This thesis has been submitted in fulfilment of the requirements for a postgraduate degree (e.g. PhD, MPhil, DClinPsychol) at the University of Edinburgh. Please note the following terms and conditions of use:

- This work is protected by copyright and other intellectual property rights, which are retained by the thesis author, unless otherwise stated.
- A copy can be downloaded for personal non-commercial research or study, without prior permission or charge.
- This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the author.
- The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author.
- When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given.
Arabic Massive Open Online Courses and Teachers in
Saudi Arabia

Technology, Space, Gift and Entrepreneurship

Nada Alsayegh

PhD
The University of Edinburgh
2022
Acknowledgements

I would like to express my sincere gratitude to my supervisor, Dr Jen Ross, for her patience, kindness, encouragement and faith, which made it possible for me to complete my PhD, despite all the challenges I have been through. I would also like to extend my thanks to Dr Jeremy Knox, for guiding me, providing me with valuable insights and stimulating my thinking in a constructive and creative way. I would not have made it this far without their guidance and support.

I am thankful to all participants for their contributions and willingness to share their time, opinions and experiences with me. Their input allowed me to reach a better understanding of technology, education and culture in Saudi Arabia. I appreciate their cooperation and participation in my research.

I also want to acknowledge the Government of Saudi Arabia for sponsoring my scholarship and supporting me financially during my study. My thanks to the Centre for Research in Digital Education at the University of Edinburgh for fostering a creative atmosphere for digital education research, and for giving me the opportunity to do my own research.

I would like to show special thanks and appreciation to those who ensured that I had a high quality of education since childhood and continue their support, trust and belief in me: to my father, Mohammed, and my mother, Badriah. I extend my thanks to all of my family for their continued care and encouragement; your prayers, love and support are much appreciated.
Abstract

This thesis critically examines Arabic Massive Open Online Courses (MOOCs) and the MOOC teacher experience by studying MOOCs in the context of Saudi Arabia from a posthumanist and sociomaterial perspective. It considers the materials, digital technologies and social context as active components in forming MOOCs and developing teachers’ identities and practices. Examination of Arabic MOOC platforms and online courses was conducted through visual analysis, interviews with MOOC teachers, and theoretical work on sociomateriality and spatial theory. Through this analysis, these MOOCs were shown to be deeply implicated in Islamic culture and in Saudi Arabian educational policy structures.

The findings highlight the spatial implications of Arabic MOOCs in a cultural context and show new forms of teaching, spaces, and concepts. Specifically, the MOOC project in Saudi Arabia appeared actively engaged in producing new meanings of gift-giving and entrepreneurship. It reframed giving and knowledge-sharing practices in Islamic culture, including zakat of knowledge and waqf, and reconceptualised entrepreneurship in a digital educational context through the formation of entrepreneurial teachers. These different practices and the identities they produced were overlapping and unpredictable and confirmed the dynamic role of materials and digital technology in forming MOOC spaces, in addition to the entanglements of materials and social dimensions in MOOC teaching and MOOC teacher identity formation. These findings add empirical evidence to theoretical claims that MOOCs are not only a technological medium for online education, but also spatially and relationally produced and enacted.

This thesis contributes new knowledge in three main areas. First, it challenges the assumption that MOOCs are ‘universal’ or ‘global’ by shedding light on the Arabic MOOCs and presents an alternative evidence-based perspective from an under-represented cultural context. Secondly, it offers a critical examination of MOOCs by adopting a relational approach and considering the material and digital technology in studying teachers’ experiences in Saudi
Arabia. Finally, it shows how Arabic MOOCs actively engage in shaping cultural and entrepreneurial spaces in Saudi Arabia. This thesis makes an original contribution to scholarship in digital education, MOOCs and open education, online teaching, sociomaterial and spatial studies and education in the Gulf and Arab region.
Lay Summary

This thesis critically examines Arabic Massive Open Online Courses (MOOCs) and the MOOC teacher experience in Saudi Arabia. It considers the materials, digital technologies and social context as active components in forming the courses and developing teachers’ identities. Through this analysis, Arabic MOOCs were shown to be deeply implicated in the Islamic culture and educational and policy context of Saudi Arabia.

The findings highlight the spatial implications of Arabic MOOCs in a cultural context. Arabic MOOCs appeared to be actively engaged in producing new meanings of gift-giving and entrepreneurship. They reframed giving practices in Islamic culture, including zakat of knowledge and waqf, and reconceptualised entrepreneurship in a digital educational context. These different practices and the identities they produce were overlapping and unpredictable and confirm the dynamic role of materials and digital technology in forming MOOC spaces, in addition to the entanglements of materials and social dimensions in MOOC teaching and MOOC teacher identity formation. These findings add empirical evidence to theoretical claims that MOOCs are not only a technological medium for online education but are also spatially and relationally produced and enacted.

This thesis contributes new knowledge in three main areas. First, it challenges the assumption that MOOCs are ‘universal’ or ‘global’ by shedding light on the Arabic MOOCs and presents an alternative evidence-based perspective from an under-represented cultural context. Secondly, it offers a critical examination of MOOCs by adopting a relational approach and considering the material and digital technology in studying teachers’ experiences in Saudi Arabia. Finally, it shows how Arabic MOOCs actively engage in shaping cultural and entrepreneurial spaces in Saudi Arabia. This thesis makes an original contribution to scholarship in digital education, MOOCs and open education, online teaching, sociomaterial and spatial studies and education in the Gulf and Arab region.
### Contents

**CHAPTER 1: INTRODUCTION**  
Main themes and research questions  
Contributions  
Thesis roadmap  

**CHAPTER 2: THE CONTEXT**  
Introduction  
Overview  
Higher Education  
Digital Education  
Saudi Vision 2030  
Knowledge-Based Economy  
Conclusions  

**CHAPTER 3: MOOCS AND THE GIFT**  
Introduction  
Massive Open Online Courses (MOOCs)  
Arabic MOOCs  
MOOC research in Saudi Arabia  
Gift Giving  
Gift Giving in the Digital Context  
Gift Giving in Islamic Culture  
Waqf  
Zakat  
Conclusion  

**CHAPTER 4: SOCIOMATERIALITY AND SPACE**
<table>
<thead>
<tr>
<th>Posthumanism in Digital Education</th>
<th>68</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociomateriality</td>
<td>71</td>
</tr>
<tr>
<td>Spatial Theory</td>
<td>78</td>
</tr>
<tr>
<td>Identity and Self-Presentation</td>
<td>84</td>
</tr>
<tr>
<td>Agency</td>
<td>88</td>
</tr>
<tr>
<td>Ownership</td>
<td>90</td>
</tr>
<tr>
<td>Conclusion</td>
<td>91</td>
</tr>
</tbody>
</table>

**CHAPTER 5: METHODOLOGY**

<table>
<thead>
<tr>
<th>Introduction</th>
<th>94</th>
</tr>
</thead>
<tbody>
<tr>
<td>The nature of the research</td>
<td>95</td>
</tr>
<tr>
<td>Relational methodology</td>
<td>98</td>
</tr>
<tr>
<td>Sociomateriality methodological approaches</td>
<td>99</td>
</tr>
<tr>
<td>Research design</td>
<td>100</td>
</tr>
<tr>
<td>Pilot study</td>
<td>102</td>
</tr>
<tr>
<td>Approaching MOOCs</td>
<td>104</td>
</tr>
<tr>
<td>Recruiting participants</td>
<td>106</td>
</tr>
<tr>
<td>Methods</td>
<td>107</td>
</tr>
<tr>
<td>1. Observation</td>
<td>109</td>
</tr>
<tr>
<td>2. Visual methodology</td>
<td>110</td>
</tr>
<tr>
<td>3. Interviews</td>
<td>110</td>
</tr>
<tr>
<td>Transcripts</td>
<td>115</td>
</tr>
<tr>
<td>Translation</td>
<td>117</td>
</tr>
<tr>
<td>Data management and co-researchers</td>
<td>119</td>
</tr>
<tr>
<td>Positionality</td>
<td>122</td>
</tr>
<tr>
<td>Reflexivity</td>
<td>124</td>
</tr>
<tr>
<td>Validity and reliability</td>
<td>125</td>
</tr>
<tr>
<td>Ethics</td>
<td>126</td>
</tr>
<tr>
<td>Opportunities and challenges</td>
<td>129</td>
</tr>
<tr>
<td>Conclusion</td>
<td>131</td>
</tr>
</tbody>
</table>

**CHAPTER 6: GIFT AND ENTREPRENEURSHIP**

<table>
<thead>
<tr>
<th>Introduction</th>
<th>132</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>133</td>
</tr>
</tbody>
</table>
Tracing the emergence of Arabic MOOCs 134
Gift-giving as spatial formation 140
Rwaq, gift-giving and space 141
Entrepreneurship and MOOCs 154

CHAPTER 7: MOOCS AND TEACHER IDENTITY 164

Introduction 165
MOOC representational spaces 167
Participants' space 179
Course materials 184
Course statistics 189
Outcome space 192
Conclusion 195

CHAPTER 8: SPACE, MATERIAL AND TEACHER PRESENCE 197

Introduction: 198
Space one: Knowledge Construction 198
Space Two: Course Production 202
Space Three: Engagement Space 211
Conclusion 213

CHAPTER 9: CONCLUSIONS 215

Contributions and implications 217
Limitations and challenges 221
Future research 223

BIBLIOGRAPHY 228
APPENDIX 254
Tables and Figures

Tables
Table 1 Research design 101
Table 2 participants and MOOCs involved in the pilot study 103
Table 3 Platform classifications 105
Table 4 Characteristics of the participants and courses 107
Table 5 Methods adopted in the research 108
Table 6 Interview design 113
Table 7: Classification of MOOC representational spaces 168

Figures
Figure 1 Timeline of Arabic MOOCs 42
Figure 2 Interface of Awqaf Tech platform 61
Figure 3 Medication reminder App (digital waqf) 62
Figure 4 Awqaf Tech tweet and digital waqf 62
Figure 5 Example of waqf website 63
Figure 6 Digital coding of the interviews in MAXQDA 117
Figure 7 Extract from collected data record 120
Figure 8 Excel sheet showing translation extracts from the interviews 120
Figure 9 Screenshot showing translating images in PhotoScape X 121
Figure 10 screenshot shows data coding in MAXQDA software 121
Figure 11 My writing workspace in different locations 122
Figure 12 Example of hand drawings 129
Figure 13: Rwaq announcement to teachers on Twitter 138
Figure 14 Rwaq platform interface (automated translation) 142
Figure 15 Rwaqs' Twitter messages mentioning 'Zakat of knowledge' (Translated by Google) 145
Figure 16 Message of thanks to Rwaq's teachers 151
Figure 17 Doroob platform interface 155
Figure 18 Maharah platform interface (automated google translate). 158
Figure 19 Shorfaa and its most popular courses 160
Figure 20 Screenshot from flower arrangement course 164
Figure 21 Examples of teachers' output appeared in the videos 171
Figure 22 Teachers and their books in the videos 172
Figure 23 From a colouring book to Art therapy course 173
Figure 24 Example of teachers in videos 178
Figure 25 Screenshot of comments to solve a technical issue 182
Figure 26 Textual material from Arabic literature course 186
Figure 27 Student' engagement statics 190
Figure 28: Outdoor filming for Arabic literature course 197
Figure 29 Portable recording setting 203
Figure30 : Sleeves used for recording purposes 204
Figure 31 Adding voiceover to videos 205
Figure 32: Equipment storage and recording place 206
Figure 33 Books and video background 207
Figure34 Sealing strips around the door and white noise speaker 208
Figure 35 Screenshot from coffee-making course 209
Figure 36 Screenshot from flowers arrangement course 209
Figure 37 Twistable smart camera 212
Figure 38 Gift cards on Shorfaa platform 220
Figure 39 Initial manual coding of the first interview 261
Figure 40 Digital coding in MAXQDA 261
Appendices

Appendix 1 Interview questions ............................................. 254
Appendix 2 Sample of anonymised and translated transcript .... 256
Appendix 3 Screenshots from Manual and digital coding ......... 261
Appendix 4 Information sheets and participants’ consent form ... 262
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>KSA</td>
<td>Kingdom of Saudi Arabia</td>
</tr>
<tr>
<td>MENA</td>
<td>Middle East and North Africa</td>
</tr>
<tr>
<td>MOOC</td>
<td>Massive Open Online Course</td>
</tr>
<tr>
<td>IP</td>
<td>Intellectual Property</td>
</tr>
<tr>
<td>LMS</td>
<td>Learning Management System</td>
</tr>
<tr>
<td>SL</td>
<td>Second life</td>
</tr>
<tr>
<td>ANT</td>
<td>Actor-Network Theory</td>
</tr>
<tr>
<td>SI</td>
<td>Scientific Integrity</td>
</tr>
<tr>
<td>LMS</td>
<td>Learning Management System</td>
</tr>
<tr>
<td>CITC</td>
<td>Communication and Information Technology Commission</td>
</tr>
<tr>
<td>OER</td>
<td>Open Educational Resources</td>
</tr>
<tr>
<td>NELC</td>
<td>National eLearning Centre</td>
</tr>
<tr>
<td>STS</td>
<td>Science, Technology and Society</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and communication technology</td>
</tr>
<tr>
<td>STI</td>
<td>Science, Technology and Innovation</td>
</tr>
<tr>
<td>QRF</td>
<td>Queen Rania Foundation</td>
</tr>
<tr>
<td>SEU</td>
<td>Saudi Electronic University</td>
</tr>
<tr>
<td>SMEs</td>
<td>Small Medium Enterprises</td>
</tr>
<tr>
<td>KFUPM</td>
<td>King Fahd University of Petroleum and Minerals</td>
</tr>
<tr>
<td>GAA</td>
<td>General Authority for Awqaf</td>
</tr>
<tr>
<td>IPR</td>
<td>Intellectual Property Rights</td>
</tr>
<tr>
<td>AI</td>
<td>Artificial Intelligence</td>
</tr>
<tr>
<td>HRDF</td>
<td>Human Resources Development Fund</td>
</tr>
<tr>
<td>VwO</td>
<td>Voice without Organs</td>
</tr>
<tr>
<td>MOS</td>
<td>Management and Organisation Studies</td>
</tr>
<tr>
<td>ACAD</td>
<td>Activity-Centred Analysis and Design</td>
</tr>
</tbody>
</table>
Chapter 1: Introduction

Some time ago, when I was working as a lecturer at a Saudi Arabian university and researching universities abroad to apply for PhD study, I encountered websites offering courses from well-recognised universities around the world. I was surprised to find that no previous experience or even evidence of English language competency was required. They were all free to access and enrolment in any of them was straightforward. I joined a couple of courses, Research Design and Methods and International English Language Testing System (IELTS) Preparation. They were both skills needed to pursue my PhD studies overseas. However, I was curious to explore how they worked in practice and how they differed from more traditional online courses. I liked the idea that completion of tasks was optional, it was essential only for who want to obtain the certificate. As I did not need a certificate, I did not complete the courses.

