example, for releasing stress (Proctor Gallagher Institute, 2015), and thus no real change of behavior can occur.

Figure 29. The origin of personal paradigms and how to change them, as per Proctor Gallagher Institute (2015).
Often, paradigms are naturally passed down from generation to generation. This happens through the process of upbringing and dictates a person’s sense of logic, utilization of time, the perception of situations and a person’s effectiveness (Proctor Gallagher Institute, 2015). In order to activate paradigm change then, it is necessary to address the subconscious to understand and change the paradigm that seems to prevent the desired behavior. However, being able to do so requires great self-awareness and a strong willingness and desire for change (Proctor Gallagher Institute, 2015). Once the choice for change is made, relentless repetition of the desired thought and behavior is required until it finally becomes part of the automatic system (Proctor Gallagher Institute, 2015).

Changing paradigms is certainly a complex topic, but it addresses change at its root. Linking this to the thesis topic of inspiring interest in books and reading, a paradigm change from passive indifference to active curiosity could foster a desire to understand the world better. This could lead to the target group seeking more profound materials for their development. In the process of that, they may start to reconsider reading books despite their negative previous experiences. However, and this goes back to self-efficacy as mentioned in section 5.1.1, if a person subconsciously does not believe in their abilities to create change or better themselves, for example, their desire alone may not be enough.

5.2 / Education: a brief philosophical review

Throughout the research and design process, strong doubts about how to appropriately address the topic of fostering joy and meaning in reading (books) for adults in Nairobi persisted (especially due to my own foreigner position in this). It was by luck then, that the works of Ivan Illich and Paulo Freire were brought to my attention, which yielded the insights well needed. In this brief excursion into the philosophical realms of education and schooling, these two pieces of work dating back to the early 1970s are outlined.

In his book titled Deschooling Society, first published in 1971, philosopher Ivan Illich argues why schools should be disestablished. Illich (1973) lists the paradoxes and injustices in the educational and schooling system at the time. For example, he states that “educational disadvantage cannot be cured by relying on education within the school” or that “It should be obvious that even with schools of equal quality a poor child can seldom catch up with a rich one” (pp. 4-5). Illich further notes that schools taking sole responsibility for children’s education “discourages other institutions from assuming educational tasks” (p. 5). Other institutions could include parents, other types of mentors, but also leisure clubs or public facilities such as libraries. Illich (1973) furthermore warns that placing too much confidence in the educational system, established by the government, may not actually provide for learning that benefits the students for personal growth and the acquisition of life and work skills. Illich goes on to claim that “[n]either learning nor justice
is promoted by schooling because educators insist on packaging instruction with certification. Learning and the assignment of social roles are melted into schooling.” (Illich, 1973, p. 7). Instead of learning for life, school systems often teach students everything but, as social norms and a strive for good grades does not provide room for intellectual exploration (Illich, 1973).

When it comes to reading, therefore, the activity is packaged as a necessity to merely pass exams, Illich argues. He states that it is introduced within an environment of pressure, where often reading material is pressed into the students’ brains to be remembered and reproduced, often within an expected and planned framework of thinking presented by the teachers. This is counter-productive to developing an understanding of reading as a lifelong activity that sparks joy and curiosity about the topics studied (Illich, 1973). Illich continues by addressing learning and how schooling is rarely the cause of it. He says that most learning is not the results of teaching but “happens casually” and that “even most intentional learning is not the result of programmed instruction” (p. 7). He adds that nonetheless, planned learning needs planned instruction, but that great improvement is necessary.

As per Illich (1973), schools and even universities often lack the structures or will to encourage the “the open-ended, exploratory use of acquired skills” (p. 9). The main reason for that, he writes, is that school is mandatory and has become “schooling for schooling's sake” (p. 9). Illich proposes “a network or service which gave each man the same opportunity to share his current concern with others motivated by the same concern” (p. 10) as a more radical alternative to school. Doing that, instead of matching early learners based on age group, faces them with topics to be studied for which they actually have an interest. This more student-centered approach could be supported by occasional assistance which would facilitate them with “space, schedules, screening, and protection” (Illich, 1973, p. 11).

Finally, Illich (1973) summarizes that “[c]ontemporary society is the result of conscious designs, and educational opportunities must be designed into them.” (p. 11).

Although Illich’s work is several decades old, and societies have overall changed since then (especially considering the technological developments), greater adjustments in the schooling systems in general have yet to be initiated. The important takeaway from this work is that changing societies requires flexible institutions. While learning is a fluid and often unpredictable process where new and developing skill sets have become even more critical (such as creativity, imagination and innovative thinking in recent years), formal education manages to assist in training students in these skills only to a certain extend. The responsibility cannot be placed alone on schools and thus other institutions need to gain agency to educate and share that responsibility. Considering that Kenya’s educational system remains rather traditional, Illich’s work remains relevant.

Another fascinating and perhaps most eye-opening exploration into education, schooling and pedagogy comes from the Brazilian
educator and philosopher Paulo Freire. His philosophical thinking on pedagogy with focus on an oppressor-oppressed relationship was published in 1970. In his work, Freire (2000) explains the roles of oppressor and oppressed as well as their relationship dynamics. He justifies the need for liberating both parties (which can be individuals or peoples) through the concept of pedagogy of the oppressed. The concept entails the notion that every human being, no matter how oppressed, holds the capability to critically view the world and take action to transform it, and that if executed, this would benefit the oppressed as well as the oppressor(s) (Freire, 2000).

Freire (2000) details how the process of liberation starts with the recognition of the oppressed, “that they have been destroyed.” (p. 67). Then, with the right tools, they can start to view the world more critically, recognize themselves in a limiting situation (rather than a finite reality), which they now perceive as being transformable, and commence to take action towards liberation. “They will tend to reflect on their own ‘situationality’ to the extent that they are challenged by it to act upon it.” (Freire, 2000, p. 108). This reflection and participation in that process are extremely important as otherwise they remain passive and thus oppressed, Freire (2000) notes.

It is further explained that pedagogy of the oppressed has two stages. First, “the oppressed unveil the world of oppression and through the praxis commit themselves to its transformation.” (p. 54) (By praxis, Freire refers to a combination of reflection and action; see Figure 30) In the second stage, the reality of oppression has already been transformed. In this stage, the pedagogy no longer belongs only to the oppressed, but “becomes a pedagogy of all people in the process of permanent liberation.” (Freire, 2000, p. 54).

The crucial aspect of pedagogy of the oppressed is a “critical and liberating dialogue” (p. 65). This, as per Freire, needs to be present during any stage of the process to liberation. Therefore, any non-oppressive leadership or education must practice “co-intentional education” (p. 69), as Freire calls it. What he means by that is that both parties, may it be teachers and students or leadership and people, co-intentionally unravel reality, and thereby come to know it critically, in order to finally recreate it together. In this co-intentional education, both parties become teachers and students at the same time (Freire, 2000).

As Illich, Freire (2000) criticizes common educational practices. He says that “everything in this ready-to-wear approach serves to obviate thinking.” (p. 76). He agrees that proper dialogical education is problem-posing and entails educational content that is the “organized, systematized, and developed ‘re-presentation’ to individuals of the things about which they want to know more.” (Freire, 2000, p. 93)
In pedagogy of the oppressed, dialog is an "existential necessity" which is also "an act of creation" (p. 88). By illustrating how spoken words are action and reflection in one (which is what work is; see again Figure 30), Freire (2000) concludes that by using words, people are already transforming the world through naming it. This then means that dialog is a way "by which they achieve significance as human beings" (p. 88), transforming the world with their words. Freire remarks that words without the action part are mere verbalism and that words without reflection are mere activism (Freire, 2000).

Important factors that need to accompany dialog, as per Freire (2000), are the following: "a profound love for the world and for people" (p. 88) as well as hope, as "dialogue cannot be carried on in a climate of hopelessness" (p. 91). Further, he summarizes that "[o]nly dialogue, which requires critical thinking, is also capable of generating critical thinking. Without dialogue, there is no communication, and without communication, there can be no true education." (p. 91).

Freire’s concept of the pedagogy of the oppressed shows that education must take place through dialogical encounters. While examples of education with teacher/student or leadership/people relationships are provided, the pedagogy of the oppressed can certainly be applied to any oppressor-oppressed circumstance. This may in some cases even apply to parent/children dynamics or any dysfunctional relationships.

In conclusion, considering Illich’s and Freire’s work helped to put this thesis topic in a grander context. This thesis project aims to inspire adults in Nairobi that books and focused reading is beneficial for their development and their lives. The target group members have been traumatized by a schooling experience, when it comes to reading. Their perspective and aversion to reading, in particular to books, have been shaped by that experience. In order to support them to free themselves from that past and consider reading books as something beneficial to them, therefore, requires a wider, more encompassing reflection, which has been provided by Illich’s and Freire’s work.

Additionally, it has raised critical questions as to how much someone (like me) coming from outside of Kenya and especially from a western (historically charged) country can and should insert themselves in a sensitive topic like this. Therefore, great attention must be placed on how a design for this topic could look like and should be communicated. Finally, this short philosophical excursion is an important reference for defining the tone of voice used in the design concept as well as what type of content should be included and how.

5.3 On reading

In order to prepare valuable content for the final design outcome of this thesis, the topic of reading must be studied thoroughly first. This includes understanding why we read, how and what to read, reading strategies and approaches, as well as threats to reading and why reading alone might not be enough for a goal of self-development.
5.3.1. Why we read

Similar to art, reading has a purpose beyond mere productivity. As per the "creative mastermind" David Ogilvy, reading can be “a priceless opportunity to furnish your mind and enrich the quality of your life.” (Popova, 2016). This opportunity can support the pursuit of success but also the pursuit of beauty and understanding about our place in the world. Theodore Roosevelt, the 26th president of the United States, shares in his autobiography how the written word and the consumption of it can speak to the core of people, to their feelings, and how that is a great human necessity for wellbeing:

"[We] all need more than anything else to know human nature, to know the needs of the human soul; and they will find this nature and these needs set forth as nowhere else by the great imaginative writers, whether of prose or of poetry." (Anderberg, 2014)

Shane Parrish, a passionate reading advocate and pursuer of worldly wisdom, who runs a popular blog on reading and learning, sees reading as much more than merely a productive pursuit, which becomes clear through his many articles on the activity (Parrish, n.d.b). Parrish notes that reading makes smarter. He also remarks that it allows for meeting the most accomplished and inspiring people in history, who readily share their experiences and wisdom collected over their lifetimes in the written form. This stimulation of the mind and body (in the form of emotions) can captivate, enlighten and change people, which is what art does.

"One glance at (a book) and you hear the voice of another person - perhaps someone dead for thousands of years. Across the millennia, the author is speaking, clearly and silently, inside your head, directly to you. Writing is perhaps the greatest of human inventions, binding together people, citizens of distant epochs, who never knew one another. Books break the shackles of time.

—Carl Sagan in Cosmos; (A quote from Cosmos, n.d.)

With humanity about 200-300 thousand years old, life qualities and technologies have changed enormously, especially during the last century. While books can carry great value for individuals, they are also part of the foundation of human development and collaboration. Humans have always had a strong urge to document themselves and their lives and to communicate with others in one form or another.

Today, a variety of methods for writing and storing thoughts and worldly wisdom are available. Nonetheless, the fundamental process and purpose are still the same. The written word informs, moves and inspires people. No matter what high-end technology is used, in the end stories want to be told, lessons want to be shared, people want to be heard and feel important in this world. Reading books and absorbing the wisdom stored in them allows us not to feel alone, but to feel that this life is a shared experience. The ability to read is a crucial skill for an individual to make sense of the world and also to take an active part in society. Fredrick Otike (2011) summarizes it well:
[Reading] is essential to full participation in modern society. It adds quality to life and provides access to culture and cultural heritage. Reading is important because it empowers and emancipates citizens. It brings people together. Reading is essential because books are the key to the world: both the real world and the fantasy world. (p. 2)

Being able to read and write is considered a key factor for accessing any individual’s potential, as well as a nation’s and people’s development. It can lift people from passiveness to activeness when it comes to shaping their personal world and surrounding.

I have frequently witnessed how discussants grow in social awareness and how they are impelled to take political action as fast as they learn to read. (Illich, 1973, p. 10)

As per the 4th edition of the Handbook of reading research, the purposes of reading are innumerable and depend entirely on the reader and how they make use of this medium:

- readers act with the meanings they bring to and construct from reading. Reading can serve the purpose of helping individuals create their personae, and claim social group membership. The purpose of reading can be to extract information, to learn new words, concepts, or practices; to use the ideas to carry out a task; to emancipate or enable participation in social and political processes; or to maintain the status quo. (as cited in Kamil, Pearson, Moje & Afflerbach, 2011)

Nonetheless, in order to make full use of the power (benefits) of books and the written word, the crucial step of gaining literacy must be completed first. Having acquired the basic skills of reading and writing, however, does not automatically mean that one is able to understand, detect relationships between different readings and content, and draw conclusions or think critically about the read. This has raised questions about how reading literacy, for example, should optimally be taught.

Many recommendations on how to learn to read exist. Don Drummond suggests that “there is no ‘best’ way of learning to read and that almost every method practiced can be successful.” (as cited in Otike, 2011). Nevertheless, it has been discovered that a few variables are likely to support the effective learning of reading, such as the following abilities: “intelligence, language, facility visual abilities, auditory abilities, physical factors, environmental influences and emotional factors” (as cited in Otike, 2011, p. 2).

Research conducted by the UK Department for Education in 2012 found that reading for pleasure is an enormously beneficial factor for learning to read. This has been reported as even more influential to a child’s educational success than the socio-economic status of the family, as per the Organisation for Economic Co-operation and Development (OECD) (OECD, 2002). Further beneficial factors that are mentioned in the same research study are positive attitudes towards reading, access to books, to have a choice for reading topics, parents and the home environment, as well as the quality of the relationship between the learner and teacher (e.g. student/teacher,
child/parent) (Department for Education, 2012). Another recent study also revealed the value of maintaining a home library for children’s literacy development up into their adult life, and for their academic success (Sikora, Evans & Kelley, 2019).