Later, I realised that there was an online Arabic platform called Rwaq that worked in a similar way. It provided free courses in different disciplines, all in the Arabic language. However, there was no presence of academic institutions and universities on the platform. At that time there was only a limited number of courses. I joined the Islamic History of Andalusia course, which was presented by a Saudi academic. The course was delivered in a professional way, equivalent to courses on English platforms. The main reason I joined was to explore how such online courses work rather than to study the material or obtain a certificate of completion. Although I did not complete the entire course, I kept following the Rwaq platform over time. I witnessed the number of courses on the platform increase dramatically, as well as the diversity of who delivered them and the style in which they were presented.

These online courses, characterised by their openness, are called Massive Open Online Courses (MOOCs). They are a relatively recent phenomenon, about a decade old, and they have received considerable attention from the media, researchers, and policymakers (I will discuss this further in Chapter 3). My observation of the state of Arabic MOOCs and the
scarcity of research on this topic raised many questions and encouraged me to explore this topic further through my PhD studies.

My relationship with the MOOC continued after I was offered a place to do my PhD at the University of Edinburgh. In the early stage of my studies, I enrolled in a MOOC on Social Research Methods introduced by Edinburgh University and run by academics, including my supervision team. As a new student, I was keen to engage with other students in a learning experience. Although I did not follow the course until the end, it gave me a sense of studying at the University of Edinburgh and introduced my supervisors to me.

Based on my experience of joining several courses on different platforms and despite not completing any of them, I realised that these courses could potentially generate knowledge beyond the educational purposes they were designed for. They certainly contributed to shaping my interest in MOOCs. My observation of Arabic courses on the Rwaq platform in comparison to English courses on international platforms motivated me to pursue further research in MOOCs to better understand what they are, what knowledge they potentially generate, who introduces them and whether they are really massive, open, and a free form of online education.

Main themes and research questions

This thesis explores Massive Open Online Courses (MOOCs) in the Arabic context. MOOC projects initially began in the Western context, with the aim to enhance education and promote equality by providing free education. Although MOOC projects started to appear in different regions and contexts, they were perceived as an instrument for achieving predetermined objectives and producing similar outcomes, regardless of where they operate. Criticisms of MOOCs have emerged in recent years (e.g. Knox, 2017), questioning their mission and early promises. One MOOC criticism is that MOOC projects reflect a postcolonial perspective, as they neglect contextual and cultural diversity (Bali & Sharma, 2017). Adam
(2020) noted that MOOCs tend to privilege dominant epistemologies, promote colonial perspectives while marginalising non-Western knowledges, exacerbating inequality and making MOOCs a device of power.

To engage with digital education and MOOCs from a critical perspective, Selwyn (2010) emphasised the importance of developing ‘context-rich’ rather than ‘context-free’ analysis. He argued that ‘the academic study of educational technology needs to be pursued more vigorously along social scientific lines, with researchers and writers showing a keener interest in the social, political, economic, cultural and historical contexts within which educational technology use (and non-use) is located’ (p. 66). There is a crucial need to consider the context in which MOOCs are situated to broaden our understanding of MOOCs beyond the common assumptions promoted by high-profile MOOCs, which shape the higher education landscape and the subjects involved within it (Knox, 2017). MOOCs are advertised as an open, online, and free form of education, but what they actually are and what they do could be different. Almuhanna (2018) questioned the features of MOOCs, as higher education is already offered free of cost in Saudi Arabia and called for rethinking MOOCs based on the ecological aspects of the locations in which MOOCs are adopted. To cultivate knowledge regarding digital education and MOOCs, Bayne et al. (2020) emphasised the importance of acknowledging diverse cultural practises and understanding the claim of MOOCs that ‘massiveness is more than learning at scale: it also brings complexity and diversity’ (p. 102).

In this thesis, MOOCs are explored in an Arabic context, with a particular emphasis on Saudi Arabia. The social practices in this region are significantly influenced by Islamic culture and Arab tradition. Knowledge is placed within Islamic beliefs, which are intertwined with policy considerations, people’s understandings of themselves, their citizenship, and their capacity to operate with responsibility and self-determination (Lightfoot, 2016). Although social and cultural foundations shape the education context profoundly, the cultural implications of digital educational technologies have received scant research attention (Hamdan, 2005). Technology and context are often treated as separate entities, but there is a need to think
about ways to bring them together, for example, by designing culturally sensitive technologies or training people to adapt the technology to fit cultural needs. This thesis approaches digital technology and the social context as entangled and relationally produced (see Chapter 4). In this thesis, I examine giving in Islam and specifically teaching as gift giving in the form of zakat and waqf (defined in Chapter 3) in order to understand how these concepts interweave with technology and shape the local understanding of MOOCs. Moreover, my thesis proposes a question regarding MOOC teachers and the identities that are formed through MOOC teaching practices in an under-represented cultural context. I adapted concepts of gift-giving, which are commonly researched from a social perspective (e.g. Mauss, 2002), to offer an alternative understanding of the gift in a digital educational context. Throughout this research, the complexity and richness of the context in which MOOC projects are acknowledged and assumptions that underlie how prominent MOOCs are promoted as being both global and universal are challenged.

In addition to its contribution to understanding MOOCs sociomateriality in an Arabic context, this thesis examines teaching and teacher experience in MOOC settings. Since the inception of MOOCs and the emergence of MOOC research, much attention has been given to both learning and technology, as they are considered central to education. However, Ross et al. (2014) claim that the epistemological foundations of MOOCs are deeply connected to MOOC teachers and argued that recognising the complexity of MOOC teachers’ experiences can facilitate a fruitful discussion on the meaning and purpose of the MOOC. Despite the significant role teachers play in the context of MOOCs, their experiences have received less research attention compared to other aspects of MOOCs (Zhu et al., 2018), particularly in the Arab context, where there is a noticeable lack of research on all aspects of MOOCs (Almansour, 2020). This research addresses this gap by studying the experiences of Arab MOOC teachers and showing the different forms of teachers’ identities that have been created within Arabic MOOCs.
This thesis is not only focused on teacher experiences and the social and cultural context of Saudi Arabia but also in digital technologies and materials, which constitute a considerable part of MOOCs and human engagement in MOOCs. Educational research has long been dominated by a human-centred approach, which tends to be representational in its assumptions and practices, focussing on the development of human subjects and their cognitive acquisition of ideas. Materials, from this perspective, are often treated either as passive and inert or as instruments used as a means to enhance and improve educational outcomes. However, recent research invites us to rethink materiality in education and argues that materials are entangled with the meaning and subject and should not be assumed to be separate from it (e.g. Fenwick et al., 2015). Researchers are drawing on a range of studies from other fields, such as science and technology studies (STS), organisation studies, and the sociology of technology, to show how materials can participate in educational practices beyond human intention (e.g. Sørensen, 2009). This requires us to rethink our way of perceiving non-human components and their participation in educational practices.

I have been influenced by a range of studies that adopted the posthumanist philosophy to challenge the assumption that humans are universal and autonomous and call for repositioning of the subject and object. These studies are based on relational ontology, shifting the focus from the entities involved to relationships enacted in practices. In my study, I adopted a sociomaterial approach (discussed in Chapter 4) to examine MOOC teachers’ experiences. Teaching practices locate MOOC teachers within a set of digital technologies, including the platform, design, software, and algorithms, and other tangible materials, such as network devices, cameras, headphones, desks, pens, notebooks, and clothes. These non-human components participate in constructing meaning and forming teachers’ identities. In my exploration of teachers and their ideas and experiences, I was careful not to position teachers above materials and digital technologies and to acknowledge the relationships constructed. In other words, I paid attention to what teachers said about their experiences and, equally, observed how they acted in practice. The material action and inter-action (or...
intra-action) generate knowledge that cannot be perceived by relying merely on internalised concepts, meanings, and emotions (Fenwick, Edwards, et al., 2015).

Finally, this thesis is about space. The notion of space has become blurred and less defined with the growth of digital technology in the educational context. Universities and schools are no longer viewed as a static container in which teachers and students are placed or as a backdrop against practices; instead, space is seen as a dynamic multiplicity that is continually enacted by activities (Fenwick, Edwards, et al., 2015). The relational view of space allowed me to rethink MOOCs as both (per)forming and formed by different forms of space. I was influenced by Law and Mol’s work (e.g. Mol & Law, 1994; Law, 2012; Law & Mol, 2001) and their conceptualisation of space and technology, which enabled me to show different forms of spaces enacted by relationships in MOOCs. My findings confirm the argument that MOOCs are active assemblages that act and generate effects, as they influence their users to act (e.g. Decuypere, 2019).

This research was conducted during a transformative period in Saudi Arabia, when technology was seen as central in guiding the nation toward creating a knowledge-based economy. Saudi Arabia and many countries in the Middle East and North Africa (MENA) region have made significant investments to equip education with technology and advanced digital materials, hoping that these will change the way teachers teach and students learn and thereby enhance the economic, societal, and cultural foundations of nations in the twenty-first century (Lightfoot, 2016). However, they have done this without critically questioning the range of impacts technology might have on the social and cultural foundations of the region. Ahmed and Al-Roubaie (2012, p. 95) claimed that a ‘pure knowledge economy generates creativity to produce new ideas instead of making use of existing knowledge’ and argued that digital technology within a knowledge-based economy allows everyone to access Western knowledge, which may not be consistent with the social, religious, and cultural norms within Arab and Muslim societies.
In this thesis, I sought to critically investigate the potential cultural and spatial implications of MOOCs in Saudi Arabia by answering the following questions:

- What forms of spaces are formed through MOOCs in Saudi Arabia?
- What forms of teachers’ identities are formed through MOOCs in Saudi Arabia?
- How can gift and entrepreneurship be defined from a sociomaterial perspective and in the Arabic MOOC context?

It is worth noting that the research was not merely informed by my knowledge and interests. Although the main research agendas were set at an early stage, different circumstances occurred while conducting the research at the global, national, and personal levels, which contributed to shaping the thesis in different ways. The variety of research activities that I was involved in, including reading related works, conducting the fieldwork, communicating with participants, and analysing the data from different perspectives, with different resources and materials, all participated in forming the shape of this thesis. Moreover, the study placed me in different places between Saudi Arabia and Edinburgh in the UK and in various locations on the university campus, beyond and online, which influenced my thinking during the research. This relational perspective is significant, as it represents one of the main theoretical foundations of this thesis (see Chapter 5).

**Contributions**

This thesis contributes to knowledge on MOOCs and digital technology in general. It challenges the assumption that MOOCs are universal and global by presenting an alternative evidence-based perspective from an under-represented culture. It discusses the cultural and spatial implications of MOOCs in Saudi Arabia and argues that MOOCs are never socially separated, natural and global; rather, they are entangled with social contexts and are active and regionally formed and produced.
Furthermore, the findings from this research confirm that MOOCs in Saudi Arabia are deeply implicated in the Islamic culture and educational and policy context of the country. Arabic MOOCs are shaped by their cultural and social context, and the social and cultural contexts are also formed by MOOCs. This entanglement allows a new understanding of *waqf* and *zakat of knowledge* as forms of giving practices in the Islam religion. The thesis presents the argument that culture is inherently integrated into technology, and that this has cultural and technological implications.

Examining MOOC teacher experiences and practices from a sociomaterial perspective reveals that different forms of teacher identities are enacted through MOOC teaching practices. MOOC technology contributes to forming entrepreneurial and gift-giving MOOC teacher identities. It creates entrepreneurial teachers and a marketplace where individuals engage competitively in teaching and presenting their professional identities. I argue that MOOCs are not simply online learning courses conveying educational knowledge; they also generate identities.

Moreover, the data shows that the gift-giving and entrepreneurship practices are enacted by the relationships among different social and material actors, and they are shifting, intersecting, and overlapping. Based on this analysis, I argue that gift-giving in a digital context is more complicated than being pre-defined as free.

This research adds significant knowledge about MOOCs, their teachers, and spaces in a cultural and digital education context. It has implications to consider the context as well as the materials and digital technology as active actors in MOOC research. In addition, it invites us to think about the knowledge, practices, and identities that come out of technology, materials and social arrangements instead of thinking about ways to design MOOCs and education technologies to meet particular human aims.
Thesis roadmap

The thesis is structured into eight chapters beyond this introduction chapter. I briefly present the contents of each chapter below.

Chapter 2 describes the research context. It discusses educational policy in Saudi Arabia and shows the state of digital and online education in higher education and how they operate within the neoliberal policy context of Saudi Arabia. Furthermore, the chapter presents the implications of the Saudi Vision 2030 for the education system and digital technologies that are adopted to create a knowledge-based economy. Finally, the chapter describes the state of MOOCs within Saudi Arabian educational policy and systems.

Chapter 3 shifts from the political context to the cultural context, introducing the Islamic interpretation of the gift. In this chapter, I explain the rationale of embracing the gift giving as one of the conceptual frameworks that informed this thesis. The chapter reviews the gift literature in general and in a digital context in particular. It also introduces *Waqf* and *Zakat* as forms of gift-giving practices in Islamic culture.

The second part of the chapter introduces MOOCs and pays particular attention to Arabic MOOCs, discussing their inception and presenting examples of Arabic MOOC platforms. Furthermore, the chapter identifies the knowledge gap based on existing MOOC research.

Chapter 4 moves from the conceptual framework of the gift and MOOCs to the theoretical approach of the research. It introduces sociomaterial and spatial theories, which are both based on a relational ontology that acknowledges the materiality in practices. It also discusses the rationale for adopting sociomaterial approaches in my study of MOOCs and the significance of sociomateriality in reconceptualising teacher identity, agency, ownership, gift giving, and entrepreneurship, which are the main research topics.
The chapter reviews previous works on identity in a digital and cultural context and shows how identity can be viewed as spatially and relationally constructed by the interaction between humans and digital technology. The literature reviewed in this chapter shows how cultural values and traditions are interrelated with digital technology. This chapter highlights the entanglement of digital technology, materials, and humans in practices and proposes an alternative approach of studying MOOCs and teachers from a relational and posthumanist perspective.