A few benefits of reading, when done with dedication, joy and a desire to understand or learn, have already been implied. In How to read a book, Adler and Van Doren (2014) elaborate on what rewards a good book can offer:

_The reward, of course, is of two kinds. First, there is the improvement in reading skill . . . . Second—and this in the long run is much more important—a good book can teach you about the world and about yourself. . . . You become wiser. Not just more knowledgeable. . . . But wiser, in the sense that you are more deeply aware of the great enduring truths of human life._ (Adler & Van Doren, 2014, p. 331)

It seems that reading books can almost be the answer to any question, challenge or dilemma in life. The great wisdom hidden in books seems to provide anything from a simple piece of information to enlightenment about the self, up to eternal wisdom of the universe. A crucial question would then be: What benefits do books not offer? And, how does one access all that books have to give? These questions will be explored later in this chapter.

More benefits of reading (books) are collected below.

_“In my whole life, I have known no wise people (over a broad subject matter area) who didn’t read all the time — none, zero.”_  
—Charlie Munger as cited in Parrish (n.d.a)

_“there is no limit to the amount of growth and development that the mind can sustain.”_  
—Adler and Van Doren (2014, p. 336)

_“Books are key to understanding the world and participating in a democratic society.”_  
—Carl Sagan as cited in Popova (2017)

_“One of the fastest and most effective ways to get smarter and gain new knowledge is to read.”_  
—Shane Parrish (n.d.c)

_“Reading fiction not only develops our imagination and creativity, it gives us the skills to be alone. It gives us the ability to feel empathy for people we’ve never met, living lives we couldn’t possibly experience for ourselves, because the book puts us inside the character’s skin.”_  
—A quote by Ann Patchett (n.d.)

_“Reading is transformative”_  
—Worldreader in Why Reading (n.d.)

_“Reading fiction [...] can counter extremism”_  
—Milnes (2018)

Considering the benefits above (next to more obvious ones such as increased vocabulary and writing skills), as well as what has been stated about self-efficacy earlier (that self-efficacy is a core skill for initiating change), it must be wondered if reading widely and immersively can support the creation of self-efficacy. After
all, reading books can transport the reader into all kinds of lives which can foster empathy and inspire. Thus, it could allow more critical and diverse thinking as well, about the world and the self, which could create innovative thinking and therefore a dreaming or imagining of what has not been possible before.

5.3.2. How to read

It seems that reading (books) is crucial to a person’s development towards reaching their potential. While this is fairly common knowledge, people all over the world, no matter how evolved their reading culture is, struggle with making good use of this resource. Therefore, it is relevant to explore how exactly reading should be done to extract that powerful personal benefit.

The first step to successfully picking up the right reading materials and books is to be inquisitive and interested in a topic or to have a question that wants to be explored. Shane Parrish writes on his infamous blog that the secret to good reading is to pursue one’s curiosities and to read what seems fascinating and interesting, which will then in return create even more curiosity and excitement (Parrish, 2017c). In contrast, slogging through books is said to be the worst one can do:

\[
\text{there are many better strategies than plowing ahead. You must pursue your curiosities! This is by far the most important principle of good reading. (Parrish, 2017)}
\]

In a biography about Michel de Montaigne, a French philosopher who lived in the 16th century, author Sarah Bakewell reveals his rule for reading: “If I encounter difficulties in reading, ’he wrote, ’I do not gnaw my nails over them; I leave them there. I do nothing without gaiety.’” (Parrish, 2016a).

If reading and books are used for following curiosity and joy, it might be natural that the reader would intuitively explore related topics to gain an even greater understanding. To make sense of the world and persist in this growingly complex world, one must read widely and diversely. “Neither a subsistence farmer nor a graduate chemist can fulfill his/her potential without the cognitive growth that comes from reading widely” (Otike, 2011, p. 5).

Surely, to attain and maintain that cognitive growth, another condition must be present: a (constant) choice to read, or a practice of reading. Adler and Van Doren (2014) explain that “There is no other way of forming a habit of operation than by operating” and that “After practice, you can do the same thing much better than when you started.” (p. 52). What they state is no surprise. If one wants to read well, and with the promised benefits, one needs to practice reading, and practice it often. To make that conscious choice also means to allocate the right amount of time to the activity and to make it a priority. Ultimately, reading cannot be externally motivated but must be about investing time in oneself. Only this will bring the desired rewards.

Furthermore, the practice of reading and this exercise of the mind must become a lifelong habit. Adler and Van Doren (2014) state that
The mind can atrophy, like the muscles, if it is not used. Atrophy of the mental muscles is the penalty that we pay for not taking mental exercises. And this is a terrible penalty, for there is evidence that atrophy of the mind is mortal disease. (p. 336)

One could therefore say, reading keeps us well and alive.

A big factor in reading success is how the reader engages with the book and reading material. One way to look at books is to understand them as a conversation between oneself and the author and to nurture a desire to learn from that person. Montage looked for precisely this in a book as he wanted to experience “the feeling of meeting a real person across the centuries.” (Parrish, 2016a). Adler and Van Doren (2014) operate on the same belief. They beautifully summarize:

Reading a book should be a conversation between you and the author. Presumably, he knows more about the subject than you do; if not, you probably should not be bothering with his book. But understanding is a two-way operation; the learner has to question himself and question the teacher. He even has to be willing to argue with the teacher, once he understands what the teacher is saying. (Adler & Van Doren, 2014, p. 49)

Because of this view, Adler and Van Doren (2014) also recommend marking the books that one is reading, as in taking notes in the margins and underlining text or highlighting passages. They say this engagement with the book is “the highest respect you can pay” to the author (Adler & Van Doren, 2014, p. 49). Further, they add that marking a book keeps the reader awake, active and thinking as well as supports to remember what has been read (Adler & Van Doren, 2014).

This notion, unfortunately, provides a dilemma for using library books, as they cannot be marked and worked with as effectively as if one owns the book and has invested in it (Parrish, 2013c). (However, this might be most relevant for non-fiction books.) In the last decades, the internet and digital revolution have brought other means of acquiring knowledge and gaining understanding about the world. While physical books have been around for a long time, they can now also be accessed in digital formats.

Questions around how reading digitally differs from reading analogous (in regard to our brains) and how well we are able to read on these different formats have been addressed in numerous studies. These studies originate from the fields of psychology, computer engineering, or library and information sciences. In an article from 2013 that investigates this topic, the American author Ferris Jabr summarizes that research results on this topic have changed over time. He states that “Before 1992 most studies concluded that people read slower, less accurately and less comprehensively on screens than on paper.” However, since the early 1990’s, results have been looking differently: “a slight majority has confirmed earlier conclusions, but almost as many have found few significant differences
in reading speed or comprehension between paper and screens.” (Jabr, 2013). Additionally, more recent research seems to suggest that people still prefer (especially when reading intensively), “attitudes are changing as tablets and e-reading technology improve and reading digital books for facts and fun becomes more common” (Jabr, 2013).

A few possible advantages and disadvantages in reading digitally and analogous are listed next:

**About reading digitally:**

+ It can be faster for checking vocabulary.
+ Taking notes or underlining text can be more flexible.
+ Font size and related settings can be adjusted.
+ Depending on the format, digital material can be shared more efficiently.
+/- A big network of interlinked information, but the amount of content can be overwhelming.
- A potential loss of deep reading due to increased distractions.

**About reading analogous:**

+ The haptic feel of a book and the smell of paper can be a sensual experience.
+ The physical interface is faster to navigate.
+ No direct distractions coming from the book allow for a greater focus and sense of immersion.
+ Taking physical notes and underlining text in the book activates the brain more.
+ It is healthier for the eyes.
- There is only one way to access the book and one has to “carry it around”.
- It takes longer to look up vocabulary or links, references.

While more advantages and disadvantages could be identified, it already becomes clear that the optimal medium finally depends on the reader and their preferences and circumstances.

### 5.3.3. Reading approaches

Adler and Van Doren (2014) distinguish reading for information and reading for understanding. They do not address reading for entertainment or pleasure, as they argue that it is a less demanding type of reading which will come effortlessly if the former two are appreciated and practiced (Adler & Van Doren, 2014).

As for reading for information, Adler and Van Doren (2014) argue that reading materials such as newspapers, magazines or anything close to our skills and talents only increase the amount of information, but do not challenge the reader’s understanding. They suggest that reading materials that increase understanding can be recognized by a “shock of puzzlement and perplexity that comes from getting in over our depth” (Adler & Van Doren, 2014, pp. 8-9). Thus, reading for understanding is about exploring and discovering new connections and relationships and making sense of something that seems initially mysterious or cryptic. The easiest way to improve understanding is to learn from experts on the subjects and engage with them in a reader/author conversation by deeply studying the reading material.

> To be informed is to know simply that something is the case. To be enlightened is to know, in addition, what it is all about: why it is the case, what its connections are with other facts, in what
Another approach to reading, as mentioned above, is to simply read to be entertained, pass the time, feel pleasure and possibly immerse oneself into the material in order to escape the real world for a moment. While the Canadian psychologist J.B. Peterson confirms that “reading for pleasure has always been a minority occupation” (H3 Podcast Highlights, 2018), it does provide immense value to the reader. Sometimes called spontaneous pleasure reading or ludic reading, this type of reading “offers rewards that are powerful enough both to sustain reading for long periods and to support a large publishing industry.” (Nell, 1988). Over a period of 6 years, Nell (1988) conducted five studies investigating the antecedents of ludic reading and its consequences. The findings from the study were, for example, that “most-liked pages [are] being read significantly slower”, that the “reading is physiologically more aroused than other waking activities”, that “readers greatly prize the control they exercise over their reading”, and that “many reading rewards are mediated by consciousness-change mechanisms that may have an analog in hypnotic trance” (Nell, 1988). Even though these benefits seem greatly rewarding, this type of reading needs proper cultivation, which is often neglected in the achievement and exam-focused socialization process in many societies. However, as seen above, this type of reading has the biggest chance for people to get hooked and interested in reading. Having considered these reading approaches or goals, one might still be missing: the reading for inspiration and creativity. This might be especially relevant in today’s experience and knowledge societies, where creativity and innovative thinking has become extremely relevant for facing new global challenges. Den Ouden (2011) argues that in the current economy, “the problem is not the lack of financial resources but rather a lack of creativity to think differently, and to find new solutions that may start small but can grow into a sustainable ecosystem that develop further over time.” (p. 3). Thus, reading for exploration, inspiration and discovery may be another relevant reading approach, which requires an open mind, a desire to know and understand but also to feel and let intuition be a guide. For example, an artist looks for inspiration and thence reads widely, not knowing what exactly they are looking for. They may come across interesting information, they may read entertaining material that stimulates the mind and imagination, and they may eventually draw connections and understand something new. Nonetheless, the final goal remains to create a spark that initiates an idea or vision. It needs the unexpected and the freedom to explore and discover, as encouraged by Ivan Illich (1973) as well: “Education in the exploratory and creative use of skills . . . cannot rely on drills. . . . It relies on the surprise of the unexpected question which opens new doors for the inquirer” (p. 9).

Adler and Van Doren (2014) introduce four levels of reading. It is stated that the levels are cumulative, which means that they build on each other. A solid understanding of the lower levels is needed to make use of the
higher ones. While Adler and Van Doren (2014) provide in-depth explanations of the levels and how to make use of them for more effective, efficient and purposeful reading, the levels will only be briefly outlined here.

As per Adler and Van Doren (2014), the first level of reading is elementary reading, which is the standard reached in elementary school. For many people, an improvement or development beyond this stage is missing.

The second level is inspectional reading, which is reading conducted in a limited time frame. This level of reading can be skimming a book in order to understand the main gist and evaluate if a full read can be beneficial.

The third level, analytical reading, is conducted without a time limit and requires an immersion into the material to reach a substantial level of understanding about the material, which is the ultimate goal of analytical reading. This level of reading usually exceeds any reading for entertainment or information acquisition.

The fourth and highest level of reading, as per Adler and Van Doren (2014) is synoptical reading. It is the most complex and systematic kind of reading and requires the reading of several books in order to compare the subjects and place the contents in relation to another. On top of that, synoptical reading requires the reader to analyze and construct new meanings based on these readings, which requires a high level of effort and understanding.

### 5.3.4. What to read

> **If I finish a book a week, I will read only a few thousand books in my lifetime, about a tenth of a percent of the contents of the greatest libraries of our time. The trick is to know which books to read.** —Carl Sagan in Cosmos; (A quote from Cosmos, n.d.)

As highlighted above, reading can be done for many purposes and in many ways. A question that often puzzles the novice reader, especially adults who have not been raised with books, is how to find the right books. How to choose what to read? While there are plenty of suggestions and opinions available, the perhaps most credible accumulation of thoughts on this topic comes from Shane Parrish, who is himself a passionate and professional reader. A cumulation of his best tips is presented next.

**READ FOR AND WITH PLEASURE**

The most crucial factor for successful reading is to always aim to read for pleasure, or how Montaigne said, “the promiscuous pursuit of pleasure.” (Parrish, n.d.a).

Parrish agrees that the books most benefited from, for him, have been the ones where “profit was a by-product of the pleasure”. He adds, “I read them because I enjoyed them, because I liked reading them, and the profit came in as part of the enjoyment.” (Anderberg, 2014).

**READ WHAT IS INTERESTING TO YOU AND/OR RESONATES WITH YOUR CURRENT SITUATION**
The next factor, which often comes in accordance with the previous tip, is to read what seems interesting—anything interesting, in fact. Often, this might relate to a current situation in which the reader finds themselves in. What is needed in this current situation? What questions want and need to be answered? What feeling is desired? Roosevelt states:

A book must be interesting to the particular reader at that particular time . . . there is no such thing as a hundred books that are best for all men, or for the majority of men, or for one man at all times. (Anderberg, 2014).

Choosing a book is a very personal endeavor and must fit to the reader and their journey. On top of that and perhaps most importantly, this journey should not be burdened with books that seem irrelevant or boring.