Chapter 5 describes my methodology, including the ontological position of the research, and outlines the theoretical basis of sociomateriality and introduces the relational approach that informs the methodology. Moreover, it summarises the research procedure and methods for generating and collecting the data and the rationale for adopting them. Information about the sampling process and the teacher participants and MOOCs is presented. The chapter further addresses issues related to translation and transcription, materiality of research practice, how I understand my position as a researcher and how reflexivity and reliability are understood from relational and sociomaterial perspectives. It concludes by exploring the ethical issues I addressed, as well as the opportunities and challenges I encountered in my research.

Chapter 6 begins the analysis of the research data to show how MOOCs and space are related. I show how MOOCs in an Arabic context have been produced through a network including social and material components. By analysing a specific Arabic MOOC platform, the chapter examines how waqf and zakat of knowledge were constructed in a MOOC context. It presents different modes of MOOC teaching and highlights gift-giving and entrepreneurial MOOC modes as the primary methods of MOOC teaching in Saudi Arabia. It also describes the multiplicity of MOOC modes.

Chapter 7 analyses the components of MOOCs and introduces representative MOOC spaces. The analysis in this chapter is organised in four areas. First, it discusses the public space in the
course and shows how it contributes to presenting the cultural identity of the teachers. The second area is the *participants’ space*, which offers teachers a space to interact with students, such as a comments area and discussion forum. Thirdly, it analyses the *statistic space* in the course and shows how it contributes to forming teachers’ agency and decision-making. Finally, it discusses the *outcomes space* of the course and shows how it relates to the formation of teachers and their identities.

**Chapter 8** deals with space from a different angle. In this chapter, I follow the teachers before they introduce their courses, during the production and design of the course, and after the course is completed. The data are differentiated between three spaces: the *knowledge construction space*, *course production space*, and *engagement space*. Each space is constituted by a set of relationships between the teacher and materials. The chapter describes materials that contribute to teachers’ course presentations such as recording devices, smartphones, a white noise generator, and editing software, which were hidden in the visualisation of the course but contributed profoundly to transferring teachers’ personal spaces to teaching spaces and presenting teachers’ professional identity. The findings confirm the established argument that teachers are produced through spatial formations.

**Chapter 9** summarises the research contributions and outlines the key findings. It highlights the obstacles, limitations, and opportunities I encountered through the production of my thesis. Finally, it offers some recommendations and suggestions for future research.
Chapter 2: The context

Introduction

The faith in the universality of well-established facts depended on never asking where-questions at all (Law & Mol, 2001)

This chapter introduces the Kingdom of Saudi Arabia (KSA) and highlights the unique social, cultural, and economic states that shape its educational system. It starts by giving a general overview of the KSA and describes its higher education system including the state of online and digital education. Then, it introduces the Saudi national vision and its implications on the education system such as building a knowledge-based society and economy that is achieved through framing education and engaging in digital technology.

Overview

Modern Saudi Arabia was established in 1932 and is located in southwest Asia with an estimated population of approximately 35 million with an average median age of 25 (General Authority for Statistics, 2022). It plays a pivotal role in the Islamic and Arab world due to its location at the crossroads of three continents that has long served as an essential ancient trade route and a vital link between East and West. It also has a significant position in the international community as it is the largest country by area in the Middle East and has a robust economy. The richness of its culture is influenced by the diversity of the people from 13 regions, each with its own unique dialect, traditions, heritage, and culinary identity. All regions are united by the Arabic language, which is the official language of the country. Saudi Arabians uphold a variety of societal norms influenced by the Islamic beliefs, which preserve the country’s customs and traditions such as generosity, courage, hospitality, and maintaining robust family bonds.
The Islamic religion is a fundamental aspect that plays a prominent role in the country’s governance, policy, and legal system, and deeply influences cultural and social life. The Quran and the Prophet Muhammad’s sayings are the main sources of inspiration and knowledge that guide Muslims’ behaviours. Saudi culture has a strong community focus, moral code, and cultural value that include hospitality, loyalty, and a sense of responsibility to serve the community. Indeed, the charitable sector is one of the largest areas of activity for groups and associations throughout the KSA. There is a widespread belief that with increased privilege comes a greater obligation to care for the community. As a result, those who are in a better position often feel obligated to assist those who are in need (Cultural Atlas, 2022).

The economy of the country is powerful and considered as one of the 20 largest economies in the world thanks to the country’s natural resources as well as its strategic geographical location between three continents. Saudi Arabia is the largest oil-producing country in the world and greatly depends on oil as the chief income source for the country’s economy. However, as oil is a finite resource and may decline or stop at any time in the future, the government needed to prioritise other reliable resources and create a sustainable knowledge-based economy to meet the economic needs of the future. The Saudi national vision 2030 was announced to address these issues through building the country’s future road map (this will be discussed more later in this chapter).

**Higher Education**

The higher education system in the KSA is relatively new. It was established in 1957 with the launch of King Saud University. Later, the Ministry of Higher Education was founded in 1975 aiming to implement the kingdom’s higher education policy. Universities in the KSA are both public (government run) and privately operated. Curricula largely cohere with US and British standards, with some adhering to an Australian model. Both Arabic and English languages are used in teaching with the exception of some subjects such as Islamic studies, which is taught mainly in Arabic (Rexhepi, 2019).
The unique characteristics of Saudi culture give the education system a distinctive nature. For instance, campuses were designed to offer separate male and female spaces, and single-gender universities were launched, such as Princess Nora Bint Abdul Rahman University in Riyadh, which is the largest female-only university in the world. Yet, both genders have equal access to educational materials and facilities. Recently, more institutional physical spaces have been introduced to be mixed gender, particularly in practical disciplines.

Higher education has witnessed a rapid expansion in recent decades. Currently, there are 29 government-run universities and 38 private universities and colleges distributed across the country. The Saudi government is committed to providing free undergraduate education for Saudi citizens. However, many postgraduate programmes have introduced fees in public universities. The new Saudi vision seeks to increase the autonomy, independence and flexibility of decision-making at the level of individual universities. Privatizing Saudi universities through activating their own revenue resources and diversifying new funding sources to relieve the state budget is one of the strategic goals of the 2030 Vision.

Since the early 1990s, governments in various areas of the world, including the KSA, have been more conscious of the urgent need for national education reforms. The Saudi education system witnessed the first radical changes under King Abdullah, who succeeded the throne in 2005 and died in 2015. With the rise in oil prices at the time, the social infrastructure was overhauled, particularly in the area of education. King Abdullah established a project to develop and reform education. This change came in response to international criticism of Saudi education for prioritising religious and humanities studies over social and hard sciences. Accordingly, numerous curricula in public education were changed to remove references that could be regarded as anti-Western ideas (Al-Essa, 2009). Much attention has been given to teaching the English language and promoting practical subjects such as engineering, medicine, and science in general.
The government introduced the Tatweer project for the development of general education. This ambitious project, which started in 2007 and finished in 2013, was given a budget of US$3.1 billion. Although the project succeeded in reaching some goals, overall, it did not produce the desired outcome in enhancing education quality. According to Al-Essa (2009), the main reasons for the project’s failure to get under way were the lack of political vision and will, and neglecting teachers’ voices in the educational reform. The King Abdullah project has also embraced a long-term strategic plan for the higher education system called Afaaq. One of the main objectives of this plan is to ensure that the higher education sector not only supports but also drives the Saudi economy’s transformation from one primarily dependent on oil revenues to one that reproduces a much broader resource and manufacturing base (Smith & Abouammoh, 2013).

Accordingly, the government heavily invests in and funds the education sector. According to the Ministry of Finance, the government has allocated US$254.6 billion, which represents 19.37% of the total budget and the highest proportion (Ministry of Finance, 2022). The government has expanded the number of universities and introduced initiatives and projects aimed to improve the outcomes of higher education and achieve the country’s mission.

**Digital Education**

Adopting technology in education began when females enrolled in higher education in the 1970s. Closed-circuit television was used to allow the creation of a one-way video network and a two-way audio network to address the issue of insufficient same-gender instructors in higher education. Female students were able to see instructors on a TV screen and take part in discussions using microphones and speakers while physically remaining separated. This developed female education rapidly within cultural considerations (Almasoud, 2017).

Another factor that participated in adopting the technology in educational settings was the rapid increase in the Saudi Arabian population which created capacity pressure for higher
education. In addition, scarcities in both the quantity and quality of teachers and the demand for higher education in rural areas (where establishing universities is difficult) created a further challenge for higher education (Al-Asmari & Khan, 2014). These issues were addressed by employing information and communication technologies (ICTs) and introducing eLearning in Saudi universities (Alebaikan & Troudi, 2010; Aljaber, 2018).

Online education in the KSA officially started in the early 1990s and developed over the following years with the expansion of the internet and digital technologies. In 1993, King Fahd University of Petroleum and Minerals (KFUPM) in Dhahran became the first Saudi institution to connect to the internet (Alqarni, 2015) and the first to establish eLearning centres that provided assistance to their faculties to develop interactive web-based supplementary material for traditional courses. Later, King Abdelaziz University announced the first online bachelor’s degree. Following this, Imam Muhammed Bin Saud Islamic University began offering a distance learning programme that was delivered entirely online (Alebaikan & Troudi, 2010); other universities then engaged in online education by offering distance learning programmes in different subjects.

Online education has received considerable attention among Saudi universities due to its perceived ability to expand the accessibility of higher education and overcome the issue of a growing student population. It has allowed more students from remote and isolated areas in the KSA to engage in higher education and unlocked spaces for more female students to enrol in Saudi universities. It has also served the government by lowering the cost of recruiting overseas teachers in higher education through building regional and international online collaboration (Alfahad, 2012; Aljaber, 2018).

However, online education was criticised for the weakness of its outcomes and its low quality, which impacted its reputation in the labor market. Online programme graduates faced obstacles as their online degrees were not recognised in the marketplace. The issue of quality assurance in distance learning programmes created a challenge for the Ministry of
Higher Education in the KSA. In response to this issue, the national Plan for Information Technology was formed to promote digital learning and distance education in higher education, and to recognise how digital technology supported conventional education and enhanced online education quality, the National eLearning Center (NELC) was founded in 2005. It seeks to implement the national plan to enhance and implement digital technology in education by attaining three main objectives: enhancing trust in online learning, facilitating equitable access to relevant lifelong online learning, and leading sustainable innovation in education through online learning (NELC, 2021). In order to achieve this mission, the NELC provides technical support, materials, and training opportunities that facilitate the development of digital educational content in higher education. In addition, it initiated the national programme for Open Educational Resources (OER) which enables institutions and individuals to access open educational content by organising, publishing, authoring, using, and funding open educational resources.

In order to further online education and support the government goal of enhancing the quality of online education, the Saudi Electronic University (SEU) was established in 2011. SEU is the only specialised university in distance education in the KSA that offers both graduate and undergraduate degree programmes along with lifelong education in collaboration with several universities in the US. The objective is to offer online programmes in a blended learning style at both undergraduate and postgraduate levels, focusing on a wide range of specialities that are in demand in the country’s major industries, and to participate in building a knowledge-based economy in the KSA and assist in conveying the kingdom’s cultural message worldwide (Saudi Electronic University, 2021).

In response to the challenges online and digital education face, the government has committed to addressing these issues; as we have seen, some initiatives have been introduced to offer digital education while maintaining its quality. The national online platform (Doroob) that provides training programmes on various topics is one such initiative. This platform offers courses in a MOOC format, which is a form of online education that
emerged in the last decade and has gained significant attention in the KSA and globally (this will be discussed more in the next chapter).

Having described the education system and the state of digital education in the KSA, I will now move on to discuss the Saudi national vision and its implications for education in the KSA.

**Saudi Vision 2030**

In view of the obvious need for economic reform, as well as the rapidly growing Saudi population (more than 70% of Saudis are under 30) and a dramatic reduction in oil revenue in 2015, the KSA launched a new and comprehensive plan known as the Saudi Vision 2030, announced in April 2016. This plan set a road map to fulfil Saudi Arabia’s enormous potential by transforming it into a diversified, inventive, and world-leading nation for the benefit of future generations.

The new vision is driven by neoliberal and knowledge-based economy orientations. It is built around three themes: a vibrant society, a thriving economy, and an ambitious nation (Saudi Vision 2030, 2021). Developing the economy is based on aligning education objectives with economic growth. According to the national vision, this will be achieved through designing and delivering education that meets marketplace needs, creating a thriving private sector, boosting the role of small- and medium-sized businesses, and developing digital infrastructure.

It is obvious to note the particular attention that is given to education in order to promote the national economy. The education system has been reformed along with building several supporting programmes and initiatives to produce independent individuals and economically productive members of society. The ultimate objective is to transfer the country from an oil-dependent economy to a knowledge-based economy through implementing national
transformation plans including increasing the participation of Saudis in the private sector. This places a strong emphasis on education to produce graduates who are work-ready to contribute to the Saudization of the workforce (Mitchell & Alfuraih, 2018). The Saudi vision 2030 has a robust connection to reforming education and integrating technologies in order to achieve knowledge-based economy and generate individuals who are economically productive members of Saudi society. This research was conducted during the implementation of the Saudi vision 2030. Therefore, it witnessed the transformation that the KSA has undertaken, particularly concerning technology and education. The influence of the national policies and orientations on open education, MOOC projects and Saudi individuals will be apparent in chapter 6.

**Knowledge-Based Economy**

Unlike other countries in the Arabian Gulf region, the KSA was not colonised and, as a result, most of its educational changes have been driven by the country’s economic needs as opposed to the pressures of imperialism (Habbash, 2011). In the global economy, the KSA competes by building an educated and skilled workforce (Yusuf, 2017). This reflects the country’s emphasis on the need to reform its educational systems in order to prepare students to compete in the labour market (Bunaiyan, 2019), which is clearly stated in the Saudi Vision 2030:

> Among our commitments [is] ... an education that contributes to economic growth. We will close the gap between the outputs of higher education and the requirements of the job market. We will also help our students make careful career decisions, while at the same time training them and facilitating their transition between different educational pathways [...] We will work closely with the private sector to ensure higher education outcomes are in line with the requirements of the job market. We will invest in strategic partnerships with apprenticeship providers, new skills councils from industry, and large private companies. We will also work towards developing the job specifications of every education field... (Saudi Vision 2030, 2020, p. 40)
It is obvious from the statement that the Saudi Vision 2030 views economic reform as contingent on education reform (Allmnakrah & Evers, 2020). In recent years, higher education has witnessed extraordinary growth in government and private higher education institutions, including increased student and faculty enrolment rates, as well as the construction of new facilities, introduction of technologies, and the building of university campuses (Habbash, 2011; Yusuf & Atassi, 2016). According to the Saudi Vision 2030, the focus on education reform will concentrate on three main areas: curriculum improvement, higher education developments, and building critical thinking and skills needed for the job market. This proposed education reform requires adopting technology and pedagogy and emphasises English language education (Le Ha & Barnawi, 2015) in order to prepare the country to participate in the globalised economy (Bunaiyan, 2019; Yusuf, 2017).