START QUICKLY, STOP QUICKLY; REREAD

As it is often tricky to evaluate the possible reward from reading a yet unknown book, it is good to understand the levels of reading (as mentioned in section 5.3.3) and to allow oneself to skim a book first. This first impression immediately reveals if the content sparks interest and would be worth investing time.

Parrish summarizes some timeless advice on reading by Arthur Schopenhauer by recommending to “be quick to start books, quicker to stop them”, and to “read the best ones again right after you finish” in order to aid the understanding.

This means, that in order to get the most out of reading, it can be necessary to start many books, sort them out quickly, and remain with a few which are read to the end. “Finishing the book is optional” (Parrish, 2017b), because the desired insights might be gained already halfway through the book. It depends on what was the goal. Therefore, one should not be afraid to make use of the books in whatever way works best for oneself.

Finally, it is also necessary to develop the essential skill of knowing what books not to buy and not to read. Parrish suggests, “if we equate time with money, it should not be wasted on bad books” (Parrish, 2015).

READ THE OLD THAT HAS STOOD THE TEST OF TIME

Another practical idea on how to choose books is to aim for the ones that have withstood the test of time (Parrish, n.d.a). While new books (and new things in general) seem most appealing to readers, reading old books has a great advantage, as shown by the Lindy Effect. It states that the previously existing will most likely continue to exist, that time can predict value, and that older is exponentially better (Parrish, 2013b). Figure 31 visualizes this concept.

Parrish adds that, in general, knowledge has a half-life and that the most useful knowledge, in this case, is a “broad-based multidisciplinary education of the basics” (Parrish, 2018b). These are concepts that have lasted over a long period of time and should, therefore, last for a long time. He stresses that this is about mathematical expectation, which is not case-specific
but a general expectation (Parrish, 2018b). For example, any written material that relates to the human experience or to human nature remains true and relevant, no matter how old, and can, therefore, provide a full range of new understanding for current times. Further, to consider older books provides a more complete picture of the world and counters one-sided thinking. The Japanese novelist Haruki Murakami makes a brilliant argument: “If you only read the books that everyone else is reading, you can only think what everyone else is thinking.” (Parrish, 2013a).

**READ A LOT BUT QUALITY OVER QUANTITY**

The final suggestion comes in relation to the previous one and stresses the importance of quality reading material. The in-depth study of a book will reveal a lot more than the skimming of many books. “Quality matters more than quantity” (Parrish, 2017b). While skimming has its value in grasping if a book is worth reading, to read many books superficially leaves the reader with barely more knowledge than before, and surely no new understanding, as this would require to sit and think. While people desire to read and absorb more and more knowledge, reading fewer but more quality pieces is the recommendation. And for the ones who want to read faster, Parrish refers back to practice: “The only way to read faster is to actually read more.” (Parrish, 2017b).

While the benefits of reading non-fiction seem obvious, such as gaining new knowledge, reading fiction may feel like more of an effort with fewer "real-life" benefits. However, research has found great proof that speaks for reading fiction.

Professor Keith Oatley and professor Jordan B. Peterson from the psychology department of the University of Toronto have conducted extensive research on, for example, the functions of fiction (see Mar & Oatley, 2008), understanding the link between reading fiction and empathy (Mar, Oatley & Peterson, 2009), and its transformation of the self (Djikic, Oatley, Zoeteman, & Peterson, 2009). Professor Keith Oatley states: "through a series of studies, we have discovered that fiction at its best isn't just..."
enjoyable. It measurably enhances our abilities to empathize with other people and connect with something larger than ourselves.” (Parrish, 2011). Their research reveals that fiction does not only expand the readers’ imagination, but it also allows them to imagine themselves and others differently. Often, merely by reading these stories, the readers unwillingly become part of them and feel with the characters as if they were close friends. The research showed that immersing oneself into these fictional worlds and communities provides the same satisfaction as interacting with real-life groups of people (Parrish, 2011).

However, in another study, Bal and Veltkamp (2013) found that reading fiction only increases the reader’s empathy if they are also emotionally transported into the story, meaning that they lose themselves and take emotional part in it.

5.3.5. Threats to reading

When it comes to understanding contemporary threats to reading, it is interesting to notice that this topic has been prevailing for many decades already (even when the digital revolution had not been born yet). In the 1940s, Mortimer Adler (2014) stated that the sources of entertainment and information available at the time, such as television and radio, are “artificial props”, which provide an illusion of the mind being active as it naturally reacts to those stimuli. Adler explains that while the mind grows used to those external inputs, the mind starts to cease to develop internal resources. It grows less, morally, intellectually and spiritually, which is the beginning of the process of dying (Adler & Van Doren, 2014).

Especially at a young age, this disruptive and passive stimulation can have severe effects on the brain. Regarding deep reading and the digital culture that surrounds us today, Wolf, Barzilai and Dunne (2009) warn:

\[ t \text{he expert reader needs milliseconds to execute these [deep reading] processes; the young brain needs years to develop them. Both of these pivotal dimensions of time are potentially endangered by the digital culture’s pervasive emphases on immediacy, information loading, and a media-driven cognitive set that embraces speed and can discourage deliberation in both our reading and our thinking. (p. 131) } \]

The variety of media formats and the amount of content available, at any given time, have grown immensely over the last decades and will continue to grow in the future. However, hardly any format can replace the activity and art of reading. In an essay on the dangers of clickbait (a form of false online advertisement which only exists to gain user clicks to the linked content), Shane Parrish agrees: “We live under a constant onslaught of content that is not meant to live beyond the moment in which it appears. . . . [w]e often forget the existence of words is no statement on their truth.” (Parrish, 2017a).

Today, a big amount of digital (and non-digital) content is produced to make money, instead of following the pursuit of sharing ideas and truth. While fake news is one of the threats, there is another danger to gathering information only
from the world wide web. Adam Robinson, an American author and educator, explains that the internet has learned to reflect a person’s world views back to them in the pursuit of personalization and customization. He observes that “all we see is exactly what we expect to see. The internet and technology is one big confirmation bias engine.” (Parrish, 2018a).

Luckily, interactive media are not only threatening. They provide a significant amount of advantages, cater to different types of learners, and also increase engagement with reading through interactive formats. While Jordan B. Peterson recognizes that books are the medium that one can immerse oneself in the deepest, he also admits that some other media allow for a similar depth of thought process and educational utility, such as podcasts or audiobooks (H3 Podcast Highlights, 2018). Peterson adds that “for the first time in human history, the spoken word has as large a reach and as long a duration as a book. That has never happened [before].” (H3 Podcast Highlights, 2018). This is a taste of how new media formats are already and most likely will continue to change how humans store and exchange information and wisdom.

5.3.6. Reading is not enough

Reading can be a great facilitator for learning. However, reading and consuming knowledge alone are not necessarily enough for self-development. Schopenhauer says that “[w]hen we read, another person thinks for us: we merely repeat his mental process” (Parrish, 2017b). Albert Einstein observes, that “[r]ead, after a certain age, diverts the mind too much from its creative pursuits. Any man who reads too much and uses his own brain too little falls into lazy habits of thinking.” (Albert Einstein Quotes, n.d.). These statements show two other sides of reading. It is crucial how the reader engages with the material, how they think critically about it, but also and most crucially, how they work with it and apply and act upon it.

In an online article in The American Scholar on Solitude and Leadership, author William Deresiewicz explains how actual thinking is done. William explains that it is about taking time to sit with and concentrate on thoughts and ideas and to develop one’s own opinion about it, instead of merely taking somebody else’s thought as the truth. This takes time and one “cannot do that in bursts of 20 seconds at a time, constantly interrupted by Facebook messages or Twitter tweets, or fiddling with your iPod, or watching something on YouTube.” (Deresiewicz, 2010).

If one manages to read driven by curiosity and to acquire the sought after knowledge and understanding, the way to lifelong learning might be paved, including constant personal development and growth.

“The way to get better results in life is to learn constantly. And the best way to learn is to read effectively, and read a lot.”
(Parrish, 2016b)

Reading is not the only way to learn, although it is an effective one if done properly. It is this open-minded yet critical and reflective thinking
and its application in one’s own life (optimally with feedback loops) that can strongly link reading to learning. In order to truly establish and maintain this lifelong learning and growing, it must become a personal choice, priority, and pursuit, as was also mentioned in chapter 5.1.5 in connection to paradigm changes.

5.3.7. The importance of a learning mindset

To get the most out of books (or similar complex reading materials), a person’s mindset plays a significant role.

“Learning is a more powerful mindset than knowing because it enables us to keep adapting in the face of new information and conditions.” (Stroh, 2015, p. 22)

To encounter reading materials with open-mindedness and an urge to discover and learn will bring exponentially better results than merely seeking to come to know something, without questioning it. It is also more fun! Dweck (2007) differentiates between a “fixed mindset” and a “growth mindset”, where the former represents a belief in fixed personality traits or intelligence which cannot be altered, and where the latter represents the notion that a person’s qualities or traits can be changed through effort and training. This, once again, seems to correlate with the importance of self-efficacy in creating change, as discussed in chapter 5.1.1.

When people are open to learning, they easily identify new ways to use and develop their personal and professional potential. They enjoy themselves more, are more optimistic about their capabilities and believe in being able to create the life they desire. Moreover, they might also be better equipped for the future, as author Niklas Göke argues in his article The Future of Learning (Göke, 2018). Göke cites Yuval Noah Harris in explaining how in the future the skill of making sense of information, as well as connecting them to the bigger system in which they operate, rather than merely gathering data and knowledge, will become important. Göke remarks, “Knowledge is cumulative. Intelligence is selective.” (Göke, 2018). This means that current ways of learning will have to shift. The skills of learning and educating oneself will have to gain more attention to successfully adapt to the increasingly changing future, where less and less seems predictable, and uncertainty persists.

In this process, what matters seems to be the ability to continually challenge oneself, ask more critical questions instead of accepting ready-made answers, and to read and learn and explore with an open mind. This mindset makes room for different ideas and concepts that might not have been considered otherwise. It, therefore, allows for constant and ongoing learning (Göke, 2018).

Göke tells the story of a man named Isaac Asimov, who notes that “[i]n order to build true intelligence, we first have to let go of what we know.” (Göke, 2018). To let go of what one already knows may seem scary, but it is this daring that creates space for a new understanding of a world which is becoming
increasingly multilayered. The benefit of that type of learning is that even more learning than anticipated can occur along the way, which might trigger an ever-ongoing process of learning. This type of learning then becomes a way of being, instead of doing, where pre-subscribed labels and seemingly “stupid questions” become nonexistent because nothing is accepted as finite (Göke, 2018).

This continuous expansion of perspective and formation of new connections translates into lifelong learning and is what scientists also refer to as integrative complexity:

1. the capacity and willingness to accept that there is more than one way to look at an issue and to acknowledge that these different perspectives are all legitimate (differentiation), and

2. the ability to form conceptual links among these perspectives and to integrate them into a coherent overall judgment (integration) (Integrative Complexity, n.d.).

5.4 / Conclusion

This second round of secondary research has been a journey of discovery into various fields, all related to the thesis topic of finding ways to support adults in Nairobi in finding joy and value in reading books. It was studied how change can be initiated in systems but also in personal behavior. The role of formal education for individuals’ development was explored as well as reading in general, as an activity and art. Finally, reading in connection to lifelong learning, a skill that becomes necessary in an increasingly complex and fast-changing world, was addressed.

Studying these topics provided essential value for the design phase of this thesis. It created an advanced understanding of the gathered primary research insights and enriched them. Most importantly, it inspired to think beyond the field of design, and to think critically.
Chapter six opens with presenting the design process of this thesis in detail. Following, the design results are introduced. The first part of the design is a Nairobi reading culture vision for 2030, as well as five thematic strategy maps for potential implementation. The second part of the design result shows a concept called Nairobi reads. The concept includes a journey, stickers and a mobile prototype, which are introduced and explained.

6.1 / Design Process

Although different design processes usually include similar stages, methods and tools, they are overall less straightforward than they seem. The thesis design process presented herein-after is a simplified version, listing key activities but not quite revealing its rather chaotic character. This "chaos" is not unique, as illustrated by Damien Newman's Design Squiggle (see Figure 32) (Newman, n.d.), which appeared in Stickdorn and Schneider (2001) to illustrate a service design process. Often, research, experience and feelings can wildly interact, but still in informed, systematic and artistic ways. Finally, a solid design emerges which meets the project requirements, but the secret ingredients might be beyond explanation.

Figure 32. Design Squiggle as drawn by Damien Newman.
Nicely described by Koskinen et al. (2011) as “design proposals are arrived at through a series of tactics rather than systematic analysis” (p. 93), the tactics that were used in this thesis' design process can be summarized as:

1. Revisiting interview transcripts and research notes.
2. Clustering information, sketching new and old connections.
3. Distancing from and re-approaching the research; finding inspiration from within and without, such as in books, daily lives, conversations with advisors and people; further research into Kenyan news and cultural events.
4. Constant note-taking, digitally and analogously, to activate different parts of the brain, which improves inspiration.
5. Reviewing secondary research, including literature.

The pivotal part was to iterate these tactics until ideas and the final design formed naturally. These tactics were combined with design methods. The main stages and methods used in this design process are depicted in a linear way in Figure 33 and will be described in more detail in the following paragraphs.

Figure 33. The thesis’ design process in steps/phases. The process begins in the center with Ideation.
6.1.1 Ideation

“Design is about having ideas.”
(Penin, 2018, pp. 147-148)

After gathering research findings and insights, design opportunities needed to be identified next. This was started through the ideation phase. While ideation had already partly taken place during the research process, this second part of ideation focused on clustering the collected ideas. These ideas originated mostly from research participants but also from myself, when I was researching and observing the surrounding in Nairobi and was making first sense of the data. This ideation process resulted in idea clusters, which are presented in Figure 35 and were produced through the affinity diagramming method (as described in chapter 2.6). Noticing the number of ideas collected under each cluster revealed which idea cluster could potentially hold the most significant design opportunities for this thesis work.