The impact of this emerging neoliberal ideology and government actions on education systems has been noted not only in the KSA but globally (Connell, 2013). Neoliberalism is a broad term that refers to an agenda of economic and social transformation based on the free market. It also refers to the institutional mechanism to carry out this project, which is gradually implemented in every society under neoliberal governance (Harvey, 2007).

According to Ong (2006), neoliberalism can be described as:

[...] a prevailing ideological paradigm that leads to social, cultural, and political practices and policies that use the language of markets [...] to shift risk from government and corporations onto individuals and to extend this kind of market logic into the realm of social and affective relationships.

Neoliberalism has a distinct perspective on education, viewing it as the formation of human capital. It is the business of developing the skills and attitudes necessary for a productive workforce – productive in the sense of generating an ever-increasing stream of profits for the market economy. ‘Human capital’ is a metaphor that is too narrow in scope. However, this economic concept captures a fundamental element of education: it is a creative activity that is focused on the future (Connell, 2013).
In the context of the KSA, there has been increased adoption of the neoliberalist agenda. The influence of the westernised notion of education began with the discovery of oil in the 1950s, which resulted in the education of locals to take up oil jobs, and as part of the responsibilities of the welfare government to provide free education. The establishment of the first university and the requirement to meet marketplace needs was also shaped by neoliberalist ideology (Elyas & Picard, 2013). Higher education was criticised for not producing enough professionals in specific practical subjects:

 [...] the higher education system in Saudi overproduces in some areas such as social and religious studies, but it is far from producing similar numbers in areas critically needed by the country such as the health and engineering professions. (Alkhazim, 2003, p. 483)

The use of marketisation discourse, as above, indicates a clear neoliberal stance in much of the discourse criticising the Saudi education system. Along with a push for individualism, critical thinking, and creativity, there is a significant role for English and technology, particularly an emphasis on accessing worldwide knowledge (Elyas & Picard, 2013) and promoting the culture of innovation and entrepreneurship in higher education (Alessa & Alajmi, 2017; Yusuf & Atassi, 2016). The newly adopted vision has defined higher education orientation towards creating a knowledge-based economy with the help of introducing technology and reforming education. The goals and aspirations of the KSA have become more clearly defined with a focus on aligning educational goals with economic development as the national vision seeks to create a ‘Saudised’ knowledge-based economy, and education is considered a means of fostering this imperative (Mitchell & Alfuraih, 2018).

Technology plays a significant role in achieving the Saudi ambition to become globally competitive as an innovative knowledge-based economy (Alshumaimri, Aldridge, & Audretsch, 2010). The shift towards a knowledge-based economy requires a robust technological infrastructure as it is considered the medium for the acquisition, exchange, and creation of knowledge in the KSA and internationally. Wiseman (2014) argues that the openness that results from engaging with technology can conflict with social, religious, and
cultural norms in Arab and Muslim communities in the Arabian Gulf region. Rawas (2016) also notes that, since the introduction of the internet in the 1990s, the KSA has faced profound changes that have transformed the country politically and socially. This technological transformation enables access to new competing ideas that challenge conservative culture and confront its modes of thought and religious ideology. This thesis will discuss the implications of MOOCs in the context of Saudi Arabia.

Currently, the KSA has become a leader in sustainable technology (desalination, solar, wind, and arid farming techniques; Rexhepi, 2019) and is committed to investing in highly advanced digital technology, as noted in the 2030 vision:

We will partner with the private sector to develop the telecommunications and information technology infrastructure, especially high-speed broadband, expanding its coverage and capacity within and around cities and improving its quality. Our specific goal is to exceed 90 percent housing coverage in densely populated cities and 66 percent in other urban zones. We will also develop building standards to facilitate the extension of broadband networks. (Saudi Vision 2030, 2020, p.57)

The digital technology adopted in educational settings to enhance the quality assurances of the education provided by building partnerships with international institutions. Patrick (2014) states that, if the government wants to ensure that the education system produces graduates who can contribute to the growth of a knowledge economy, high-quality university science and technology instruction will be critical. Several digital initiatives have been introduced to address this issue in higher education. Technology has also been adopted in light of the Saudi Vision 2030 to bridge the gap between higher education outcomes and marketplace needs. The government introduced a number of digital initiatives to facilitate the transition; for instance, the Tawteen ‘localisation’ programme offered by the Ministry of Human Resources and Social Development works towards fulfilling the national vision through creating employment opportunities for Saudi citizens. The programme offers a series of online courses on the Doroob platform. These courses are introduced as automated self-learning based online courses in several subjects that are in demand in the marketplace. The aim is to
increase Saudi participation in the private sector (Doroob Program – Tawteen, 2021). I will talk about the Doroob platform further in Chapter 3.

With the increasing adoption of neoliberal ideology and the building of a knowledge society, the KSA is challenged to balance maintaining traditional and cultural values and responding to modernism. Lightfoot (2014) argued that Islamic education traditions are more concerned with the building of social conformity in accordance with Quranic teachings than with theories of human capital formation. However, the neoliberal objectives of the global north are increasingly driving the international norms that are used to assess the effectiveness of education systems. This has exacerbated a crisis in the region’s educational systems and produced a deficit that can only be addressed by implementing reform initiatives that take into account local traditions and values.

To conclude, the transformation that the KSA is undergoing to create a ‘Saudised’ knowledge-based economy has implications for reforming education, adopting digital technologies, and creating an innovation and entrepreneurship culture. In their study, Alessa and Alajmi (2017) found that the national vision has succeeded in encouraging individuals to engage in this entrepreneurial sector. Currently, small- and medium-sized enterprises (SMEs) entrepreneurship is being actively pursued by the majority of Saudi individuals. The KSA has allocated support for activating entrepreneurship in Saudi society, such as the National Entrepreneurship Institute, the Prince Salman Institute for Entrepreneurship, and the Entrepreneurship Association.

Another implication of the current transformation that is noted at the individual level is the increasing demand for acquisition of entrepreneurial knowledge and marketplace skills. Online and digital education opens opportunities for individuals to compete in the marketplace and promote themselves as entrepreneurs, as will be apparent in this thesis.
MOOC project has been criticized for supporting the neoliberal political economy that aims to reduce the state's role in education and commodify teaching and learning (Jones, 2015). In the context of this study, MOOCs were adopted to support the neoliberal orientation of the national policy in KSA by empowering individuals to be financially independent rather than relying on the government to offer jobs. The data generated by this study has shown that MOOCs created a competitive marketplace where individual teachers promote themselves through the courses they produce (this will be discussed further in chapter 7).

Conclusions

This chapter has presented an overview of the KSA and its education system. It has shown the state of digital and online education in formal higher education. The chapter has also discussed the Saudi Vision 2030, which guides educational policy and strategy and which has introduced education reform based on creating a knowledge-based economy.

The KSA has attained significant progress over the past few years in both economic and social areas. As we have seen, building human capital relies on education and technology that will spearhead the exploration of diverse economic sectors. Individuals under the Saudi Vision 2030 are considered as contributors to creating a reliable and sustainable economy for the future of the KSA. We will see over the coming chapters the role of technology in these transitions, and how individuals in this research (online teachers) act and interact with digital technology, in particular in online education. This research investigates the participation of the digital technology of open and online education in shaping the Saudi Arabian landscape.

While the vision appears to be economically oriented, it is supported by concepts that serve as a social and moral compass guided by Saudi Arabian cultural and religious values (Mitchell & Alfuraih, 2018). The next chapter will transfer us from strategies and policy introduced in the KSA to explore the values rooted in religion and tradition. It will discuss examples of moral values embedded in the Islamic culture and manifested in social practices, such as
sharing knowledge freely and gift-giving practices in the digital context. It will also introduce the MOOC and its inception in the Arabic context.
Chapter 3: MOOCs and The Gift

Introduction

Having set out the context of the study, I now move on to discuss the related concept and theoretical framework. This chapter introduces massive open online courses (MOOCs), and provides the digital context for this research. It gives an overview of MOOCs globally and locally and sheds light on the most prominent MOOC platforms in Arabic. In addition, this chapter demonstrates the different types of Arabic MOOCs that have emerged in this research, including paid courses and those that are free of charge that correspond to gift giving by those who teach them.

Gifts come in different forms. This research is interested in the intangible form of gifts—in particular, in the form of sharing knowledge. Gift giving is a profound theory in social science. This chapter discusses gifts as part of the theoretical framework adopted in this study and reviews literature related to sharing and gift giving in the digital context. It discusses gift-giving in general, emphasising the Islamic interpretation of the practice and the moral duty to share knowledge in Islam.

This chapter is structured into three main sections. The first introduces MOOCs both in the global and Arabic context. It also reviews previous MOOC research conducted in the Saudi Arabian context. The second section discusses the concept of gift giving and reviews gift literature in the digital context. The third section highlights two examples of gift-giving practices in Islamic culture, namely waqf and zakat. Overall, I argue that the gift is a complex concept, particularly in a context such as Saudi Arabia where neoliberal and entrepreneurial orientations have significant implications in the higher education system, as discussed in the previous chapter.
Massive Open Online Courses (MOOCs)

MOOCs are web-based learning courses that involve different teaching methods, interaction models, people and digital technologies. MOOCs have gained media attention over the last decade by being presented as a form of open education that promises to overcome educational challenges of access, equality and scale. These courses are usually offered for free and are presented entirely online. However, since new forms have appeared and continue to emerge, it is difficult to constrain the term MOOC to a single definition. Even when tracing the inception of MOOCs and how they have developed over time, there is no consensus as to what they actually are. In fact, MOOCs are perceived differently across various times and contexts. However, researchers of the subject have attempted to offer their own definitions to describe MOOCs. For example, Jansen and Schuwer (2015, p. 4) defined them as ‘online courses designed for large numbers of participants that can be accessed by anyone anywhere, as long as they have an internet connection, are open to everyone without entry qualifications, and offer a full/complete course experience online for free’.

Another definition was provided by Stracke et al. (2019), who claimed that any definition of MOOC should begin with the four words whose initials make up the acronym: massive, open, online and course. ‘Massive’ refers to a MOOC’s ability to accommodate large numbers of enrolled students, all of whom may join the course at the same time. The meaning of ‘open’ in the acronym is controversial, however. It could mean that anyone is allowed to register without paying fees, having qualifications or meeting requirements other than having a web enabled device. It could also describe the environment in which teaching and learning take place, with the materials, content, interaction and assessments all happening in the open. ‘Online’ indicates how MOOCs depend on the internet for their format, and ‘course’ refers to the way in which educational content is delivered. The courses are usually presented as a series of lectures, materials and discussion, all of which are structured and organised around a central topic, and they have timetables, teachers and course moderators.
Some of the characteristics used to define MOOCs are not relevant to every context. Almuhanna (2018) noted that free access to education, as had been used to define them, is not a universal feature, especially in places where higher education is already provided for free, as in Saudi Arabia. This prompted me to seek another description, rather than one that would define it universally. A MOOC is spatially constructed and defined, rather than being an absolute and definite online space. This is noted throughout this study, which examines MOOCs in an Arab context. This can enrich MOOC knowledge and our understanding of technology and its role in educational practices.

The first open online course to be labelled a MOOC was ‘Connectivism and connective knowledge’ (CCK08), introduced by Stephen Downes and George Siemens in 2008, which attracted more than 2000 students. The course was not content-focused; instead, it concentrated on network formation among participants and the sharing of resources and contributions across those networks (Stracke et al., 2019). The year 2012 was called the ‘Year of the MOOC’, as the concept had by then received a great deal of attention following the success of Professor Sebastian Thrun, who offered a MOOC on artificial intelligence at Stanford University that had enrolled more than 160,000 students within just a few weeks of its announcement.

Regarding MOOC typologies, the earlier MOOC literature divided such courses into two main categories: xMOOCs and cMOOCs. An xMOOC referred to a content-driven, highly structured course designed for a large number of people working independently consisting of pre-recorded lectures and assessed through automated or peer-marked assignments. It is based on interactive material and videos in addition to multiple-choice assignments. A cMOOC, on the other hand, referred to a networked and collaborative approach based on connectivism. It is learning that is not primarily curriculum-driven and does not include formal assessment; rather than relying on authorities’ expertise, the emphasis is on distributed, self-directed topic inquiry. It is worth noting that this classification was not adequate. Many types of
MOOCs have since emerged that do not fit in either of these categories; indeed, Conole (2016) argued that their distinction was too limiting and suggested an alternative way to classify MOOCs in order to measure their quality. Nevertheless, her classification still missed many varieties of MOOC that have emerged subsequently.

For the purpose of this study, and reflecting the development of MOOCs in Saudi Arabia, I have classified MOOCs as either institution-led or individual-led. The former are online courses designed, delivered and managed by a team that are pre-recorded, structured, follow a definite timeline and are presented in a visually professional way. The ownership of the course mainly refers to the institution that offers it. By contrast, individual-led MOOCs are online courses that are designed, managed and delivered by an individual teacher and have minimal intervention from the platform’s administration. This forms a new understanding of ownership that is not only performed by the teacher but also by the no-human content, material and digital technology involved in the practices. Ownership is a blurry and complex area in MOOC teaching practices.

Another classification for MOOCs proposed in this research is based on teacher identity. Some courses are introduced by teachers to fulfil a moral duty towards the community. The MOOC, in this case, represents a gift that projects the teacher as a gift-giver. On the other hand, courses can be offered as commercial projects that project an entrepreneurial teacher’s identity. I am not going to make a comparison, since the teacher can have multiple identities, as I outline in the analysis chapter. It is worth noting that course fees do not indicate a course’s typology. In other words, MOOCs given as gifts do not necessarily mean ones that are free of charge, while entrepreneurial MOOCs do not necessarily mean ones that are paid-for.

MOOCs have been criticised for their promise to offer free access to education for anybody at anytime from anywhere while charging vastly reduced fees—if any at all (Sari, Bonk & Zhu, 2020). Bali and Sharma (2017) argued that many of the people who MOOCs claim to reach and potentially teach are unable to benefit from them due to a range of factors, including
language, infrastructure and even pedagogical methods and content used for them.