Next, open questions collected throughout the same process were clustered and analyzed (see Figure 36). These questions were used as inspiration to enrich but also to challenge the ideas and opportunities already gathered. This process revealed gaps, especially in regard to the research findings and insights. These open questions were often an initiator for a new iteration.

At the end of the ideation stage, it became clear that it was necessary to narrow down the direction for the final design result. This is addressed in the following.

“There are ideas can be expressed as hypothetical scenarios that help us think about the future we want. To be able to have new ideas, designers must understand contexts and cultures, see realities; and capture their needs and aspirations, contradictions and constraints. And from them, designers should be able to creatively synthesize these elements into new artifacts” (Penin, 2018, pp. 147-148)

“In other cases, the product of design work is not the artifact but the idea itself; the scenario of a different future helps people and organizations rethink their mission and purpose” (Penin, 2018, pp. 147-148)
Web platforms
- Netflix for books
- Information platform on the importance of books and reading
- Youtube/SM channel for books

Physical products
- Inviting reading lamp

Values to be communicated
- Reading as a luxury
- Books are mentors
- Buy a book, plant 10 trees
- Document tribal storytelling
- Need for stories that are untold

You want to be smart, you want to compete? Read!

Campaign ideas
- Campaign: NEW/scandalous/cool
- Reading matters
- Video campaign
- Campaign, inform and persuade
- Give a book to someone
- Collaborations to increase impact
- Parents, read encourage involve! “if you care for your child...”
- Reading advocates
- Book tours, authors
- Intersection between platforms - where to explore writing.

Beyond Kenya
- African storytelling to the world
- African literature in bookstores abroad? Pride from external into internal
- Reading pal abroad

Benchmarking from other countries
- Maternity set in Finland, starter pack for reading for every Kenyan from 844
- Reviews of books (goodreads for Africa)
- Inspiring library spaces
- Bookstore cafés

Local touchpoints/locations to use
- Organizations such as SlumCode, Alliance Francaise, Metta
- Reading spots around town
- Improve environment to read
- Peaceful/Inspiring place to come and read
- Mobile truck with books, neighborhoods
- Use chamas
- Libraries
- Quotes around town to inspire

Services (sharing)
- Whatsapp/FB Chatbot
- Persuasive App
- Whatsapp/Text message service
- Educational platform: How to read! (but fun way) benefits, how to read, what to read for what, ideas...
- Address negative perception! Room for community?
- Book sharing service
- Open your library, like Airbnb, invite people in, - books in your surrounding.

Figure 35: Ideas and opportunities emerging during the synthesis process, presented in clusters. By Sara Gottschalk.

Strategies to develop a reading mindset
- Helping to establish daily reading habit
- Introduce reading strategies/guidelines, how to read and have fun.
- Address gap between reading and applying that knowledge
- Match reader with non-reader / community
- Encourage dialog about reading
- Help in choosing reading material
- Use bad experience of school system to reverse
- Bed time story reading
- More age specific learning content
- Intervention/Invitation to read where there are books already -CTA
- Break open statements people say: no time to read, it’s not for me, etc.
- What skills do I want? Which books should I read for that.
- Skills you want, challenges you face, goals you have. + other media as support
- Read widely, then synthesis into local content and value!
- How to know about all the books/topics/themes that are available?
- How to learn about why to read books and long-term, what are the benefits?
- If I knew which book would give me what skills, especially fictional ones since it’s less obvious.
- Interest: collective & collaborative stories
Status quo
- People DO read (newspaper, social media etc.), but what should change?
- Is reading physical books outdated (soon)?
- How has the existing reading culture developed? What is the current culture?
- Is reading physical books old school in today’s world full of other sources of knowledge and entertainment, inspiration?
- If yes, but reading itself is still relevant for our minds and brains, right?
- What do people think about when they hear “fiction”, “reading” etc.? For fiction, do they think of love stories?
- Where do people wait a lot? - use empty time
- People are interested and read! (but what people?) What’s a product goal then?

Self-observation
- What does it take to consciously take time to read? - see self observation

Extending the frame of reading
- Are there bigger problems than people not reading?
- Other more tangible focus: problem-solving, creativity? Or something else practical related to books
- What else to do with books? How sustainable are books?
- How is a culture cultivated? Especially a reading culture? Check Finland.
- What would the future look like? Check future scenarios (in general for East Africa) - collaborative!
- Combine reading with other activities (?) - what type of reading would that be

About reading
- What reading?
- Why is reading important?
- What’s the USP for reading books? For long-form reading? Compared to Youtube, online blogs etc.
- Time = Money, so why not go for easier/quicker road of obtaining information & entertainment?
- What creates the FINAL conviction that one needs to now read this book?
- People who read are more successful?
- If you read more, you’ll be smarter? Not automatically...
- Who reads for reading’s sake?

Parents
- Role of parents for reading culture?

How to read
- Message about reading needs to be subtle & indirect/hidden? Or super bold?
- What would make you want to read every day? Know yourself. When/What/How
- How do you convince people to donate, to go vegan, to buy xyz, same principles for encouraging reading?
- How to make it FUN to interact with books?
- What gets people into reading? - Narratives/Stories?
- How to share benefits of reading in persuasive way?
- How to face stereotypes of reading?
- How to shape culture effectively?
- How can parents, friends help? (chamas, salon...)?
- How do countries advertise things to their citizens?
- How can people see themselves in books?
- How to remember the lessons we read? The knowledge/wisdom we gained?
- How to make books part of our journey more actively?
- How can word of mouth be encouraged?
- Education is everything! How to bridge the knowledge between reading in a book, and applying it to real life?
- In that context, is reading more going to be such a difference?
- 1. How to find out area of passion, 2. and how to build it through further education, reading, trainings..
- How to have access to all kinds of hard copy books?
- How to get people to have the idea on their own, that reading will help them?

Aim of reading
- How much reading is the goal?
- What mindset about reading should be reached?
- Is it about books or reading in general, online/offline
- Is reading something that can be measurable? What could be measurable.

What are the needs
- What is the target groups need??
- What is a need related to reading?
- What do people want? What do people need?

What to read
- How to know which book to pick?

Remember human behavior
When we feel or are watched, we behave differently.
We want to fit in.
We are afraid to be isolated.
We want to seem special, smart, important.
We need to maintain our self concept.
We value more what we invest in, time and money.
We prefer what’s NEW.

Figure 36: Identified open questions during the synthesis process, presented in clusters. By Sara Gottschalk.
6.1.2 —Design direction—

Moving back and forth between ideation, findings and insights, the design objectives and guidelines, and open questions, three design directions for this thesis were generated:

1) Develop an infographic depicting the current reading culture (as a system). This could be shared to raise awareness about its critical state.

2) Create a future vision of Nairobi and how its reading culture could look like, also to raise awareness.

3) Develop a website which informs about the power and benefits of reading books playfully, to be shared with the inhabitants of Nairobi to raise awareness and inspire action.

After a round of discussion with the thesis advisor, the final design direction was set:

*Develop a reading culture vision for Nairobi 2030, and a strategy for its achievement. This includes relevant local actors and actions and is based on the research. From this strategy, three actions (opportunities) are selected, developed into design concepts, and evaluated. One concept is elaborated as the final design.*

6.1.3 Foresight

Foresight was used to develop the reading culture vision and strategy (which is presented in section 6.2.2). Design foresight specifically is a type of systematic thinking about the future for developing a detailed storyline on a desired future and its implementation. This process should take place in close collaboration with key stakeholders so that each stakeholder will understand their specific role in achieving the future vision upon which all have agreed on. This will optimally create a sense of ownership and stress their responsibilities.

Due to limitations in time and access to stakeholders, the foresight conducted in this thesis was done by using the field research insights and secondary research only. Nonetheless, this exercise provides a glimpse into the method and reveals how to create a future vision, as well as how to develop a strategy with concrete actions and responsible actors. It must be stressed that the results, especially the actions and actors, from this exercise are not complete. The design foresight process would have to be repeated with all stakeholders involved in Nairobi’s reading culture (from all levels such as technology, culture, social, institution and organizational), and them taking an active part in developing the vision.

The five-step foresight process implemented in this thesis is based on a foresight manual by the independent think tank Demos Helsinki (based on Börjeson, Höjer, Dreborg, Ekvall, & Finnveden, 2006; Vergragt & Quist, 2011; Wilkinson, 2017) and includes the following steps:

1. Horizon scanning

This step aims to understand the bigger picture, including how the current system works, who are the actors, and what relationships exist between them. Most of this work was done during the field research and synthesis process.
2. Vision work
Due to a proper amount of research insights, developing a vision was implemented quickly. This vision was then detailed for the following 5 main categories: the publishing industry, educational institutions, family, environment, and communities.

3. Backcasting
The backcasting method requires to identify actions for achieving the vision. This process starts from the vision, tracing back actions and possible actors towards the present. Optimally, participants “propose a future event or situation and then work backward to construct a plausible causal chain leading from here to there.” (Schroeder & Tilley, n.d.)

4. Strategic roadmapping
This step details the earlier collected actions. If possible, they are divided into easier-to-handle chunks and goals and are placed on a vision timeline.

(5. Follow-up and revision
This step has not been implemented but would play a major role in the future, when stakeholders are actively involved in this process.)

In this foresight process, especially the backcasting method established the basis for identifying the first possible actions for initiating a process of change for Nairobi’s reading culture. This is no surprise considering that for several decades already, backcasting has been recognized as a valuable tool for addressing complex long-term problems due to its problem-solving character, which aims at discovery, greater understanding as well as improved decision-making for the future (Dreborg, 1996). The methodological framework for participatory backcasting, developed by Quist and Vergragt (2006), also encourages broader stakeholder participation which leads to more effective implementation.

Applying foresight provided a strategic approach to this thesis’ design challenge, which is

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Digital information and awareness platform
- Focuses on Nairobi and local context
- Informs about reading as an important, beneficial and joyful activity
- Provides strategies on how to read the right content for yourself

Simple pro-reading poster or sticker campaigns
- Public advocacy for reading and benefits
- Should be a nudge, needs to link to website with more information
- Optimally comes from a credible organization

Reading corners in public spaces
- for example in Java house or salons etc.
- Fun/comfort/social combined with reading
- Places where people already spend time
- Could be appealing because it would be NEW and different

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Figure 37. Three first concept ideas that emerged from three selected actions from the strategy maps (presented in chapter 6.2). By Sara Gottschalk.
necessary for working with a complex system like a reading culture. In order to avoid unsustainable quick fixes, which would undermine long-term effectiveness, long-term success must be a priority. This type of strategic planning and thinking hence allowed to set more realistic expectations about what is possible. Yet, it equally encouraged the consideration of short-term successes, which can still be in alignment with the long-term goals (instead of undermining them, as often happens with quick-fixes) (Stroh, 2015).

Based on this undertaking, and with the design guidelines from chapter 4.4 in mind, three near-future actions were selected from the strategy maps (see chapter 6.2.2) and were preliminarily elaborated. They are presented in Figures 37 and 38.

### 6.1.4 —Reconsiderations—

During the process of elaborating and evaluating the three selected actions into design concepts, it became clear that something was still missing. It felt as if an important perspective had not been addressed or that the concepts were still too superficial and idealistic.

It was during that time that I had been introduced to the philosophical works of Ivan Illich and Paulo Freire, which were outlined in chapter 5.2. Their critical and philosophical view on education, schooling, and the desire to inspire others to learn and understand, provided an invaluable new perspective to me. It challenged my position (a person and designer coming from outside of Kenya) and relationship to the individuals and the reading
As mentioned by one of the research participants, there is a strong need for local Kenyans to speak up about the quality of local public education, about the lack in diversity and quality in much of the local reading materials, as well as about how disconnected many local politicians are from their people’s living conditions. However, because I am not a local, but a white European in particular, the whole research project automatically carried a charged connotation (due to Kenyan history). This was something I had not fully considered before or had been trying to avoid. Realizing this, it became clear that the design and results of this thesis must be compiled with high sensitivity and care. It became even questionable if any design started by me could have a real impact, as for anything to work (long-term), a desire for change and action must come from within, which would mean from Kenyan people, the government, or other local stakeholders.

Eventually, after pondering more on this, it seemed possible to reveal the research insights and findings and present a design, still. However, its incompleteness would have to be stressed, as well as a desire for local participation and involvement. The thesis’ design purpose and objective thus remain the creation of awareness and optimally the initiation of dialog, as Freire (2000) suggests.

Increasing self-awareness is an intervention in and of itself, and the precursor to making any other changes.

(Acaroglu, 2008, p. 46)

After this discovery, the design process continued with defining persona spectrums.

6.1.5 Persona spectrums

We will need to understand the personal differences between individual people, and to address these . . . it is even more important to make sure that individual differences are addressed if we want to create sustainable behavior change.

(Den Ouden, 2011, p. 9)

Persona spectrums were created to simplify the variety of adult individuals that are addressed with the design. Instead of establishing one or several persona characters, which often include common biases and assumptions (P, 2018), persona spectrums focus on a range of incentives, abilities, and circumstances. While
still based on the strength of personas, which is to humanize the insights collected, persona spectrums aim at “keeping different human attributes distinct”, articulate “a specific human motivation and the ways it’s shared across multiple groups” and stress “how that motivation can change depending on context.” (P, 2018).

The range of possible persona spectrums for this thesis project target group can be seen in appendix 5, where the highlights show the focused spectrums used for the design process.

After having considered and synthesized these spectrums, the targeted Kenyan adults are the ones that are literate and in general interested in learning and developing themselves. They will be alone in a public space and have waiting time ahead of them when targeted, such as sitting in a matatu (a local public transport bus). During that time, they will also have phone access. This ensures that they will be able to access the design and have time and optimally the mind for it.

The aspect that can differ between single target group members, is their motivation for reading long-form material. Either, they are very reluctant, or they are already open to discovering new ways that can inspire them to read more books, because they are aware of the benefits. Further, their socioeconomic statuses may differ. This heavily influences their ways of accessing books, type of support from their social environment, as well as the variety of daily challenges. This also affects each individual’s priorities and values. Figure 39

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**Figure 39.** Persona spectrum for the final design development. By Sara Gottschalk.
illustrates the final spectrums that were used for the design.

6.1.6 Journey mappings

Based on the narrowed persona spectrums, experience and learning journeys were drafted next. In this thesis, the experience journey describes an individual’s journey from first engagement with the design until the last interaction with it. The learning journey, on the other hand, details the interaction with the specific content of the design, which is covered in the content development and experience

Figure 40. Experience journey for the design concept. By Sara Gottschalk.
Figure 40 depicts the high-level experience journey, illustrating how a target group individual would optimally experience the design in regard to their thought process. The two tangible elements of the final design are already indicated (the green circle 1 and 2). In chapter 6.3.1, another version of this experience journey is presented, focusing on the direct interactions with the design components.

Overall, crafting the experience journeys was crucial to the design process. This first form of prototyping—the imagining and “testing” of these possible experiences, by preparing stories which include the design—helped to think through, define and refine the whole experience and interactions.

6.1.7 Content (Experience) Design

The content development and design process began by gathering information and an understanding about reading and books. This was previously presented in chapter 5.3.

Next, the content was prepared into easily digestible pieces of knowledge and tips and tricks, and was arranged into a content learning journey (which took place in a simple word document). The main goal was to avoid being boring and too formal, which would confirm people’s associations with reading and books. Instead, the language and tone of the content needed to be more personal and emotional in order to hook the readers, perhaps even startle them and make them question what they know about books.

Communication is the basis of social influence. . . . In the case of language, the core function is transference of emotional states to help share critical information and knowledge (Acaroglu, 2008, p. 58)

Further, the content needed to be precise and culture-sensitive to the context of Nairobi, in order to increase its relevance for the audience. Also, appealing content that supports action-taking, as in picking up books for reading, needed to be included.

A first design was finally developed in this thesis. However, with more time at hand, the content would have to be developed into a more captivating learning experience. This could, first of all, include more refined interactions and higher user engagement throughout the content (or even beyond it, from first to last encounter with the design). Therefore, the content experience of the final design prototype (presented in chapter 6.3.3) represents only a first draft, which leaves room for further developments.

Stories are a very powerful tool in enabling change. They are an embodiment of experience, and a mind’s protest against conformity (Acaroglu, 2008, p. 69)

6.1.8 Evaluation and feedback rounds

The first feedback round evaluated the vision, strategy and the three preliminary concepts,
which had been developed from selected actions from the strategy maps (as described in 6.1.3). Feedback was provided by the thesis advisor and an Aalto University professor from the Media Department with a background in East Africa. The thoughts and ideas from that feedback round were thoroughly considered and used to develop the three concept ideas and the overall design direction. Additionally, the three concepts were evaluated through the spider diagram method, and further revised and elaborated.

The spider diagram evaluation (Figure 42) resulted in understanding that all three concepts were of equal value. This was confirmed during the second feedback round, where the revised vision, strategy and concepts were presented and discussed with a few research participants in Nairobi. This second feedback round, as well as the philosophical exploration mentioned above, led to the merger of these
Stage 1: Understand behavior
1. Define the problem in behavioral terms
People have not been introduced to the value that comes from reading books.

2. Select target behavior
People should seek out pleasant and right books for them to learn and develop themselves.

3. Specify the target behavior
People intentionally looking for books as valuable medium for their sources of information gathering and finding answers.

4. Identify what needs to change
People learn what books can offer them and how media cannot compete with them!
*Social opportunity, psychological capability, and reflective motivation need to change for target behavior.

Stage 2: Identify intervention options
5. Intervention functions
   - Persuade, Educate, Model, Enable

6. Policy categories
   - Communication/Marketing

Stage 3: Identify content and implementation options
7. Behaviour change techniques
   - Shaping knowledge, Natural consequences, Comparison of behavior, Comparison of outcomes, Identity, Self-belief

   Based on TDFs
   - Knowledge: Benefits and consequences of reading; Beliefs about capabilities: Verbal persuasion to boost self-efficacy; Focus on past success; Intention: Commitment, Behavioral contract; Social Influences: Social Comparison, Social support and encouragement, Information about others’ approval, Vicarious reinforcement, Modeling or demonstrating the behavior; Identification of self as role model; Social reward; Emotion: Reduce negative emotions, Emotional consequences, Self-assessment of affective consequences, Social support (emotional)

8. Mode of delivery
   - Print/outdoor media → Stickers
   - Digital media → Internet → Social media
   - Individual level → Phone → Web-application

Figure 43. The behavior change intervention design process by Michie et al. (2014) was applied for evaluating the design direction. Drawn by Sara Gottschalk.

three concepts into the final design concept called Nairobi reads.

Next, the BCW behavior change intervention design process (the BCW was presented in chapter 5.1.2) was utilized for evaluation. It was applied to the design challenge to confirm, if the design direction was solid. The results recommended persuasion, education, modeling, and enabling for the targeted group, which aligned with the design direction. This evaluation process is summarized in Figure 43.

The third and final feedback round took place after the design prototype had been developed. The design, with prototype and journey, were shared with several research participants in Nairobi, who were closest to the target
The received feedback was helpful and constructive. Some of it was implemented into the final design. Other, more extensive feedback would require more comprehensive adjustments, which were not possible to implement at this time. However, it was still noted and could be applied to future versions. Overall, the feedback given referred to the journey, the prototype content, its engagement and flow, and the name of the project.

In conclusion, the design process contained various steps or phases and iterations, always referring back to the field research findings and insights, as well as the secondary research. While at times seemingly unstructured and wild, every step and iteration served a distinct purpose and helped the development of the design, which received positive feedback. The design results are presented next.

6.2 / Design Result I: Vision and Strategy

When designing for a complex challenge, a systemic approach is helpful. Thinking about the whole ecosystem and its actors, stakeholders and already existing solution approaches helps to put any new idea into context and to consider long-term impact and effects. When it comes to Nairobi’s reading culture, as this is the challenge’s context in this thesis, society’s views and values on reading became apparent, as well as the culture’s influence on individuals and their reading behavior.

For that reason, the first outcome of this thesis aimed to understand the bigger systemic picture and to transform this understanding into a vision for Nairobi’s reading culture for 2030. The year 2030 was used as it is a common year in the future for which many existing long-term strategies are planned (for example, Kenya Vision 2030, n.d.). Based on this vision, a strategy draft on how to achieve this vision was created. As this strategy was synthesized from the thesis research (primary and secondary), it must be stressed that it is only a draft, because of the lack of stakeholder involvement in its development. In order to arrive at a representative vision and strategy, strong collaboration and involvement between all actors and stakeholders would have to be ensured. This could be initiated through workshops, where the role of a designer could be its facilitation. However, this exceeded the thesis scope and therefore, the vision and strategy presented next is only a first attempt and exploration into this type of work, which would be highly beneficial for fostering sustainable change in Nairobi’s reading culture and for its people.
6.2.1 Nairobi reading culture vision 2030

The overall reading culture vision for Nairobi in 2030, developed from the primary and secondary research conducted during this thesis research, is described below:

In 2030, Nairobi is known for its vivid reading and writing culture – a culture that empowers its citizens on a personal and professional level.

In 2030, Nairobi is a city of avid and lifelong readers who understand the importance of encouraging dedicated reading for their children as well as for themselves.

Throughout all the districts and independent of socioeconomic class, inhabitants of Nairobi are part of an environment that inspires and actively supports the activity of reading of local and international material.

In 2030...
...locally interesting and inspiring reading material is available and affordable to all inhabitants of Nairobi.
...families set an example for their children's reading journey.
...educational institutions inspire their students to read for life and provide them with strategies for effective reading.
...the urban environment offers quality spaces and experiences for its inhabitants that support their quest for a better life.

National publishers and writers are publishing diverse fiction and non-fiction material and are featured and celebrated by the media and society.

Educational institutions and families understand their key role in their children's education by supporting them to read widely and frequently and based on their interests.

The urban environment in general, but also communities inspire and promote the importance of reading and make it easy for its inhabitants to read.

Figure 44. The developed Nairobi reading culture vision 2030 in summary. By Sara Gottschalk.
When envisioning Nairobi’s future reading culture, it is equally important to imagine how an individual’s life would change based on this change of system. Figure 45 shows an individual’s journey from today to their 2030 version, and how they were influenced along the way by various public institutions as well as their personal surrounding. The target group representative in Figure 45 is shaped by improved and new services and offerings, which will then in return also shape the representative’s children and how they in return interact with their children in regard to books and reading.

Figure 45. Envisioning how an individual in Nairobi would be influenced by a changed reading culture. By Sara Gottschalk.
6.2.2 Vision 2030 strategy: action steps and stakeholders

In order to achieve a vision like the one presented above, many stakeholders have to be involved, become active, take responsibility and ownership, but also believe in the vision and see value emerging from it for them. The first strategy draft is presented next. Five key categories were crystallized from the vision (Figure 46) and then separately elaborated and detailed with specific action steps and possible responsible actors (see Figures 47a-e). The five categories are 1) the publishing industry, 2) the educational institutions, 3) family influences, 4) the public surrounding and environment, and 5) communities. The visual setup of these strategy roadmaps, which form the strategy draft, comes from the foresight manual by the independent think tank Demos Helsinki, as mentioned earlier.

When examining these five strategy roadmaps, it becomes clear how many different actions and actors need to be involved, and that perhaps the year 2030 is too close for achieving a vision like this. The successful implementation of any strategy always depends on stakeholder commitment, them seeing value in the envisaged change, and strong facilitation of the whole process. This might pose a significant obstacle in an environment like Kenya, where the government is still very reluctant to collaborate across industries.

"Businesses and government organizations will need to work together on innovations that alleviate societal issues."

(Den Ouden, 2011, p. 46)

Figure 46. Developed vision strategy roadmap for Nairobi’ reading culture 2030. By Sara Gottschalk.
Kenyan publishers are publishing diverse reading material that goes beyond politics and news.

Local writers have grown in numbers and the quality of writing can be compared to global standards. Most local writers can make a living from writing.

Kenyan authors are known in the world. Discussions spark interest worldwide.

Local fiction & non-fiction literature is featured and celebrated by the media and public.

Local content and storytelling (in various languages) is widely available and affordable, online (also offline).

---

**Reading Culture Nairobi – Publishing**

*From mostly educational to local quality (storytelling) content.*

**Vision 2030**

---

**2018**

**Action:** Subsidised programs for publishers to publish local writers and more diverse content  
**Actor:** Government

---

**2022**

**Action:** Support publishers to publish content in local language  
**Actor:** Government

---

**2026**

**Action:** Grow Nairobi International Bookfair  
**Actor:** Kenya Publishers Association

**Action:** Bookwriters tours are common  
**Actors:** Book sellers, e.g. Textbook Centre

---

**Figure 47a. Strategy roadmap for the publishing sector. By Sara Gottschalk.**
Reading Culture Nairobi – Educational institutions
Supporting children and young adults to learn for life, not for school.

<table>
<thead>
<tr>
<th>Year</th>
<th>Action</th>
<th>Actor</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>Feedback and data collection in public schools</td>
<td>Public Schools with Government support</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Action: Teacher Manual and Guidelines</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td></td>
<td>Actor: Ministry of Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Action: More teachers for primary schools</td>
<td>Government</td>
</tr>
<tr>
<td>2022</td>
<td>Action: Policy for promotion and cultivation of reading in schools</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td></td>
<td>Actor: Ministry of Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Action: Research published on conditions in public schools!</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td></td>
<td>Actor: Ministry of Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Action: Policy with guidelines on how to promote and cultivate reading habit</td>
<td>Ministry of Education, Government</td>
</tr>
<tr>
<td>2026</td>
<td>Action: Each public school has trained school librarian and library</td>
<td>Public Schools</td>
</tr>
<tr>
<td></td>
<td>Action: Implementati-on of Problem-based learning in schools</td>
<td>KICD</td>
</tr>
<tr>
<td></td>
<td>Actor: KICD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Action: Programs focused on children’s creativity, critical thinking, problem-solving, communication skills</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td></td>
<td>Actor: Ministry of Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Action: School decides which educational books are used (guidelines), teachers can add</td>
<td>School principals</td>
</tr>
<tr>
<td></td>
<td>Action: Global partners cities – students learn from each other</td>
<td>Educational Institutions</td>
</tr>
<tr>
<td></td>
<td>Actor: Educational Institutions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Action: More teachers for primary schools</td>
<td>Government</td>
</tr>
<tr>
<td></td>
<td>Action: Research published on conditions in public schools!</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td></td>
<td>Actor: Ministry of Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Action: Policy with guidelines on how to promote and cultivate reading habit</td>
<td>Ministry of Education, Government</td>
</tr>
<tr>
<td></td>
<td>Action: Each public school has trained school librarian and library</td>
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<td></td>
<td>Actor: KICD</td>
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<tr>
<td></td>
<td>Action: Programs focused on children’s creativity, critical thinking, problem-solving, communication skills</td>
<td>Ministry of Education</td>
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<td></td>
<td>Actor: Ministry of Education</td>
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<tr>
<td></td>
<td>Action: School decides which educational books are used (guidelines), teachers can add</td>
<td>School principals</td>
</tr>
<tr>
<td></td>
<td>Action: Global partners cities – students learn from each other</td>
<td>Educational Institutions</td>
</tr>
<tr>
<td></td>
<td>Actor: Educational Institutions</td>
<td></td>
</tr>
</tbody>
</table>

By Sara Gottschalk.