Language and the availability of technology that enable engagement with these courses have been shown to be the main challenges in determining their effectiveness in the Arab context. Sallam (2017) stated that MOOCs are heavily reliant on digital infrastructure, the internet and connection fees, each which varies greatly from one Arab country to another. In some Arab countries, such as those in the Gulf region, MOOCs have gained popularity because the internet and digital devices are widely used. By contrast, other countries in the Arab world seem to be less engaged in MOOCs because the required technologies are weak or absent there. This raises concerns regarding equality in MOOC education.

Arabic MOOCs

Following the global emergence of MOOCs, they reached the Arab region, with Saudi Arabia and Jordan being the first countries to respond to the call of these courses. The launch of the Rwaq platform in 2013 announced the beginning of Arabic MOOCs. Following Rwaq, a number of other Arabic platforms launched, accompanied with the appearance of different models. Figure 1 shows the timeline of Arabic MOOC platforms.

![Timeline of Arabic MOOCs](image)

By ‘Arabic’ MOOCs, I am referring to open online courses offered in the Arabic language that therefore target native speakers who may be geographically distributed worldwide. However, this study aims to examine MOOCs in a cultural context and, in particular, the teacher experience in the context of Saudi Arabia. Therefore, the geographical region was chosen to investigate the cultural meaning of MOOCs and teaching in them. This approach would also
assist in understanding how teachers present their identity in these courses, considering the material and culture and the relationship between them.

Arabic MOOCs can be divided into two main categories. The first refers to courses that are translated from another language that are usually designed in collaboration with international MOOC platforms. These platforms include edX, Coursera and FutureLearn. University College London, an international university engaged in designing Arabic MOOCs, announced its first such course in 2019 on one of the Arabic platforms. The course aimed to increase professional development for teachers working in difficult circumstances, especially those affected by conflict and mass displacement (Kennedy & Habib, 2020). Translated MOOCs have been offered by international institutions to provide a venue for addressing their corporate social responsibility objectives (Wakefield et al., 2018). The other type of Arabic MOOCs are locally designed and introduced by Arab teachers, for example Rwaq platform and Edraak platform. I discuss these two platforms and other prominent Arabic platforms below.

Edraak, which means ‘realisation’ in Arabic, was launched in May 2014 and is affiliated with the Queen Rania Foundation for Education and Development (QRF), in partnership with the edX platform (Shah et al., 2022). Adham and Lundqvist (2015) claimed that the emergence of MOOCs in the Arab region were inspired by elite Western universities, including Harvard, MIT and Stanford, with the goal of providing a higher quality of education to Arabic learners. Bali and Sharma (2017) criticised MOOCs from a post-colonial perspective and argued that ‘even where MOOC comes from a non-dominant part of the world and in a language of developing countries, as the case in Edraak, there remains a hegemony of the larger, and also often Westernised, educational institutions in that region providing the content’ (p. 38). MOOCs have bolstered the West’s status as the centre of knowledge production while also widening the gap between the West and the rest of the world (Wang, 2017). Similarly, Adam (2019) claimed that MOOCs promote a neo-colonial, Westernised approach to epistemology that ignores more local forms of knowledge. She also argued that MOOCs exacerbate historical
inequalities and reflect a techno-capitalist, neoliberal aim to commodify education. The implications of MOOCs delivered in collaboration with international institutions have exceeded the education setting to include all cultural, social, political and economic aspects (Adham & Lundqvist, 2015).

Another popular Arabic platform is Rwaq, which was the first Arabic MOOC platform when it was launched in September 2013 by two Saudi entrepreneurs. In Arabic, Rwaq refers to the location where scientists and scholars would exchange knowledge in great mosques of Córdoba in Spain and Al-Alazhar in Egypt. This metaphor depicts Rwaq’s approach to teaching and learning as informal yet academic and scientific, since this is carried out by professionals, teachers, academics and other experts. It offers free academic subjects taught in Arabic by well-known Arab teachers across a variety of fields and disciplines to individuals who are beyond the walls of universities (Wakefield et al., 2018). Rwaq links teachers who are willing to share their knowledge freely with an Arabic audience of knowledge-seekers by allowing teachers to design their courses from scratch rather than offering translated courses (Macleod et al., 2015). Fouad Al-Farhan, the co-founder of Rwaq, said in an interview that the start-up had been inspired by the MOOC movement but was not attached to its business model; rather, its founders had tried to find a business model that would work in the Arab world, perhaps by ‘helping others to create their own mini-initiatives’ (Curley, 2013). Their intention was to invest in the education sector by providing free educational opportunities in Arabic and build their business model to continue operating the platform through collaboration and the establishment of partnerships (Badi & Ali, 2016a). Most of the courses are offered for free, although Rwaq has recently been offering courses in partnership with institutions as part of a paid model. There remains only a limited number of these courses compared to the other free individual-led MOOCs. The implications of Arabic MOOCs is under-studied, but they may produce different consequences compared to the global translated Arabic MOOCs. Ruipérez-Valiente et al. (2020) found in their study that regional MOOCs play a very different role in the MOOC ecosystem compared to global ones.
The increasing number of free, individual-led MOOCs has raised questions not only about how these courses attract teachers to engage in teaching for free but also about what MOOCs do beyond their education objectives. This study aims to find answers to these questions by observing courses and interviewing teachers. The early definition of MOOCs does not reflect what they currently do, nor is it applicable to other contexts. Therefore, it is crucial to examine MOOCs from a different perspective to attend to the complexity of these courses. In the following chapter, I propose a theoretical framework that acknowledge MOOCs’ materiality and offer a different understanding of various kinds of teacher identity and how it is formed in the MOOC context.

MOOCs have also attracted the attention of governments. The Saudi Arabian government, for instance, publicly stated its official position on the value of this form of education in a statement published by the Ministry of Labour, stating that these courses had ‘launched an initiative to provide accessible, relevant, high-quality education opportunities for our citizens’, with the goal of providing vocational training and educating skilled workers across a broad demographic including women, youth, the disabled and those living in rural areas (Alsulami, 2016). The Human Resources Development Fund (HRDF) launched the Doroob platform in 2014 as a Saudi enterprise for offering MOOCs in partnership with edX. Doroob aims to provide integrated online training programmes that offer officially accredited certificates recognised by many key employers in Saudi Arabia. It also offers entrepreneurs the necessary tools to build sustainable businesses (Farhat, 2017) and bridge the gap between higher education outcomes and the marketplace (Almuhanna, 2018). In light of the national vision, Doroob designed a program named Tawteen, meaning localisation, which I have discussed in Chapter 2. The program consists of MOOCs seeking to train Saudis and increase their participation rate in the private sector (Tawteen, 2021)

Higher education participation in MOOCs emerged later with the launch of the KKUx platform, which was introduced by the eLearning deanship at King Khalid University. As the university’s objectives are driven by the Saudi Vision 2030 national plan, KKUx courses focus
on learning skills for future jobs (KKUx, 2021), to fulfil the university’s social responsibility. I discuss the KKUx platform, its objectives and the knowledge it produces in Chapter 5. Overall, integrating MOOCs within the Saudi higher education system poses a challenge. As I discussed in the previous chapter, higher education faces an issue in terms of quality assurance in online education, which reflects poorly on its reputation. When the Rwaq platform launched, universities hesitated to invest in its courses. Instead, the response came from Saudi academics and faculty members themselves. In November 2013, Dr Ashraf Fagih presented the first course on the Rwaq platform, entitled ‘How machines think: Introduction to computing techniques’. Following that course, the number of MOOCs has increased significantly across different disciplines.

**MOOC research in Saudi Arabia**

The launch of Rwaq spurred interest among education researchers to study Arabic MOOCs. For example, Alshahrani and Ally (2016) examined the e-readiness and motivations to enrol in MOOCs in the Arab region. They found that individuals participate in the MOOCs for several reasons such as seeking professional development, meeting others with a similar interest and earning credits and certificates. At an organisational level, MOOCs act as a marketing tool and as educational technology that can offer a social service. In the same vein, Mafraq and Kotb (2019) investigated the factors influencing learners to take part in MOOCs on the Maarefh platform and found that the self-management and facilitating environment has significant impact on MOOC learning and retention. Similarly, Hakami (2018) examined the motivational factors influencing MOOC students’ intentions to continue studying and found that cultural factors such as the language of the courses fosters a sense of community and belonging in the courses.

Almuhanna (2018) investigated the cultural implications of Arabic MOOCs from Saudi participants’ perspectives, focusing on the impact that MOOCs have had on participants’ lives, pedagogy, learning design and the social environment. Through mixed methods
including surveys, observations, and interviews with course participants, the results showed that female participants represent the majority of learners due to the capacity of the MOOC to offer a flexible learning environment and develop educational cultures. She argued that MOOCs assist participants to expand their knowledge, personalities as well as their educational and professional activities.

Moreover, Alsulami (2016) conducted a study to investigate the views of students, educational leaders, and policymakers about MOOCs at King Abdulaziz University in Saudi Arabia. The results showed that MOOCs are seen as both effective and affordable educational technology and can offer learning opportunity to learners from various socioeconomic and geographic backgrounds to enhance their education, find better employment opportunities, and develop their careers and ultimately assist the government to create knowledge-based economy. Furthermore, Alanazi (2020) conducted a case study at a Saudi University to examine the impact of adopting hybrid MOOCs on students’ experiences and achievements and found that combining hybrid MOOCs with flipped classroom has significant potential to assist students to learn according to their abilities and learning style, both inside and outside the classroom. Additionally, Almansour (2020) studied the adoption of Arabic MOOCs by comparing the engagement of students in Arabic and in English courses to identify the characteristics of the former courses, finding that the effectiveness of MOOCs depended on a clear pedagogical approach which was absent in Arabic courses observed in the study. Overall, these studies focus on MOOCs as tools for developing and enhancing educational outcomes.

From the teacher’s experience and cultural perspectives, Adham (2017) studied the digital technology used in MOOCs and its impact on Saudi traditional and cultural norms such as gender separation in learning spaces. She examined the impact of using avatars in the presence of female teachers on the Rwaq platform. Through designing and presenting a MOOC that adopted an Avatar tool to present a female teacher, combined with recording the teacher’s voice, she concluded that the Avatar tool can be effective to increase female
teachers’ participation in online teaching environments practically in the presence of a gender separation culture such as in Saudi Arabian society.

More research on MOOCs in Saudi Arabia context has been published in Arabic language. For instance, Al-Juhani (2017) examined the role of MOOCs in supporting students’ motivation and self-regulated learning strategies, and Alanizi (2020) studied the effectiveness of MOOCs in the reinforcement of national identity and motivational improvement of MOOC learners. Meanwhile, Al-Sobhi (2021) introduced a proposal to suggest the employment of Arabic MOOCs in the educational process.

Three main pointes emerge from the studies discussed so far. The first is that the central focus has been on the experience, access and retention rate of MOOC students, in addition to other subjects related to enhancing learning in MOOCs. Research in this area has considered MOOCs to be effective education tools that have the capacity to enhance conventional education and its outcomes. Although a critical stance has emerged towards MOOCs in recent research, I agree with Bayne et al. (2015) that the field has lacked a consistent definition of ‘open’ and has leaned too heavily on optimism, advocacy and conviction, rather than critically analysing what openness means in education.

Second, MOOC research has been dominated by a humanist approach that places humans above material and digital technology, while the role of technology is to meet human expectations. This view lessens the cultural aspect of educational practices and considers technology and humans as separate entities. Knox (2014) argues that this uncritical stance on MOOCs constrains our understanding of humans and technology. In his book (2016), he also criticises the humanist subjects that underpin MOOC education and encourages educationalists to venture beyond this assumption. Posthumanist theory can allow for exceeding the limitations of the humanist stance by considering digital technology and materials that contribute to forming educational practices (I will discuss this point in the following chapter).
Thirdly, the teacher experience has been given less attention. Although teachers played a crucial role in establishing Arabic MOOCs when institutions were reluctant to engage with them, their experience has been absent in local and global MOOC research. It is true that more research has been conducted in this field recently, however more research in teacher experience is needed. In a recent systematic review introduced by Meet and Kala, (2021), they confirmed the scarcity of MOOC teachers’ experience in MOOC research. According to Ross et al. (2014), teachers are perceived in this research field to be charismatic celebrity professors, co-learners or facilitators or automated respondents. This image of MOOC teachers does not reflect their actual experience. This was confirmed by a team of teachers who taught a MOOC on e-learning and digital cultures introduced by Edinburgh University on the Coursera platform. Their reflections challenged the conventional perceptions of MOOC instructors. Drawing on their experience, they argued that ‘acknowledging the complexity of teacher positions and experiences can contribute crucial perspectives to debates about what the MOOC is for and what it can accomplish, including new ways of thinking about retention and access (Ross et al., 2014). This is particularly important to acknowledge, especially in courses led by individuals, such as most of those on the Rwaq platform.

In this research, I acknowledge the importance of MOOC teachers’ experiences. I also believe that considering the digital technology and material can offer a more nuanced understanding of what MOOCs do in general and in relation to MOOC teachers in MOOC education. Therefore, I have adopted a sociomaterial and spatial approach to critically examine Arabic MOOCs in the context of Saudi Arabia. I discuss these theoretical frameworks further in the next chapter. This research critically examines MOOCs in relation to teacher experiences by considering materials and digital technology as active actors participating in constructing the meaning of MOOCs and forming the identity of MOOC teachers. Having introduced Arabic MOOCs and their inception in the Arab region and reviewed previous research on MOOCs in Saudi Arabia, I now move to introduce the concept of giving gifts.
Gift Giving

Gifting is a multidisciplinary concept that has mainly been studied by anthropologists, sociologists, psychologists and economists. It is highly flexible and indeterminate and cannot be reduced to mechanical laws, defined structures or a universal definition (Komter, 2007). Klamer (2003, p. 243) defined gifting as the ‘transfer of a good without an explicit specification of a quid pro quo. The good can be a tangible thing or money, but it also can be intangible, as in the form of time, attention, information or knowledge’. Lévi-Strauss (1996, p. 19) interpreted gifts as ‘vehicles and instruments for realities of another order: influence, power, sympathy, status, emotion; and the skilful game of exchange consists of a complex totality of manoeuvres, conscious or unconscious, in order to gain security and to fortify one’s self against risks incurred through alliances and rivalry’.