Figure 47b. Strategy roadmap for educational institutions.
## Reading Culture Nairobi – Interesting surroundings

*Be inspired to expand your mind.*

<table>
<thead>
<tr>
<th>Action</th>
<th>2018</th>
<th>2022</th>
<th>2026</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Action</strong>: Talks, discussions, coverage of local writers</td>
<td><strong>Action</strong>: National reading campaign ads; billboards, TV, newspaper</td>
<td><strong>Action</strong>: Physical books are all digitized</td>
<td><strong>Action</strong>: Affordable and usable online libraries</td>
</tr>
<tr>
<td><strong>Actors</strong>: Media houses</td>
<td><strong>Actors</strong>: Publishing houses, Non-government organizations</td>
<td><strong>Actors</strong>: Kenya National Library Services (KNLS), Book Bunk</td>
<td><strong>Actor</strong>: Public library services</td>
</tr>
<tr>
<td><strong>Action</strong>: Pro-reading public transport campaigns</td>
<td><strong>Action</strong>: Students design inspiring library spaces</td>
<td><strong>Action</strong>: Reading corners established in frequently visited places around town, for men and women</td>
<td><strong>Action</strong>: Inspiring online presence on Kenyan storytelling, writing and reviews (Goodreads for Africa)</td>
</tr>
<tr>
<td><strong>Actor</strong>: Non-government organization</td>
<td><strong>Actors</strong>: KNLS, Nairobi Design Institute</td>
<td></td>
<td><strong>Actor</strong>: Independent</td>
</tr>
<tr>
<td><strong>Action</strong>: Reading and writing competitions</td>
<td><strong>Action</strong>: Government admits reading culture importance and provides support to stakeholders</td>
<td><strong>Action</strong>: Inspiring online presence on Kenyan storytelling, writing and reviews (Goodreads for Africa)</td>
<td><strong>Action</strong>: Goodreads features more African books</td>
</tr>
<tr>
<td><strong>Actor</strong>: Cultural institutions</td>
<td><strong>Actor</strong>: Government</td>
<td></td>
<td><strong>Actor</strong>: Goodreads</td>
</tr>
<tr>
<td><strong>Action</strong>: Cultural events around reading, writers, storytelling, local native languages</td>
<td><strong>Action</strong>: Programs on how to read, levels of reading, reading for joy!</td>
<td><strong>Actor</strong>: (Non-)Governmental organization</td>
<td></td>
</tr>
<tr>
<td><strong>Actors</strong>: Alliance Francaise etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Public libraries are inspiring spaces and available in good number with diverse and quality reading material.** Smaller community libraries are common. Online libraries are popular.

Frequently visited public spaces are made for reading; interesting environments to take a break, chat or read and relax.

Cultural and educational places host local authors and their storytelling. They are discussed in society and covered by the media. Books tours with reading sessions are common.

---

Figure 47c. Strategy roadmap for Nairobi city environment. By Sara Gottschalk.
It's not enough to send children to school to prepare them for life's challenges.

**Reading Culture Nairobi – Family influence**

Actions:
- **Awareness campaigns about importance of reading for all ages**
  - **Actors:** Non-governmental organizations, independent

- **Read with your child campaigns**
  - **Actors:** Government, see Worldreader (NGO)

- **Have diverse library at home AND set example by reading with family members**
  - **Actors:** Families

- **Set example by reading**
  - **Actors:** All, parents

- **Master your time: Online and offline reading; check time child spends on different activities**
  - **Actors:** All, parents

Vision 2030

Families and especially parents are aware of the importance of reading as an activity.

Parents and other family members set an example by reading themselves. They also read with their kids.

Parents take an active part in the children’s education by talking with them about school and the material that they engage with. They also find out what the child’s (reading) interests are beyond school topics and support the child in that.

Parents buy relevant books for their children or borrow them from the libraries (also online libraries).
Reading Culture Nairobi – Community initiatives
Do the best you can do in YOUR community.

2018

Action: Urban Sauti Kuu campaign; What can you do in your community.
Actor: Sauti Kuu

Action: Invite new members to local book clubs.
Actor: Book club members

Action: Share a book you love with your friends
Actor: Community leads, members

Action: Advocacy for better public quality education
Actor: Community leads

2022

Action: Community reads– guidelines for community leads
Actors: Non-governmental organization, Educational Institution

Action: Build small community libraries and maintain them, in churches, chamas, etc.
Actor: Community leads

Action: Book sharing service
Actors: independent

2026

Action: Community based reading booths (share books you don't need anymore)
Actor: Communities

Vision 2030

Community members actively advocate for reading, education, joy and expansion in their surrounding and help each other out.
Readers inform “non-readers”.
Readers share / hand down books.

Figure 47e. Strategy roadmap for community initiative. By Sara Gottschalk.
It can be noted that family and community have received a strong emphasis in this strategy draft. While it is crucial that public institutions support the reading culture, individuals have nonetheless the power to activate change from a grassroots level. Furthermore, reconsidering the thesis scope with individuals as the target group, the family and smaller community levels are rather essential. While it may take time to involve the key stakeholders for the establishment of long-term change, involving individuals is a more realistic short-term approach, which at the same time does not conflict with more significant systemic change.

Figure 48 lists the different levels addressed by the first design result presented in this chapter. Additionally, it highlights the individuals’ level at which the second design result is based, and which is introduced next.

![Diagram](image)

The value that society places on reading (books) needs to change

- Policy changes, government programs
- Educational system changes
- Publishing industry changes
- Public environment & discussion changes
- Individuals’ perception of reading (books)

Figure 48. Levels that need to initiate change for a reading culture cultivation. By Sara Gottschalk.
6.3 / Design Result II: Nairobi reads—a mobile journey on books and reading

The final design is a short experience that can take place in public places where people spend time waiting. This could be in public transport such as in matatu busses, but also in salons or similar places. The design essentially constitutes of two physical elements: 1) stickers, as triggers to get the target group’s attention, and 2) mobile content, which comes in the form of a journey and informs about the value and benefits of reading books.

This design aims to be a first step in the right direction, sensitizing the targeted group about books having the potential of being more than boring study material, and the raising of awareness about the topic. This design does not intend to be a full solution to the challenge due to what was discussed previously. Instead, it should be seen as the smallest possible design, which carefully and respectfully considers all the research and does not create more problems by its existence in the bigger system. Nonetheless, the potential value of this design should not be undervalued either, as often the smallest changes can create impact as well. This thought is visualized in figure 49. It shows how a small trigger can influence a person to consume content which changes them, and which might eventually activate them to promote change in the society they live in. That kind of potential is always there and has been considered throughout this whole thesis by the development of the different thesis design results.

The design will now be explained in more detail. First, the interactions of an individual with the design are introduced. Then, the two physical design components are presented.

---

**GOAL**
Trigger spark of inspiration about reading, books, and their powers.

**THESIS DESIGN**
(Stickers and Nairobi reads mobile journey)

**Individual level**

**Societal level**
(Nairobi reading culture 2030 vision and strategy)

Figure 49. The relationship between the thesis design results and potential reading culture change. By Sara Gottschalk.
6.3.1 The Journey

Figure 50 illustrates the journey of a target group member getting in touch with the *Nairobi reads* design, to interacting with its two elements, to leaving the design.

As was described earlier (section 6.1.6), the experience already starts before the individual notices a sticker upon sitting down in a matatu, for example. That person already has previous experiences when it comes to books and reading. Depending on their previous experiences, the individual is triggered by the sticker and gets involved with it. The stickers feature provocative messages and a URL. (Step1)

If the individual feels curious about the sticker and its message, they will follow their curiosity and enter the URL into their phone browser (Step 2).

The stickers are strategically placed in environments where the individual will have waiting time (such as in busses and salons). Therefore, they have nothing to lose by accessing the URL. Once the content is loaded, and it looks interesting enough to them, they optimally get involved with the content and immerse themselves into it (Step 3). The content is designed to be easy to read and equipped with visuals, gently carrying the user forward with a personal voice. A degree of interactivity is provided so that they can easily comprehend the content in busy environments such as busses and salons. The content and journey are also kept as short as possible so that their time on the bus, for example, is long enough to not get interrupted while reading the content.

---

**STICKERS**
(also online)

**Nairobi reads**
MOBILE JOURNEY

**WORD OF MOUTH**

Figure 50. A person’s interactions with the *Nairobi reads* design elements. By Sara Gottschalk.
After finishing interacting with the content, it is now up to the individual on what will follow next. The content aims to plant a seed of thought, a spark, an inspiration that will inspire the individual to rethink their beliefs and perceptions about reading (Step 4).

If the content was successful, the individual will start their own curious journey of rediscovering reading and books for themselves, sooner or later. They may come back to the content at some point in time, remember it suddenly, or share it with others. Because of this, this user journey also does not have a clear ending point because the target group member can decide what they will do with this new knowledge and understanding.

The tangible interactions between user and design are, however, clearly connected to steps 1 to 3: the sticker triggers, the URL (access), and the mobile content (medium of the message).

Figure 51. The stickers envisioned in a matatu environment in Nairobi. Photo and collage by Sara Gottschalk.
6.3.2 The Stickers

The stickers are the first design element in the design concept. Their size is 14.5cm x 9cm. They are the trigger for the target group to become interested and access the website link indicated on them. This link leads them to content specifically prepared for mobile access and is presented in the form of a small journey. A first interaction with this journey should not take longer than 10 minutes, as the stickers will be spread in places where people have some waiting time, but possibly not extensively. This, in Nairobi specifically, applies to public transport such as riding in the city buses (matatus) which are privately owned and already creatively decorated. Figure 51 shows the inside of a matatu in Nairobi and places the stickers in this scenery. The stickers could also be spread in salons, where women spend lots of time, or other similar public spaces such as sports clubs (more male centered), or malls.

The visual design of the stickers, presented in Figure 52, is not final, but it provides a first idea of its content and setup. The messages need further development, providing strong enough and diverse enough triggers for the different persona spectrums developed in section 6.1.5. Possible improved content could include

![Figure 52. The stickers. The visual design and messages are not final, but provide a first impression. By Sara Gottschalk.](nairobireads.org)
quotes from reading advocates in Nairobi, other famous quotes that promote reading and make people think, as well as evidence, facts and numbers on reading benefits, for example. Overall, the sticker messages need to be provocative, optimally apply behavioral principles in their choice of words, and trigger the individual to want to learn more about what is behind the message and link.

6.3.3 The mobile content (Nairobi reads prototype)

The second tangible design part of the journey is the mobile content or mobile journey which carries the name Nairobi reads. This content has been carefully designed to speak to the specific target group, take their previous experiences with books and reading into account, and provide them with an upbeat, fresh, personal and easy access to how books and reading can be fun and beneficial to them. A few screenshots of the mobile content are depicted in Figure 53.

The full Nairobi reads prototype can be accessed and tested at https://marvelapp.com/421ge0i (or QR code on the right below). You can go ahead, give it a try and enter the URL into your phone browser!

It must be stressed again that this mobile prototype is still at an early stage and needs several adjustments to allow it to be shared widely. Nevertheless, so far it has received positive feedback from target group members (below) with whom it was tested. It provides a solid first impression of its message, flow and potential.

In summary, the potential of the different thesis design results should be visible. They form a valuable foundation for further developments on a systemic but also individual level of the thesis topic. That being said, the focus of this thesis has been to understand the context, define the challenge, and identify opportunities. This guides us to the final chapter of this thesis, where the thesis process and results will be discussed and concluded.

Feedback on the mobile prototype and journey:

“I just went through Nairobi Reads and the information there is amazing. I love it.”

“I liked the part where you had the photo of posts on the back of matatu seats. It is very thoughtful and if implemented it can be a fantastic idea.”

“I'm also surprised how you tackled the reading culture in Nairobi I think this is very accurate!”

“the app, I like it! I love the choice of fonts, color and imagery . . . the simplicity”

“The content is truly informative, simple to go through especially for people who don’t read books yet. It is an encouraging piece that can inspire that culture for starters.”

“I love it! I've gone through it and I feel inspired to grab a book and get to reading!”
Figure 53. Screenshots of the Nairobi reads mobile content and journey. Access to the full prototype via https://marvelapp.com/421ge0i. By Sara Gottschalk.
Discussion and Conclusion

This final chapter discusses the thesis, its process, objectives, and results. Thesis limitations and further research are considered. A conclusion closes this thesis work.

7.1 / Discussion

This thesis has explored Nairobi’s reading culture and the experiences, beliefs, and perceptions of younger adults Nairobians in regard to reading and books. It attempted to provide profound insights and identify design opportunities, on a societal and individual level, responding to the challenge of supporting younger adults in becoming more interested in books. A smallest possible design was elaborated and prototyped.

Although the initial wide scope of the thesis topic stretched the thesis timeline, it enabled to gain a more holistic understanding of the local context, reading culture, and the research participants’ experiences. A too narrow initial scope, while having similar thesis goals, would have created gaps in the research. Therefore, the initial challenge was intentionally not limited more to be able to fully explore the topic and be able to study a complex system like Nairobi’s reading culture and the system around it.

Four weeks of interviews, observations and focus group sessions with people across different socioeconomic statuses, combined with a more extended phase of secondary research, exploring various fields, provided valuable insights and a greater understanding about the local reading culture (and system), its dynamics, and how Nairobians move and take part within it. It created the needed foundation for the identification of potential intervention points and design opportunities for the defined target group.

The comprehensive secondary research, including a literature review, was intentionally not conducted before the field trip to keep a blank and open mind during the field research, and avoid being led by other studies and their results. Instead, the field research findings and possible gaps were compared with the
secondary research insights later and matched rather well—a good sign that the field research was sound.

Overall, the field research mostly proceeded as had been planned, which could be surprising because the research was conducted in a foreign country and by me alone, with the help of some friends and connections. However, despite challenges, previous personal experiences in Nairobi, supportive friends, and useful contacts provided by the thesis advisor allowed for a successful field research.

The analysis and synthesis, as well as the design process, were more complex than expected and took significantly longer. To handle all the required tasks alone instead of within a team, plus the complexity of the topic itself, caused a lot of extra back and forth. While there is lots of room for further elaboration of the project, the design prototype did receive positive feedback from locals in Nairobi and seems to have a potential for further development. Factors that supported this outcome, although perhaps more subconsciously, might be years of training and experience in design, including methods and methodology, personal intuition (experience) and empathy for the target group, and a deep curiosity about the local culture. On top of that, revising design objectives and creating design guidelines from the insights for the design process were of great help. The set-out design tactics at the beginning of the process and their iteration, as well as enough room and time to explore, proved to be of great value as well.

The initial assumption that Kenyans do not read much was provocative (and an especially sensitive topic, coming from a foreigner like me). It was an assumption that had been picked up from local online news stations and intended to relate to another bigger locally well-known challenge: unemployability among younger adult Kenyans, in Nairobi. The assumption or hypothesis, which was to be proven right or wrong, did provide the right setup to research the topic thoroughly and with an open mind. The eventual result that Kenyans do read a lot, but more in bits and pieces online, was a positive finding, as well as meeting several Kenyans that absolutely loved reading (physical) books. Nonetheless, these participants mentioned that they were more unique among their social groups and so it became clear that by researching this topic I had naturally attracted people who liked reading. In general, the results confirmed how vital mobile phones and access to them are in Kenya and what great potential it carries. Inspiring people to read physical books might be a tougher challenge, but inspiring people to read more digital books on their phones might not be far off. There is a great potential for utilizing technology to instill an interest in people in reading long-form materials starting from an early age. And this could be combined with other activities that have been proven to be highly influential, such as parents reading with their children or having a home library and engaging them with it.

While the change of a society’s reading culture requires enormous and collaborative efforts by government and local stakeholders, smaller local initiatives have already started to advocate for reading and books by restoring libraries, publishing more local content, or setting up book clubs. In general, there are
many ways how reading can be promoted on a small scale, but the effort has to be made. These local initiatives show that people are desiring change and are working to create a movement. While digital media has been and still is very attractive to especially the younger Kenyans, many do notice that not all answers can be found online. It is often the lack of habit and the negative past experiences that keep them from recognizing books as an easy and invaluable source for their own development, but that is something that can be changed. People are passionate about growing and learning and so it is often the tools and opportunities that are missing.

It was anticipated that a holistic solution would certainly not be possible to implement within this Master thesis, as for that longtime effort and collaboration of local stakeholders would be necessary. It is not a secret that change can take time and requires the marriage of existing and new structures. Further, change must come from within—individuals’ awareness and mindset—and without—cultural and societal adaptations—and therefore, this thesis project could only hope to initiate a first tiny step into the right direction, optimally starting with the creation of a dialog.

In the beginning of this thesis, it was questioned if reading books could be an effective way to develop and empower oneself. Based on the research conducted and the findings extracted and tested in the design concept, it became clear that reading does play a big part in self-development. However, it must be stressed that it is crucial how the activity of reading is carried out, what emotional experiences the reader has to books and reading and how well the reader applies the read in their own lives. Reading alone does not ensure the development of the mind, even though it is often simplified like that. Throughout the thesis research it became apparent that an awareness of the power of reading and books has to accompany the reading experience so that the reader is open for learning, open for failing, and open for developing. As was also noted by Paulo Freire, it is always necessary to have a combination of reflection and action. One alone does not create change. Because of this, the thesis design concept aimed to address the importance of understanding why humans read, why reading can change us, and how we must apply what we read.

Overall, the developed design seems appropriate in regard to the thesis scope and time and has received positive feedback from target group members. Nonetheless, so far the content (development) was prioritized due to time limitations. The design would inevitably require an enhanced and elaborated user and learning experience with more interactivity and engagement. This could be in the form of quizzes or similar, for example. Additionally, the visual and interface design should be further developed, next to content revision rounds. Learning theory and more behavioral principles could be implemented into the prototype, but also the journey, to optimize the target group’s experience and introduction to finding new value and joy in reading books.

The developed vision and strategy only indicate what could be possible, if greater collaboration was initiated. In this process, another role for designers could be facilitation and support for the stakeholders in finding
common value and agreement in reaching a related goal.

The Nairobi reads design concept and the prototype should show that even in a complex challenge like this, something small can be done to start a process of change. Many opportunities have been identified which could each contribute to the local reading culture. What is crucial, however, is local ownership and commitment to desiring and subsequently demanding and creating change. Solutions coming from outside of Kenya, without including the locals, could never replace that. The here presented design prototype and concept could be easily and fully implemented in the near future. The strategy and vision, in contrast, are undoubtedly in its infant shoes and would need a strong revision with active collaboration between government and stakeholders (and facilitation of that), for them to become applicable.

7.2 / Limitations

The biggest limitation of this thesis might be the broad scope of the researched topic, which aimed to cover too many topics. Although literature and further secondary research topics were studied with great dedication and interest, it was impossible to acquire proper in-depth knowledge and become an expert in each of them.

Next, due to the field research taking place in a foreign culture and context, many research-related decisions had to be made based on limited amounts of preparation, spontaneously, and depending on the local situation, which was hard to anticipate despite previous experiences in the country. As the local context is of high importance in this thesis, but circumstances change rapidly as time passes, the research collected is also very sensitive to that time period in 2018. This means that the thesis research only informs about that narrow window of time and space and into people’s lives.

Further, on site, my presence and influence during interviews and observations must be noted. Research participants were mostly asked to self-report on their experiences and beliefs while I was with them. This might have affected their perceptions and answers. Certain interview styles and the comparison with secondary research attempted to balance this.

The relatively small number of interview participants might be another limitation, especially in regard to the scope of the topic. This becomes a crucial limitation, in fact, when considering the specific target group, which was only narrowed down after the field research had been completed and the assumption had been proven mostly wrong. More rounds of interviews with the finalized target group would be required. Finally, more stakeholders would need to be interviewed and involved as well, for the proper development of the strategy roadmaps.

7.3 / Further research

Understanding adult reading in Kenya remains a field that is not formally studied. In general, reading research in Kenya, but also in Africa overall, is scarce. Formal research would benefit locals in many ways and might thence attract various projects from diverse other
fields, such as design and technology. In alignment with that, more qualitative but especially quantitative research could be conducted to understand adult reading behavior.

Fields such as designing for behavior change and systems thinking could be applied more for creating positive change in a context like Nairobi, which is becoming increasingly design-sensitized. More local research, initiatives, and design and technology projects could explore new ways to cultivate the local reading environment and culture actively, and positively influence the local society and citizens. These new ways could be tested, and their importance communicated to the government and stakeholders, as this topic does not seem to be prioritized at the moment.

Overall, personal and professional development has been identified as a great desire for younger adults in Nairobi. Research and projects addressing e-learning hold significant potential and could utilize design fields such as learning experience design.

7.4 / Conclusion

The promotion of reading books has been a global concern for many decades. Scientific evidence has made a connection between reading books and a significant positive influence on a person’s development and success in life. While this thesis specifically looks at the case of Nairobi, Kenya, people everywhere in the world could generally benefit from a more dedicated practice of reading.

In Kenya, how much people read has been a local topic of discussion. Based on a local news segment, the statement that Kenyans do not read much was extracted and used to initiate the thesis research. This initial statement, or assumption, and the conducted thesis research, guided the direction of this design project, which also included revisions of the design challenge and target group.

During the field research, while investigating the local reading culture and young Nairobians’ experiences and beliefs about reading and books, it became clear that the abovementioned statement or assumption was mostly not true, as people read online, daily. However, participants reported a general lack of local reading culture, as well as negative associations with books. Understanding this already during the field research provided the chance to gather first ideas, identify intervention points in the current system and environment, and gather first design opportunities for the design challenge.

After the field trip, the collected research data was thoroughly analyzed and synthesized and enriched with literature reviews and further secondary research. The thesis’ design objectives guided this process, aiming to find opportunities for how adult Nairobians, in their early twenties to mid-thirties and who attended the 8-4-4 educational system, could be supported in (re-)discovering meaning, value, and joy in reading books. It became clear that although adult Kenyans in Nairobi were focused, the research insights and design results would have to be developed from a systemic and individual level, which would then complete each other and allow for a greater understanding. Figure 54 summarizes how these two levels were applied throughout the entire thesis process.
Figure 54. The thesis process summarized, highlighting the system and individual level approach at all times.
In this thesis, design methodologies were applied to understand the local context and current status quo of the reading culture in Nairobi. Based on that, an exact design challenge for a specific target group was crafted, and a Nairobi reading culture vision and a strategy for 2030 were developed. A final design concept called *Nairobi reads* was created and tested. It introduces younger adult Nairobians to the benefits and value of books in an easy and appealing way, without taking too much of their time. Having completed all these milestones results in all thesis objectives having been achieved.

The thesis results are summarized in Figure 55 and include high to low-level results, which represent the complexity of the thesis challenge.

Throughout this thesis research and project, it has become evident that every behavior, no matter how small, is always connected to a bigger system (or systems) around it. Every behavior influences society, and vice versa. This must always be considered, especially when aiming at introducing new “solutions” to unexplored contexts. Not considering this might worsen the whole system.

When it comes to Nairobi’s reading culture and people’s attitudes, beliefs, and behavior specifically, regarding reading and books, the local government and other stakeholders related to education and the reading culture in Kenya must become active and collaborate extensively and closely for positive change to be initiated. So far, the reading culture in Nairobi has not been actively cultivated and prioritized. Only by committing to a common goal, investing in education, promoting reading, and creating the facilities needed for that, a flourishing reading culture and hence more common joy for reading books can be established.

Finally, this thesis aimed at conducting design research in a complex context like Nairobi. Key challenges in this context have been related to reading practices in Nairobi being deeply ingrained in its local culture and history, and a highly informal nature of society. Further, the concept of design is relatively underelaborated in public discourse in Nairobi (in contrast, for example, to Finland). Furthermore, little reading research has been available on adults in Nairobi and so the field research provided value.

This thesis focused on framing the design challenge and identifying design opportunities. This was achieved including the development of one design concept. The achievement of all thesis objectives makes this work complete.

**Figure 55. Thesis results.**


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Appendices

Appendix 1: Interview question examples for individual interviews and focus group sessions

What is the first thought that comes to mind when you think about books?

What do you think about reading/books?
What was your first experience with books?
What has been your overall experience with books/reading?
Do you see people in your community read? What do they read?
What do you see as barriers to reading (more)?
What do you believe are the benefits of reading?

What do you enjoy doing?
How does leisure time look like for you?
How does your everyday time look like?

What topics do you find interesting in general?
Do you have an idol? Who is it and why?
What do you dream about doing?
What service/product would you like to have to reach that dream?

Do you have ideas on how to foster reading (culture)?
What would an optimal future look like when it comes to reading in Nairobi?

What do you read and why?
What is your favorite book?
What time of day do you read, and where, how often?
How do you access reading material?
Do you go to the library here? Why yes or no.

Topics that were aimed to be covered:

- Actual behavior/actions, thoughts/beliefs, feelings around reading/books
- Self
- Family & friends & schoolmates
- Perception of society
- Kenyan culture
- Languages
- Content/material
- Access
Appendix 2: Detailed research findings

Reading behavior

/ Book usage

- Behavior varied from rare one-time access of a fiction book to reading occasionally, but then mostly non-fiction, to reading a lot, and then both fiction and non-fiction

/ Access to books and benefits of each access format

- Bookstores were only used by booklovers; disadvantage of books being expensive and problems with availability.
- Libraries were hardly used, although they agree on advantage of having a physical copy and no very small costs only; disadvantage of environment being focused for studying, it’s old and dusty, and transportation time to access the library
- Most participants accessed books and material online through pdfs shared by others on FB groups, WhatsApp chats, Torrents, other websites, kindle; advantage of convenience, access, lower price - however, these may contain incredible or even fake content (e.g. on blogs)
- Some participants borrowed or exchanged books from and with another
- Some buy books from the second hand street sellers

/ Reading online versus reading offline

- General media content online was discussed, the biggest advantages being an endless network of knowledge and content, content types for everyone (such as visual, audio etc.), better support with learning new vocabulary, more entertaining content. The biggest drawback was lots of distractions and lack of focus, as well as information overflow.
- Regarding books, convenience was a big factor for participants for reading them on their phone or online. However, distractions were a main negative influencer.
- On the other side, some participants appreciated physical books for their interface, the focus it allowed them, the sensual experience (touch, smell), being able to take handwritten notes in the books and the higher reading comfort for their eyes.

Perception of reading and books

- Most common perception: books/reading = studying, exams, pressure, struggle
- This negative association was always referred back to school

/ What physical books represent

To the participants interviewed, physical books bring up the following associations: school, bad experience, struggle, history, old, old school, wisdom, childhood reading, value (if one invested in buying a book), knowledge, knowledge accessed, knowledge available
Influences on reading perception

/Social class
There is a big gap in the quality of public and private education, which means that high earners will send their children to schools that provide a joyful introduction to reading, whereas public schools have been known to focus on exams and grades, while neglecting to teach the joy and value of reading. Also, depending on families’ home districts and income, access or interest in reading material may limited. This means that depending on social class, children are likely to grow up more or less exposed to the art and activity of reading, which shapes their perception of it.

/Content available
Reading material available in schools, bookstores and libraries is lacking diversity. Focus is set on a lot of education material and textbooks, as well as Western books and reading material. The limited existence and availability of local content influences people’s ideas of who is and should read.

/Public discussion
Reading and writing is not especially discussed or promoted in public media. A few articles will spark people’s interest, but there is still a lack of actual reading culture and examples set by influential people.

/Language
Most children in Kenya are raised in another mother tongue (their tribe language) than the official languages English and Swahili. Thus, upon entering school they mostly have to learn and read in a to them foreign language, which is often tough for them.

/Stereotypes/stigma about reading and readers embedded in Kenyan society
The following stigmatizations and stereotypes are common to hear:
• Men read newspapers, women read love stories.
• Reading is something western (it is), “I am not a muzungu”*. (*Swahili word for “foreigner”)
• Reading is for nerds. Reading is boring.
• Reading is counter-social, you do it alone.
• Reading takes a lot of time.
• Reading takes a lot of effort and concentration.
• Reading is all work, no fun.

Further, there is a western proverb about Africans and books, that was mentioned several times by the participants: "If you want to hide something from an African, put it in a book."

Influences on reading behavior

/Social class (see above)
Additionally, the lower the income of people, the less time they can spare, as they will have
to hustle to make enough money. The further away they live from the city, for example far east, the longer it takes to reach the city by public transport for services.