One of the main characteristics of gifting is that it involves uncertainty in relation to reciprocity and exchange, and the timing of the return is left undetermined. Klamer (2003) pointed out that a gift is defined as any good transferred from one party to another without an explicit agreement on the nature, value or timing of a return. This ambiguity and uncertainty about the reciprocity process distinguishes gift giving from other exchange practises, such as market exchange. The gift-giving practice is also different in terms of its ability to develop values; this ability is not easily generated through market exchange, such as in a personal relationship, sense of belonging, love, friendship or intimacy, in addition to it producing knowledge and religious and spiritual meaning. Gifts can, in fact, fulfil a variety of social functions (Berking, 1999; Mauss, 1954; Schwartz, 1967) and economic purposes (Camerer, 1988; Cheal, 2015). Gift giving is a complex practice, as the gift has the power to change relationships and enact new ones.

In Islamic and Arabic heritage, gifting gained attention for its importance in enacting social interaction and solidarity (Al Shugair, 2022) and supporting social integration. The well-known Arab intellectual Al-Jahiz (2017) described a gift in such a way that ‘it brings affection, cultivates love and negates resentment; leaving it begets loneliness and calls for
estrangement; and the gift makes the distant near, the enemy a friend, the hated a custodian, and the heavyweight light’ (p. 261). This confirms a gift’s agency in forming social relationships. In a collectivist society such as Saudi Arabia, gifting plays a vital role in society in all its forms. Gift giving is a moral obligation shaped by the traditional norms (Al Shugair, 2022) and the principles of religion, as I discuss later in this chapter.

Mauss’s (2002) work remains influential in modern interpretations of gift-giving. In his theory, the act of gifting comprises three processes: (a) giving, which is seen as the first step in forming a relationship; (b) receiving, since he argued that a gift cannot be refused; and, above all, (c) reciprocating, which demonstrates social integrity. His interpretation emphasised the idea that a gift always implies reciprocity; a pure gift does not exist in gift-giving practices. The core of his work relied on the relationship between the gift and the giver. He argued that ‘to make a gift of something to someone is to make a present of some part of oneself’ (Mauss, 2002, p. 16). According to his view, a gift involves within itself a part of its giver’s identity; therefore, it has to be reciprocated. He considered altruism and self-interest to be linked and not contradictory in the act of gift giving.

The notion of reciprocity in Mauss’s (2002) interpretation of gifting has provoked debate. Belk (2007) distinguished two notions, namely sharing and gift giving, in terms of reciprocity. In his view, sharing is ‘an alternative to the private ownership that is emphasised in both marketplace exchange and gift giving’ (p. 127). From this perspective, ownership is seen as a border line differentiating between gift-giving and sharing. In Belk’s view of gifting practices, ownership is transferred from the giver to the recipient, while sharing allows both parties to possess the shared entity. In contrast, Arnould and Rose (2016) claimed that gift-giving, like sharing, results in joint-ownership. In the digital context, there is a lack of an agreed means of differentiating between sharing and gifting (Spence, 2019). According to John (2013b), who examined sharing in social media settings, the digital context alters the meaning of sharing. The next section discusses gifting and sharing in the digital environment.
Gift giving and sharing are complex practices, particularly in the digital context. Both notions involve uncertainty concerning ownership, as will become apparent in Chapter 8. In this thesis, I use both terms interchangeably, as I argue that digital technology can reconceptualise the conventional meaning of social practices and enact new ones.

In summary, gift giving is far too rich and complex to be narrowed down into specific dimensional approaches, and to attempt to do so is beyond the scope of this research. I have adopted a gift-giving approach in this research because teaching and sharing knowledge freely has a particular cultural meaning. The Islamic interpretation of teaching and sharing knowledge freely involves meaning of gift giving (I will discuss this point later in the chapter). Recently, an increasing number of individual teachers approach MOOCs from this cultural understanding of teaching freely. This led me to think about gift giving in such digital educational settings.

**Gift Giving in the Digital Context**

With the prevalence of technology and the internet, a new form of sharing and gift-giving has emerged. Sharing in the context of digital technology began with the emergence of the computer towards the end of the 1950s. Time-sharing was used to describe sharing a computer between several users who divided their time using it. However, with the emergence of personal computers, time-sharing was no longer relevant; rather, a new concept of sharing emerged, such as disk-sharing and file-sharing. These practises describe remote access to resources or data, which were shared in the sense of being in communication. Sharing files also involves copying original digital information, which refers to the current meaning of sharing in the digital context as the transfer of data without entailing any kind of material sacrifice (John, 2013a).

Sharing has become a significant characteristic of social networking sites, as it has come to mean participating online. It is a fundamental and constituent activity of social networking
sites that are built on user-generated content. These sites also participate in forming a new meaning of sharing. John (2013b) noted that the word ‘share’ is inherent to social media sites, as most of them have a ‘share’ button that allows users to engage in sharing digital content. For instance, Flicker uses the phrase ‘Share your photo’ and Facebook encourages its users to ‘connect and share with people in your life’, while Amazon users are encouraged to ‘share your thoughts with other readers’, rather than ‘write a book review’, and so on. John argued that these online settings give a new meaning to sharing, as the shared entity often accompanies such vague terms as ‘your life’, ‘your world’ and ‘your true self’. John also noticed that the word ‘sharing’ is now used in the digital context without a shared entity at all.

Another characteristic of gift giving in a digital setting is that it does not cause a financial burden. Belk (2014) stated that ‘engaging in many Web 2.0 sharing cultures is free; we lose nothing while potentially gaining a lot from others’ online sharing’ (p. 10). He also argued that the Internet has allowed new sharing practices that extend offline and may involve compensation. Consequently, it can be said that digital technology and social networking have facilitated the practice of sharing. Lupton (2014) argued that online sharing of content can be part of a gift economy in which people produce material to share with others for free. From this perspective, scholarship and knowledge are not viewed as marketable commodities but rather as a social good.

The influence of digital technology on the practice of giving gifts can also be noted by changes to the mechanism of reciprocity involved in the practice. The conventional meaning of a gift is that it is reciprocal between the participants; however, this is not always the case in digital settings. Belk (2014b) noted that the YouTube slogan ‘What do you have to share?’ encourages users to share by freely uploading videos. Active users who upload videos frequently can receive some compensation from YouTube through advertisements that are posted in the digital content. Users still engage in free sharing practises, as the reciprocity is received from the digital platform and not from the viewers. However, the vast majority of
content that is posted is uncompensated. The same case applies to other social media websites, such as photo-sharing sites Flickr and Pinterest, social giants Facebook and Twitter, the travel review service TripAdvisor, the book ratings service Goodreads and the digital commerce site Amazon. These platforms are not inherently non-profit; instead, they make profits from advertising through search engines such as Google that make it easier to access a large archive of shared internet knowledge. However, the vast majority of users of these sites, as well as individuals who create much of the content that can be found freely online work free of charge.

In defining the nuance between gift giving and sharing in a digital setting, Spence (2019) adopted the notion of ‘inalienability’ from the literature on gift giving to explain gifting and sharing in the context of cultural heritage. In the study, she developed a smart phone application that would allow museum visitors to design gifts for a friend, family member or colleague. These would be photographic representations of objects in the museum that the giver thought the recipients would like if they ever had the opportunity to send them in real life. In the application, givers could make voice recordings describing why they had chosen their object and offer clues as to where they would be found if the recipient visited the museum to view their gift. Finally, to further personalise their present, the givers could record a ‘gift card’ message and select a song. The results of the project showed that sharing act comprises sending something that already existed to a recipient, but also to the general public as an outward expression of the sender’s interests. However, gifting is an investment in time and effort by selecting an appropriate item for a certain individual based on one’s relationship with them. Designing a gift for a specific recipient generates ‘inalienability’, which differentiates gift giving from sharing. Although I do not draw a line in this research between gifting and sharing, the digital technology in this project offers a better understanding of digital gift giving practices.

John (2013b) stated that sharing and gifting in general are always associated with positive values, such as equality, reciprocity, honesty, openness, empathy and caring. However,
sharing in an online setting raises concerns about ownership. Likewise, Belk (2007) claimed that the ‘Internet revolution that some see as fostering a new age of altruism is also fostering a new age of expanding intellectual property rights (IPR) that threatens to replace the altruism of sharing with the egoism of commoditization’.

The field of gift giving in the digital context is under-theorised and worth exploring alongside the increasing involvement of technology in one’s social life. By examining gift-giving in an online teaching setting, this research will add to the knowledge on gift giving, identity and technology.

**Gift Giving in Islamic Culture**

Since this research is conducted in the context of an Islamic society, it is essential to introduce the Islamic interpretation of gifting. Islamic transcripts encourage gift-giving practises by emphasising the value of this in creating social integrity in a Muslim society. Kochuyt (2009) stated that by highlighting the core value of charity, believers inadvertently establish a standard for how people should interact with one another and with God through giving gifts. Gift giving is not limited to intangible forms, nor is it restricted between two parties, namely the giver and the recipient; instead, it involves God, who reciprocates the gift-giving action. The Prophet Mohammed said:

> If anyone relieves a Muslim believer from one of the hardships of this worldly life, God will relieve him of one of the hardships of the Day of Resurrection. If anyone makes it easy for the one who is indebted to him (while finding it difficult to repay), God will make it easy for him in this worldly life and in the Hereafter, and if anyone conceals the faults of a Muslim, God will conceal his faults in this world and in the Hereafter. God helps His slave as long as he helps his brother. (The Comprehensive Book -Book 16, Hadith 1., 2022)

Islam approaches gift giving from a different perspective to the theoretical and conventional meaning of gift-giving. It is an investment with God, and it is reciprocated in worldly life and
in the hereafter. Gift giving comes in different forms in Islam. Some of these are obligatory, such as zakat, which constitutes the third pillar of Islam. It also comes in voluntary forms, such as through donations and endowments, each having their own regulations and laws. This study focuses on two forms of gift giving practices in Islam, zakat and waqf. The reason for choosing these is that they are relevant to education and teaching as a form of gift giving. Several education projects have been influenced by waqf and zakat concepts. In addition, these two themes have emerged from analysing interviews and visual data, as we will see later in the analysis chapters.

\textit{Waqf}

When the son of Adam dies, his deeds come to an end except for three things: Sadaqah Jariyah (continuous charity), a knowledge which gives benefit, or a righteous child who prays for him (the deceased)—Prophet Mohammed. (Annawawi, 1994)

Charity, which is known in Arabic as waqf (Islamic endowment) is among the things that perpetuate human actions after death (Mahamood, 2000). The literal meaning of waqf is loosely translated as ‘prevention’, ‘confinement’, ‘detention’ or ‘tying up’ (Abdullah, 2005) or ‘holding’ or ‘prohibition’ (Alomair, 2018). Technically, waqf involves preventing property from passing into another individual’s ownership, but instead donating the usufruct (Al-Zarqa, 1997). According to Cambridge Dictionary (2023), usufruct refers to the legal right to use someone else’s property temporarily and to keep any profit made from it. In other words, any property, by its very nature, is subject to circulation among people through the act of gifting, inheriting and economic exchange. Property is known as waqf when it is removed from circulation and brought into communal ownership in such a way that only its usufruct can be used and benefited from. In this sense, waqf is defined as ‘a dedication of property either in express terms or by implication, for any charitable or religious object, or to secure any benefit to human being’ (Mahamood, 2000). Similarly, McChesney (2014, p. 6) stated that waqf is ‘the voluntary relinquishing of the right of a disposal of a thing by its owner and the dedication of the usufruct of that thing to some charitable end, as a charitable gift’.
*Waqf* is a unique type of charity that has three primary characteristics, according to Alomair (2018), namely perpetuity, irrevocability and inalienability. Perpetuity means that *waqf* cannot be limited by time or temporariness, and it must also be perpetual in nature and remain in eternity. Religiously, this means that a giver continues to receive the rewards from God as long as the *waqf* functions and generates benefits for the recipients. Some materials, such as food, perfume and money, which are diminished by use, are invalid for *waqf*, since use diminishes their benefit. Single-use material contradicts the idea of *waqf* law, which states that a *waqf* entity must be permanent and persistent over time.

The second characteristic is irrevocability, which means that once it is established and takes effect, it cannot be revoked by the giver; this is because *waqf* prevents ownership from its transmission by assigning it to God. Therefore, a *waqf* entity cannot be used for personal interest either by the donor of the *waqf* or by others (Abdullah, 2005). This introduces the third characteristic of *waqf*, which is inalienability. This principle states that property cannot be sold, disposed of, mortgaged, gifted, inherited or otherwise alienated (Alomair, 2018).

*Waqf* was the practice of the Prophet Mohammed, his companions and their followers, as well as of those who have come after them until the present day. It generates benefits for humanity as well for the person who contributes *waqf* during their lifetime and after their death. By contributing *waqf*, the donor is anticipating God’s reward in the hereafter. In the Quran, God said:

> Those who (in charity) spend of their goods by night and by day, in secret and in public, have their reward with their Lord; on them shall be no fear, nor they shall grieve. (Quran, 22: 77)

In Muslim societies, the *waqf* institution is extremely important. Since its inception, it has steadily grown, benefiting people and helping to cover a variety of public expenses such as for mosques, cemeteries, hospitals, schools, orphanages, warehouses, bakeries, mills and
other charitable, educational and religious foundations (Mahamood, 2000). It has played a major role throughout Islamic history by constituting one of tributaries that contribute to building Islamic civilization and urbanisation by setting a practice to meet the diverse needs of society and to be of benefit to the general public. There are numerous examples of *waqf* recorded and documented in Islamic history, and some of them still remain, confirming the efficacy and durability of *waqf* practices. Sustainability and *waqf* are inextricably linked. In fact, *waqf* has played a key role in the long-term social and economic growth of Muslim societies.

Early *waqf* came in the form of concrete, immovable entities, such as land, wells, mosques, farms and buildings. It can now also comprise movable objects such as animals, clothes, books and furniture. The rule is that any entity that can be sustained and re-used multiple times can be subject to *waqf*.

One of the important aspects of *waqf* relies on its effect. Mosques, for instance, occupy a particularly significant role in Muslim society as places of worship where the five daily prayers can be performed. The Quran regards a mosque as a consecrated structure, with its premises and all the materials used in its construction treated as *waqf* property so that the practice of worship can take place. This does not mean that *waqf* is restricted to religious purposes; rather, it also applies to education, health and other settings, as long as the *waqf* entity acts, allows and benefits those attending it.

*Waqf* in Saudi Arabia has attracted much attention from both individuals and the government. Many people have sought to register their own *waqf* under the supervision of specialised institutions. The *waqf* sector has gained the government’s attention by creating revenue to overcome issues such as poverty and shortage of resources. It also has been included in the Saudi Vision 2030 national plan. Saudi Arabia seeks to increase and develop the *waqf* sector, which represents the largest such sector in the Islamic world. To achieve this goal, the government has initiated projects that aim to improve *waqf* and introduce effective
administrative procedures to regulate it (Alomair, 2018; Al-Dowayan, 2022). Recently, the
government established a new governing body, the General Authority for Awqaf (GAA),
which aims to enhance the role of endowments in economic and social development and
social solidarity (GAA, 2020). (Note that awqaf is the plural of waqf.)

Having briefly introduced the waqf notion and principles, I now move on to discuss a specific
form of waqf that has recently emerged and become a common practice among individuals.
Recently, digital technology has generated waqf spaces in a digital context. The following
section introduces waqf in its digital form.

**Digital Waqf**

With the prevalence of digital technology, new forms of charitable practices have emerged,
including digital waqf. Furthermore, the technology has revived waqf practices by expanding
their scope and allowing individuals to engage in waqf, regardless of their financial ability.
This is explained further later in this study.

Alshaye (2017, p. 33) introduced the digital waqf definition in Arabic as ‘every moral right
that has been waqfed in digital form through an appropriate medium to benefit from it or its
revenue’. The moral right includes copyright and creative commons. The waqf value here
comes in two ways: either direct or indirect. Direct waqf, such as through a website or
smartphone application, benefits users directly, while indirect waqf allows a waqf entity to
generate financial revenue, such as by publishing an online book or designing a paid
application. In such cases, the original object is not a free gift but rather the source of
financial income that constitutes the meaning of waqf.

Although waqf practices can be commonly noted in the digital context, this subject remains
under-studied. So far, the majority of waqf research concentrates on conventional waqf.
Digital waqf is worth exploring, especially in light of the present trend for digital
transformation by various institutions (Wadi & Nurzaman, 2020) and the digital
transformation that Saudi Arabia is undergoing through its current national strategy.
waqf gains considerable attention from the government. *Saee Foundation* in Saudi Arabia, for example, is one of a number of prominent and non-profit institutions that specialises in research, practice and development of *waqf*, with the aim of promoting it in the community and supporting those in charge of *waqf* and its beneficiaries. It also provides suitable present and future solutions and applications for *waqf* (Saee, 2022). During my research, I contacted Saee and visited its digital library. It became clear that there is a scarcity of digital *waqf* literature. The next section provides examples of established digital *awqaf*.

**Examples of Digital Waqf**

There are many practical digital examples based on the practice of *waqf*, of which I show some here. Digital *waqf* projects can be categorised into two main themes, based on their functionality. The first theme is designed to promote engagement in *waqf* practice by collecting donations to constitute online or offline *waqf*. These projects facilitate participating in *waqf* and expanding its scope. Many individuals are motivated to practise *waqf* but do not have an idea how and where to do so. These projects answer these questions and bridge the gap between individuals and *waqf* entities. The second theme of digital *waqf* projects is introduced as *waqf* itself. The benefits it generates produce a space subject to *waqf* principles. The following examples demonstrate this further.

**Innovative Waqf: Awqaf Tech**

Awqaf Tech is the first project to apply the concept of *waqf* in mobile applications. It supports an innovative idea of *waqf* by developing and designing mobile applications to receive donations by funding one or more of these mobile application as *waqf* in the name of the donor or their loved ones. (Awqaf Tech, 2022).

The project was introduced by a charitable institution concerned with advocacy and guidance to Islam. On its website (Figure 2), the institution provides descriptions of a number of mobile applications across different themes, such as children, health and lifestyle. These mobile
applications are already designed and ready to use, but they require funding. The donor chooses one of these applications. Each application shows the cost of operating the application on iOS, Android, and both. Once the payment is made, the application appears in the chosen store, for example, on Apple Store or Google Play or both. Here the mobile application represents waqf. It offers service for its users, and at the same time, its revenue supports the charity’s advocacy and projects.

![Image](image_url)

Figure 2 Interface of Awqaf Tech platform

The plant that wraps the smartphone in the poster (Figure 2) symbolises the moral reward for growing something and multiplying it. The plant depicts the moral reward of gift giving, as mentioned in the Holy Quran:

> The likeness of those who expend their wealth in the way of God is as the likeness of a grain of corn that sprouts seven ears, in every ear a hundred grains. So God multiplies unto whom He will; God is All-embracing, All-knowing. (Quran 2:261)

The reward for gift-giving is described as a live entity (grain) that is small in size. Still, it can sprout and multiply to seven ears, and each will continue to grow. This metaphor confirms the reciprocity of the gift and encourages the act of gift giving, whatever the gift and its value.

Awqaf Tech offers a collection of ready-to-use applications that are available for purchase as donations for both application users and as financial support for the charitable projects of Awqaf Tech. Once the App is purchased, it becomes available in the applications store to be used by the public. Figure 3 shows an example of applications offered by Awqaf Tech.
platform. This application works as medication reminder by assisting the user in taking their medication regularly.

![Figure 3 Medication reminder App (digital waqf)](image)

This example shows how technology has adopted the principle of *waqf* and transferred its conventional meaning to one in an online or digital setting. Figure 4 shows a tweet by Awqaf Tech promotes digital *waqf* by comparing it to conventional *waqf*. The image attached to the tweet depicts contemporary *waqf* features in contradiction to conventional *waqf*, as represented by a building. Unlike the fixed, stable building, the mobile applications symbolise the mobility of *waqf*’s benefits.

![Figure 4 Awqaf Tech tweet and digital waqf](image)
1. Online Knowledge Production Spaces: Websites and Blogs.

Digital *waqf* also comes in the form of online spaces that collect and comprise knowledge production, such as online libraries and digital books, websites, blogs and social media accounts. These online spaces embrace the *waqf* concept. It will become apparent in this study how MOOCs participate in generating online *waqf* spaces. Here, I provide an example that demonstrates this idea further.

The website of Saleh bin Abdulrahman Al-Hussein, the General Head of Affairs of the Grand Mosque and the Prophet’s Mosque and a member of the Council of Senior Scholars and the Presidential Council of the King Abdulaziz Center for National Dialogue in Saudi Arabia, established a model of digital *waqf*. The website comprises his writings and research and adheres to the *waqf* principle. Figure 5 shows his statement regarding the copyright of the website (Rowaq, 2022).

![Figure 5 Example of *waqf* website](image)

This example, by an influential figure in Saudi Arabia and Islamic society in general, encourages others to follow this innovative approach to *waqf*. In fact, the founder of the Rwaq platform mentioned in the interview how this example had inspired his idea for the platform.

Recently, some studies have been conducted to investigate the use of technology in Islamic practices. For instance, Siskandar (2020) looked at the role of digital technology for improving the sustainability of a *madrasa* in Indonesia. A *madrasa* is a place of teaching and
learning religious education that is influenced by Islamic values. The process of teaching and learning is structured but is different from formal education. The study found that digital technology develops the academic and non-academic performance of teachers and students, indicating how crucial it is to adopt technology to enhance the quality and sustainability of madrasas.

Again, digital *waqf* is under-represented in *waqf* research. Alshaye (2017) asserted the crucial need to explore this field theoretically and practically. This thesis contributes knowledge regarding the relationship between technology and Islamic giving practices such as *waqf*, through exploring MOOCs and its particular forms of knowledge sharing in a cultural context that understands knowledge as a gift.

**Zakat**

*Zakat* is another form of charitable practice in Islam. In this section, I briefly introduce its concept with an emphasis on one form, knowledge *zakat*.

*Zakat* literally means purification; therefore, it involves the concept of giving to purify the self from greed and deliver the giver from self-indulgence and egocentricity (Al-Salih, 2020). It is also a means of thanking God for His blessings that are considered to be gifts, such as wealth, health and knowledge. The obligatory form of *zakat* under Islamic law refers to a certain share of wealth to be given according to defined categories at specific times of the year. *Zakat* has to be paid by those who have an excess of wealth over a certain threshold (*nisaab*). However, *zakat* is a broad concept and is not limited to money or obligatory forms; rather it comes in other forms, including voluntary ones. The voluntary form of zakat falls under *Sadaqa*, a broader concept that includes any kind of voluntary giving that is often performed through voluntary work, in-kind contributions, and free services such as sharing knowledge (Alkahlout, 2021)

The practice of *zakat* has an important spiritual and social role in Muslim society (Abdullah & Suhaib, 2011). This research is interested in knowledge sharing as a form of voluntary *zakat*,...
which can be the moral duty of educators, teachers and scholars towards their societies. This form of gift giving implies the meaning of distributing and circulating power and reducing centralisation. Kochuyt (2009) analysed the practice of zakat by drawing on Mauss’s (1954) theory on gift giving. He pointed out that when giving, accepting and returning gifts are linked, a chain reaction occurs, linking all of the actors together in a network relationship. Because the sequence of behaviours can be repeated, stable associations emerge. According to Mauss’s (1954) view, when a gift is returned, the two participants switch roles: the beneficiary becomes the giver, while the original giver becomes the receiver.

Both practices of zakat and waqf enact patterns of relationships, rearrange social ties and create a form of social solidarity. However, when comparing zakat to waqf in relation to sharing knowledge, we could say that zakat develops relations that reduce centralisation and distributes power, while the waqf creates a dynamic flow through retaining and holding the gifted entity over time (this point will be discussed further in chapter 6).

Waqf and Zakat both appear in the context of Arabic MOOCs. They are enacted through the visualisation, promotion, practices, and materiality of MOOCs. Waqf and Zakat can be understood as social spaces performed through a set of relationships, as will be evident later in the thesis.

Conclusion

This chapter has introduced MOOCs in both a global and local context. It has discussed MOOCs inception in the Arab context and presented prominent examples of Arabic MOOC platforms. It also identified a knowledge gap by reviewing previous MOOC research in Saudi Arabia. We have seen how MOOCs have been researched uncritically and mainly from a humanist perspective. The next chapter proposes an alternative approach to investigate the material, digital technology and human relationship in MOOCs. This approach acknowledges both the material and social aspects of the practice as co-constituents of each other.
The second section of this chapter discussed the gift concept, which is often presented and studied from a social perspective. It also introduced the gift in the digital context, particularly sharing knowledge as a form of gift giving. Then, the chapter introduced the Islamic interpretation of the gift and highlighted Waqf and Zakat as examples of gift-giving practices in Islam.
Chapter 4: Sociomateriality and Space

The previous chapter introduced MOOCs as online courses that involve several components, namely teachers, students, textual and graphical content, digital technologies and materials. These different components are related and interact in different ways to produce these courses. MOOCs come in different models and forms, and, as we have seen in the previous chapters, some have been introduced as a form of gift-giving. Accordingly, I have discussed the theoretical framework of the gift and reviewed the gift-giving literature both in general and in terms of Islamic culture, emphasising gift-giving in the digital context. With the scene set, I now wish to discuss the theoretical framework of the relationship between humans and technology. As we have seen in the previous chapter, a human-centred approach is dominant in digital education research and particularly in literature on MOOCs. This approach prioritises the human over materials, and assumes materials as passive entities. This chapter proposes an alternative perspective by considering the relationship between humans and materials in digital practices in a way that is valuable for providing a more developed understanding of Arabic MOOCs and MOOC teachers’ experiences in a cultural context.

This research is influenced by posthumanist philosophy, which challenges the humanist approach and its view of humans as being universal and autonomous. The post-humanist approach acknowledges the relational nature of subjectivity and urges us to rethink the position of humans and non-humans in their practice. It questions non-human participation in what is assumed to be a solely human action. Several theories engage with the post-humanist perspective by shifting thinking from the representational to the relational ontology of knowledge, such as sociomateriality and spatial theory.

I use these approaches to analyse several Arabic MOOC platforms and courses as a means to understand the form of space and the role of teachers. A spatial analysis is helpful in examining MOOCs alongside cultural values and traditions that are often seen as separate
and isolated from technology. This chapter introduces these theories and explains the rationale for adopting these approaches in this research.

This chapter is structured into three main sections. It begins by briefly introducing posthumanist philosophy and its significance in understanding the human in a digital education setting and, in particular, in examining MOOC projects. The second section discusses the theories of sociomateriality and spatiality and reviews the relevant literature and research that draw on these theories. Finally, the third section reviews the key terms related to the study, including agency, identity, space and ownership.

**Posthumanism in Digital Education**

For years, self-centred and self-important human observers, interpreters and narrators have guided most of the world’s ideas, theories and understanding. In an educational setting, Edwards and Usher (2002) claim that the humanist idea of a certain kind of subject with an inherent ability to become self-motivated and self-directed, namely a rational subject capable of exercising individual agency, underpins the educational process and the educator’s function. As a result, education has been viewed as a task of ‘bringing out’, or assisting in the realisation of this potential, so that individuals become fully autonomous and capable of exerting their individual and intentional agency. Research in the field of education has been influenced by a view of humanism that asks how ‘the word can be arranged to support one or another desired dimension of human life’ (Sørensen, 2009, p.2). This perspective is overly concerned with developing a particular kind of human, while the non-human and material world is seen as invisible or subordinate to human cognition and intentions (Fenwick & Landri, 2012).

Posthumanism is a relatively new branch of philosophy that raises the question of what it is to be human while embracing the complexities of modernity. It entails a transition in thinking about ‘the human’ as an individual being separated from and observant of the world and its ‘human and non-human’ inhabitants, to one that is inseparably linked to the world and only
conceivable as emergent from and through it. It challenges the humanist perspective in viewing humans as the supreme instrument for understanding the universe. Moreover, it theorises the relational nature of subjectivity as ‘constituted in and by multiplicity’ and ‘embodied and embedded’ with a ‘partial form of accountability, based on a strong sense of collectivity, relationality, and hence community building’ (Braidotti, 2013, p. 49).

Digital education could be a rich ground in particular for engaging with the critical post-humanism turn. Bayne (2016) stated that posthumanism questions assumptions that are based on a humanistic understanding of the dominance of the human over its technological and material environment and requires us to reconsider our belief that technology can simply be ‘harnessed’ by teachers or students, or that it can be utilised to ‘empower’ better learning without causing issues. It is a philosophical movement that is critical of the foundational assumptions of classical humanism that structure so much of life as we know, live and understand it. Critical posthumanism would encourage us to ask deeper questions about the complex entanglement of humans and non-humans and how this displacement of the human from centre stage might lead to more nuanced understandings of our relationship with digital education. It is worth noting that posthumanism is not compatible with anti-humanism and abandoning humanity; rather, it might be interpreted as a historical turning point in the conflict between humanism and antihumanism (Braidotti, 2013). It is a philosophical endeavour to reconsider the meaning and significance of humanity in the contemporary moment (Bayne, 2016).