/ Costs
Buying books in bookstores can be expensive, as there is a high tax of 16%. As for accessing books online, buying them online is cheaper, yet expensive for some. Also, data bundles for mobile phones are an investment for some (WiFi in homes is only common for certain social classes), thus downloading material needs to me thought through. Nevertheless, data bundle costs have gone down over the years and smartphones have become more affordable as well.

/ Infrastructure
Libraries and bookstores are not available in every district, thus there are transportation and time costs to access physical reading material, which may limit people’s willingness to read. (see social class)

/ Devices
Reading online and on phones is convenient and easy, if one has access to a smartphone, which most people do in 2018. Nevertheless, in many families, one smartphone is shared, which means limited access at times. (see social class)

/ Language and content
English and Swahili are usually not the first languages that children learn, this can create a barrier to understanding of reading content and material. Also, appropriate and relevant content for locals is often lacking (mostly foreign material is available), which creates another barrier for interest. Literacy is not a big problem in Nairobi, due to free primary education.

/ Environment
A lack of an appropriate space/environment for reading can influence the choice to read or not read. Also, a lack of exposure to interesting reading material or a culture of reading can influence a person’s choice to take up reading.

/ Society
Societal stigmatization or stereotypes about reading can create a fear in people about being stigmatized when others see them read and comment on it in a negative way. Further, there are general cultural expectations and implications for Kenyan women and men, what they ought to do and not ought to do.

/ Personal barriers to reading that participants have described
• A sense of information overflow
• Not being able to creating time to read (due to other priorities/responsibilities)
• Small concentration or attention span (brain capacity at time of day)
• Distractions coming through the phone, social media & messaging apps, also MPESA
• Books don’t seem to have an instant payoff and require effort and time, compared to other more entertaining media such as videos, games, and series
• Availability of other entertainment or even learning platforms
• Struggle with self-discipline, self-management

/ Reading incentives that have been mentioned
The biggest incentive is still purpose for reading something. That can be broken down into
• Inspiration and interest
  - Genuine interest in a topic
  - Curiosity about life
  - A question needed to be answered
  - Problem-solving in general
  - Looking for inspiration specifically
  - Interest in a specific author
  - Wanting to follow a public discussion
• Self-development
  - Priority of activity itself
  - Awareness of time waste on social media, looking for more meaningful activity
  - Awareness of the gain, benefit of reading certain content
  - Reading to be a better writer
• Technology
  - Interactivity
  - Fascinating endless network of information
  - Convenient and accessible
• Mere exposure
  - Something seems like a fun read, curiosity
  - Boredom, time to pass
• Treat
  - Want to treat oneself, taking "time for myself"
  - The sensual experience of physical books
• Environment
  - Personally inspiring surrounding that invites reading
• Pressure
  - During childhood, parents encouraged or gently forced reading of books
  - Friends recommends books (Social influence, peer-pressure)
  - A book, for example, was a gift from someone
  - To be socially or professionally relevant
  - Reading for schools, exams and grades

Current reading culture system

For this category, current touchpoints (physical and digital) for inhabitants to get in contact
with the existing reading culture were collected and listed. Further, stakeholders were mapped. These elements were prepared into a status quo reading culture and stakeholder map, which is presented in key insights. Furthermore, potential/promising touchpoints, which form the foundation for design opportunities later, were collected from the interviews and discussions and noted for the design opportunities.

Current Reading culture challenges

/ Vicious cycle of publishing industry (see Figure 19 in chapter 4)
As the book marked is dominated by educational books for schools, publishers are forced to enter that market to sustain themselves. But because there are only educational books available, no interest in other genres can be initiated. The local book market doesn’t allow local writers to survive on writing, and the local publishing industry lacks finances to experiment with interesting new material. Further, foreign books and publishers flood the market with cheaper and foreign books, which brings great competition and pressure to local writers and publishers. There is a high tax (VAT) on books. Due to that, piracy has become common and a big threat to publishers and writers, but it also means that the pirated versions are often of lower quality and equip people with low quality reading material, which leaves a bad taste in their mouth.

/ Weak culture of celebrating local writers
Local authors, even African authors could be celebrated and appreciate more. Foreign material is often consumed with interest, but low public awareness of local authorship prevents locals from success. There is a lack of culture around celebrating books such as through book tours, book readings or books being transformed into movies.

/ Research on reading and reading behaviors
There is no formal research available studying people’s reading behaviors and the amount of time they spend on reading. Also, due to a highly informal society and a big informal sector, obtaining these numbers is tricky.

/ Quality and quantity of libraries and bookstores
  • Few libraries exist in Nairobi (low saturation) and despite efforts in the last years, they remain places where people go to study, or not go at all. Often books are old and dusty. The environment is mostly not inspiring for young adults. Borrowing books remains an effort. Further, many public schools are not equipped with proper libraries and trained librarians.
  • Bookstores have decreased in Nairobi. Three popular bookstore branches are spread in the richer areas of town. Even though the bookstores are filled with people, it is a very small number of the population that loves books to visit these bookstores, especially for books other than educational books. Books in these bookstores are also expensive.
/ Infrastructure
   Due to heavy traffic in the city, reaching places takes lots of time—this includes reaching
libraries and bookstores, but also cultural places that offer for example poetry cafés or
similar.

/ Data costs
   Unlimited mobile data subscriptions are not available in Kenya, which means that every
download costs money, which people carefully spend. Despite many popular places such
as cafés offering free WiFi, these places still don’t remain accessible for all social groups.

/ Perception of reading
   Through school, a counterproductive perception about books and reading was instilled
early in children’s lives. To many, reading and book are equal to studying and pressure.
Further, parents have often not taken part in their child’s education, as they trusted
the schools with that.

/ Cost—perceived value
   For many, the costs they have to pay to access books and read them (data or buying
costs, transport, time, concentration) does not seem worth what they expect to receive in
value, due to limited positive and beneficial interactions with books previously. This holds
especially true when they can instead access other forms of entertainment or knowledge
cheaper (e.g. movies are shared on flash discs for very little money).

/ Cultural focus on news and politics
   Kenya has a strong newspaper reading culture and related to that, politics are a major
theme in the news, but also in other reading material, online and offline. Local novels often
thematize political events.

/ Other
   • Focus on the west and western content
   • Disappearance of traditional oral storytelling culture
   • Identity struggle
   • Various languages
   • Multitasking and instant payoff society
<table>
<thead>
<tr>
<th>Computers as Persuasive Tools</th>
<th>as Persuasive Media</th>
<th>as Persuasive Social Actors</th>
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<tbody>
<tr>
<td><strong>Principle of Reduction</strong></td>
<td><strong>Principle of Cause and Effect</strong></td>
<td><strong>Principle of Attractiveness</strong></td>
</tr>
<tr>
<td>Using computing technology to reduce complex behavior to simple tasks increases the benefit/cost ratio of the behavior and influences users to perform the behavior.</td>
<td>Simulations can persuade people to change their attitudes or behaviors by enabling them to observe immediately the link between cause and effects.</td>
<td>A computing technology that is visually attractive to target users is likely to be more persuasive as well.</td>
</tr>
<tr>
<td><strong>Principle of Tunneling</strong></td>
<td><strong>Principle of Virtual Rehearsal</strong></td>
<td><strong>Principle of Similarity</strong></td>
</tr>
<tr>
<td>Using computing technology to guide users through a process or experience provides opportunities to persuade along the way.</td>
<td>Providing a motivating simulated environment in which to rehearse a behavior can enable people to change their attitudes or behavior in the real world.</td>
<td>People are more readily persuaded by computing technology products that are similar to themselves in some way.</td>
</tr>
<tr>
<td><strong>Principle of Tailoring</strong></td>
<td><strong>Principle of Virtual Rewards</strong></td>
<td><strong>Principle of Praise</strong></td>
</tr>
<tr>
<td>Information provided by computing technology will be more persuasive if it is tailored to the individual's needs, interests, personality, usage context, or other factors relevant to the individual.</td>
<td>Computer simulations that reward target behaviors in a virtual world, such as giving virtual rewards for exercising, can influence people to perform the target behavior more.</td>
<td>By offering praise, via words, images, symbols, or sounds, computing technology can lead users to be more open to persuasion.</td>
</tr>
<tr>
<td><strong>Principle of Suggestion</strong></td>
<td><strong>Principle of Simulations in Real-World Contexts</strong></td>
<td><strong>Principle of Reciprocity</strong></td>
</tr>
<tr>
<td>A computing technology will have greater persuasive power if it offers suggestions at opportune moments.</td>
<td>Portable simulation technologies designed for use during everyday routines can highlight the impact of certain behaviors and motivate behavior or attitude change.</td>
<td>People will feel the need to reciprocate when computing technology has done a favor for them.</td>
</tr>
<tr>
<td><strong>Principle of Self-Monitoring</strong></td>
<td><strong>Principle of Authority</strong></td>
<td><strong>Principle of Praise</strong></td>
</tr>
<tr>
<td>Applying computing technology to eliminate the tedium of tracking performance or status helps people to achieve predetermined goals or outcomes.</td>
<td>Computing technology that assumes roles of authority will have enhanced powers of persuasion.</td>
<td></td>
</tr>
<tr>
<td><strong>Principle of Surveillance</strong></td>
<td><strong>Principle of Reciprocity</strong></td>
<td><strong>Principle of Authority</strong></td>
</tr>
<tr>
<td>Applying computing technology to observe others' behavior increases the likelihood of achieving a desired outcome.</td>
<td>People will feel the need to reciprocate when computing technology has done a favor for them.</td>
<td>Computing technology that assumes roles of authority will have enhanced powers of persuasion.</td>
</tr>
<tr>
<td><strong>Principle of Conditioning</strong></td>
<td><strong>Principle of Authority</strong></td>
<td><strong>Principle of Praise</strong></td>
</tr>
<tr>
<td>Computing technology can use positive reinforcement to shape complex behavior or transform existing behaviors into habits.</td>
<td>Computing technology that assumes roles of authority will have enhanced powers of persuasion.</td>
<td>By offering praise, via words, images, symbols, or sounds, computing technology can lead users to be more open to persuasion.</td>
</tr>
</tbody>
</table>
Appendix 4: System wisdom by Meadows (2008)

- Get the Beat of the System
  “Watching what really happens, instead of listening to people’s theories of what happens, can explode many careless causal hypotheses.” (p. 171)

- Expose Your Mental Models to the Light of Day
- Honor, Respect, and Distribute Information
  “You can make a system work better with surprising ease if you can give it more timely, more accurate, more complete information.” (p. 173)

- Use Language with Care and Enrich It with Systems Concepts
  “A society that talks incessantly about “productivity” but that hardly understands, much less uses, the word “resilience” is going to become productive and not resilient.” (p. 174)
  “The first step in respecting language is keeping it as concrete, meaningful, and truthful as possible—part of the job of keeping information streams clear” (p. 175)
  “The second step is to enlarge language to make it consistent with our enlarged understanding of systems.” (p. 175)

- Pay Attention to What Is Important, Not Just What Is Quantifiable
  “Our culture, obsessed with numbers, has given us the idea that what we can measure is more important than what we can’t measure.” (p. 175)

- Make Feedback Policies for Feedback Systems
- Go for the Good of the Whole
- Listen to the Wisdom of the System
  “Aid and encourage the forces and structures that help the system run itself.” (p. 178)

- Locate Responsibility in the System
  “Looking for the ways the system creates its own behavior” (p. 179)
  “how little our current culture has come to look for responsibility within the system that generates an action, and how poorly we design systems to experience the consequences of their actions.” (p. 180)

- Stay Humble—Stay a Learner
  “Error-embracing is the condition for learning” (p. 181)

- Celebrate Complexity
- Expand Time Horizons
  “In a strict systems sense, there is no long-term, short-term distinction.” (p. 183)

- Defy the Disciplines
  “Seeing systems whole requires more than being “interdisciplinary,” if that word means, as it usually does, putting together people from different disciplines and letting them talk past each other.” (p. 183)

- Expand the Boundary of Caring
  “expanding the horizons of caring” (p. 184)

- Don’t Erode the Goal of Goodness
  “Systems thinking can only tell us to do that. It can’t do it. We’re back to the gap between understanding and implementation. Systems thinking by itself cannot bridge that gap, but it can lead us to the edge of what analysis can do and then point beyond—to what can and must be done by the human spirit.” (p. 185)

(Meadows, 2008)
Appendix 5: Range of possible persona spectrums

General motivations

Wants to get a good/fulfilling job
Wants to get a better/more fulfilling job
Wants to get better at their job

Wants to make money

Is interested in developing their skills or themselves professionally and/or personally for that

Motivation challenges regarding reading books

Doesn’t care about reading because...

...it feels like studying and pressure.
...they don’t want to fail and feel bad about it.
...reading material does not seem interesting.
...information can be gotten from elsewhere: Youtube, TV, social media.
...books are only for nerds, it’s not cool!
...there is no interesting material for them.
...it does not help them to make a living, get a job, make money.

Motivation challenges regarding reading books

Wants to read, but...

...always gets distracted.
...it’s too expensive to buy books.
...doesn’t find any material interesting.
...can’t focus long enough.
...doesn’t want to look like a nerd.
...doesn’t think it’s for them, that they are a reader.
...doesn’t think it will help them to make money to sustain themselves.

continues on next page.
**Physical context**

- at home
- at work
- at school
- at the library
- at cultural events
- at church
- in the city centre
- in public transport
- on their phones
- at coffee shops and restaurants
- doing sports
- at the salon
- at the shopping centre

**Social context**

- alone
- with friends
- with family
- with co-workers
- in a crowd with others
- alone in a crowd

**Abilities**

- cannot read and write
- can read and write, but not well
- can read and write
- can read and write, wants to improve

**Circumstances**

**Socioeconomic status**

- Priorities and values differ (due to...)
- ...types of daily challenges (e.g. making a living) influence time and mind to read/learn.
- ...challenging or enabling environment (schools, parents/surrounding that encourages reading or not).
- access to internet, bookstores, libraries (transport) influences quality of reading material; also mentors etc.