It also can be useful to understand the relation between technology and cultural values and traditions, which can bridge the gap between the human and the materials that form much of digital education studies in a cultural context, in a way that often treats technology and culture as separate entities that have to be considered when designing technology to promote the implementation and adoption of digital technology in practice. Much digital research concerns integration and places emphasis on designing a type of technology that takes into account the cultural and traditional norms of the users (Alshehri, Abokhodair,
Kirkham, & Olivier, 2021). By taking a posthumanist approach, I consider culture as already being inherently integrated into technology, which I view as active and dynamic and comprising social and material components. In other words, this research hypothesises MOOCs as being shaped by the cultural and social context and vice versa. Culture is considered to be an actor that participates in generating Arabic MOOCs that shape the identity of MOOC teachers and teaching practices in Saudi Arabia.

Posthumanist researchers emphasise materials when adopting new sets of theories such as new materialism, sociomaterialism and space (Fenwich & Edwards, 2010; Fenwick et al., 2015), actor network theory (ANT) and the influence of science and technology studies such as that of Latour (2005), as well as other forms of theories that highlight materials and question their role in constituting knowledge. They refuse to consider the human as the only knowledge constructor and acknowledge objects in co-constructing subjects.

A growing body of MOOC researchers are questioning what MOOCs are: the early definition, and its promises to offer free accessible education, do not entirely correspond with what MOOCs are doing currently. Wakefield et al. (2018), for instance, noticed how MOOC moves toward a business-orientated model, rather than contributing to corporate social responsibility and inclusion objectives by promoting open access to education. In their view, MOOC has become equivalent to a shop window that allows the pseudo ‘purchaser’ to glimpse behind the scenes. Such observation draws our attention to the limitation of how MOOCs are introduced in the literature, as promising educational technology has the absolute ability to enhance and improve education and its outcomes. Knox (2016b) points out the importance of posthumanism in thinking beyond the MOOC subject, and argues that a posthumanist stance in MOOC research can be useful for critically evaluating the MOOC phenomenon.

In this research, I take a critical posthumanist stance by drawing on sociomaterial theories to examine MOOCs in relation to teachers in a cultural context. I aim to understand what kind of
teachers are produced by Arabic MOOCs. In doing so, I will be cautious to not position MOOC founders and teachers above MOOC materials and digital technologies when questioning the relationship between them. I believe that contextual and cultural settings play a role in shaping MOOCs and engagement when teaching MOOCs. Similarly, I assume that MOOCs produce a diverse type of teachers, as we explore further in the coming chapters. In order to approach the data from a relational perspective, I have adopted sociomaterial and spatial theory, which will be discussed further in the following sections.

**Sociomateriality**

Throughout the teachers’ interviews during the pilot stage, I realised that much was happening during courses and behind the scenes, not only between teachers and course participants, but also between teachers and non-human components. MOOC teaching is not a structured and straightforward practice, but rather complex and constantly evolving (Ross et al., 2014). The data in my research show that teachers engage with a wide range of materials and digital technologies at different stages of MOOC teaching, including constructing, designing and delivering courses, as well as during interaction and engagement. Some of these materials and digital technologies were visible in the courses, such as course materials, presentations, course delivery tools, teachers’ physical appearance and recording locations. At the same time, other components were invisible during the courses, but they played profound roles in enacting teacher presence and professional identity; in this way, timing, location, recording and editing software, Wi-Fi network and connected devices all contributed to teachers’ presentations in their MOOCs. Teachers had to adapt to this complexity and build new relationships with digital technologies and materials. This observation led me to question the performativity of materials and digital technology in MOOCs and MOOC teaching experiences.

To account for the materiality of MOOC teaching, a sociomaterial approach has been adopted in this research. Sociomateriality is a set of theoretical ideas positing that actions, objects, knowledge and space are emergent from the entanglement of human and non-
human resources and interests. This approach draws from ANT, which views entities as emergent via enactments of various forms of interaction other than pre-existing inquiry. Latour’s (2005) book, *Reassembling the Social*, explored ANT in depth and emphasised the links and assemblages that make up our social reality. Latour and other actor network theorists have claimed that boundaries between social and material are not predetermined but are enacted in practice. This view reflects the way that actions are viewed not as discrete, self-contained entities; rather, they are sociomaterial entanglements.

Sociomateriality was originally adopted to investigate the interaction between technology and work practices and has been widely employed in management and organisational research (Orlikowski, 2009; Orlikowski & Scott, 2008). It was also originally adopted in the field of science, technology and society (STS) to understand the interaction between technology, science, politics, social relations and human values and describe both how science and technology influence these relationships and how these relationships influence science and technology. Sociomaterial research in these fields has made valuable contributions to conceptualising materials, technology, humans and agency as relational effects produced through interactions, rather than separate entities.

Researchers of the sociology of technology such as Latour (2005) and Law (1989, 2012) have shown convincingly that the development of new technology is the product of contestation and negotiation among groups. This results in defining what it means to say that a particular technological artefact ‘works’. The heterogeneous engineering notion introduced by Law (1989) describes how materials and technical practices become stabilised through a heterogeneous mingling of the social and the material. This shifts our attention away from assuming that a material is a pre-given or passive entity to considering it as having a social and material relational effect. Sørensen (2009) drew on this argument to show how the construction of virtual environmental technologies involves heterogeneous social and material components developed by the interaction that occurs between them. It will become
apparent in Chapter 5 how Arabic MOOCs have been established through a network of social and material components.

**Sociomateriality in Digital Education**

Studies of organisation and management have recognised that digital technology and materials are distributed everywhere, and they only become valuable, meaningful and consequential when people actually engage with them in practice. Organisational researchers have found that most of what we call social is not merely human but also material. For instance, routines are made possible and formed through check lists, and social and consultant identity is enacted through morning whiteboard meetings (Dadderio, 2011). These studies and others have drawn our attention to the role of materials in social practice. Like workplaces, educational settings can be online or in campuses, and schools are full of materials. However, these non-human components are often misunderstood as passive instruments that are used by humans to achieve intentional educational goals. As a result, they are generally presumed to represent the background context against which, or within which, educational practise takes place (Fenwick et al., 2015). This assumption has affected the way that educational research engages with materials. Sørensen (2009) stated that there is ‘blindness toward the question of how educational practice is affected by materials, beyond the expected results’ (p. 2). She claimed that, as a consequence, materials are treated merely as tools for improving educational outcomes.

Educational research has generally been criticised for giving less attention to materials or dealing with them as instruments, such that they are passive and inert (Fenwick et al., 2015; Sørensen, 2009). It has mainly engaged with materials and digital technology through a central question about the impact of adapting certain digital technologies to enhance learning and teaching and making them more effective and meaningful. While this approach concerns evaluating the value of technology on making decisions regarding adopting or abandoning a certain type of technology or material, it misses the potential effect of the technology and limits its power to a specific area that is determined intentionally by humans.
Latour (2005) argued that in order to represent the recursive intertwining of the social and material as they develop in an ongoing, situated practice, it is necessary to replace the idea of materiality as ‘pre-formed substances’ with that of ‘performed relations’. Therefore, to disassociate ourselves from our humanist roots, we must be conscious of the language we use while interacting with technology; as Sørensen (2009, p. 27) said: ‘when we start approaching materials as part of practice, just as humans are, our variable repertoire starts sounding out of tune with our approach.’ She proposed three concepts to account for materiality, namely participation, performance and imaginary.

To claim back materiality in educational practice, educational researchers have adopted a range of theories, such as ANT, cultural historical activity theory (CHAT), complexity theory and spatial theory. All of these approaches have called for a rethink of materiality in practice and offered a new way to redefine knowledge, learning, space, materials and action. They have shifted attention to the relations among entities rather than focusing on entities that take place in space.

Fenwick et al. (2015) asserted the advantage of sociomaterial approaches in education settings with the following:

They challenge assumptions that a subject is separable from an object, or a knower from the thing that is known, and in some instances that a learner is necessarily human. They interrupt understandings of knowledge, learning and education as solely social or personal processes, and insist upon attending to the material that is enmeshed with the social, technical, and human. (p. 3)

They also argued that sociomaterial research aims to uncover the minute processes and relationships that are constantly present in educational elements that are taken for granted, such as timetables, digital materials, desks and lighting. It allows students and educators to recognise the macrodynamic relationships that exist between people, technologies and materials as well as to consider the implications for practice when these relationships are uncontrollable, continuing and constantly re-enacted. In her book, The Materiality of
Learning, Sørensen (2009) argues that sociomateriality prompts us to consider what behaviours occur when a specific arrangement of social and material components is developed, what knowledge is generated, what types of students and teachers are produced and what learning is accomplished. This perspective can help us understand what we get out of our substantial investment in educational technology.

Fenwick and Edwards (2013) argued that performative ontology allows us to move away from distinguishing the material from the social and draws our attention to the practice, the doing and the action. This would allow us to rethink the materiality of learning and teaching and see them as critically shaped through their materials. In addition, it considers that materiality is situated as a distributed, integral part of social and physical processes in which materials invite, incite, exclude and regulate various forms of participation. Learning, according to sociomaterial theory, is embedded in action and emerges through practice, which produces the materials and characteristics of educational events. It interrupts the understanding of knowledge, learning and education as solely social or personal processes and insists upon attending to the material that is enmeshed with the social, technical and human.

The view of materials being an actor and co-constitutive element of the social practices has influenced educational researchers. A growing body of educational research has recently been approaching materials from sociomaterial and other posthumanist theories. However, the humanist approach is still dominant in educational research, while the relational approach regarding materials in educational practice still needs further study. The next section will review previous studies of online education that have adopted sociomaterial approaches.

**Sociomateriality in online Education Research**

Online education research has for a long time benefited from sociomaterial insights into reconceptualising conventional concepts that influence understanding of online education. For example, Ross et al. (2013) redefined ‘nearness’ as a temporary assemblage of people, circumstances and technologies and show how ‘resilience’ that online learners are required
to adopt is a combination of nearness and distance, presence, and absence, and can be defined as the ability to navigate these different modes. Their study shows that resilience is formed by the entanglement of various human and non-human components. Likewise, Gourlay and Oliver (2018) reconceptualised student engagement in a digital university by examining students’ daily practices. The embodied sociomaterial everyday activities revealed how online students’ engagement can be perceived through materials, digital technology, and human entanglements.

Bolldén (2016) draws attention to the complexity of online learning and teaching. In particular, she examined online teaching practices by taking into account the online arrangement and digital materials of two courses, one that took place in learning management systems (LMS) and other in second life (SL), a particular virtual environment. She argued that teaching is emergent from the interactions between the teacher and the digital materials in the course, rather than being predetermined. Moreover, the digital technology arrangement in LMS or SL could be configured and engaged with in a variety of ways, rather than simply by a single approach that is constructed in advance by the course designer and teacher. It is challenging to set an arrangement in advance and be certain that it will produce a specific teaching practice and learning activity. Harrison (2018) echoed this, arguing that we cannot presume that specific spatial configurations will lead to particular types of practices or support the pedagogies we adopt. Similarly, Goodyear et al (2021) developed an Activity-Centred Analysis and Design (ACAD) framework that views learning as an emergent event that cannot be completely predicted in advance.

Critical literature on MOOCs has engaged with the posthumanist perspective, as it is a useful approach for understanding MOOCs and their potential. Houlden and Veletsianos (2019), for example, examined the flexibility promised by MOOCs, which is assumed to enable learners to participate in educational endeavours at ‘any time’ from ‘any place’. Drawing from post-humanist critiques, they show that flexibility is neither universal nor neutral; rather, it is ‘a shared enactment or co-constitutive practice between learners, instructors, technologies,
Institutions, communities and with/in varied spaces’ (p. 1011). Likewise, Decuyper (2019) critically examined open learning and open learners of xMOOCs and found these platforms to be active technologies that perform particular operations and that, in the process, enact specific notions about both ‘open education’ and the figure of the ‘open learner’.

In the MOOC research context, Knox (2014) examined specific technologies from a MOOC on e-learning and digital culture offered by the University of Edinburgh in partnership with the Coursera platform. He adopted a sociomaterial approach to examine the social and material entanglement in the MOOC to show how the algorithms and codes shape the educational space and act in a way that could not be predicted by either the teacher of the course or author of the code. In another study, Knox and Bayne (2013) examined the profusion of multimodal artefacts developed in response to the same MOOC and found that they represented a complex web of sociomaterial entanglement in which humans and technologies both had a role to play. They found that sociomaterial multimodality constitutes a new way of thinking about digital literacy as a relational enactment of knowledge rather than as a representational practice.

Perrotta et al. (2016) also adopted ANT to examine the phenomenon of corporate MOOCs by analysing the text available in the public domain. They show how digital technology has become entangled with a variety of activities and performances, including subjectification enactment. In addition, their study shows how sociomaterial entanglement produces a ‘digital video-recorder teacher’, as constituted by sociomaterial forces at the junction of technology.

In this research, I both interviewed MOOC teachers and observed their online courses. The interviews reveal how they worked with various forms of materials and digital technology to produce course materials. These behind-the-scenes practices show areas of assemblages that merit examination through the lens of sociomateriality as a means to understand how gifts and entrepreneurship are constructed through MOOCs.
Moreover, I was inspired by sociomateriality after I conducted a pilot study that involved interviewing three teachers and observing their courses. I realised that combining the teachers’ responses with my own observations would provide a greater meaning than by simply outlining the teachers’ own interpretations of their experience. For example, the interviews included questions about the motivation and outcomes that the teachers looked for while observing their courses and the digital materials that they used in them. The materials disclosed knowledge about the teachers’ motivations and aspirations. This is not to say that the teachers intentionally hid their responses, nor do I claim that I was able to identify things that did not arise in the teachers’ responses. However, the teachers themselves may not have been aware of the role of the digital technology involved in the MOOCs that they had introduced (discussed further in Chapter 6). In addition, the sociomaterial approach helped me to notice details and formulate questions about them. These details concerned the teachers’ outfits, the location and time when the videos were recorded and the recording process. The questions enabled valuable insights into MOOCs, the agency and role teachers and how MOOCs shaped the teachers. I would say that sociomateriality has assisted me in understanding teachers from a material perspective of MOOCs, which can provide a better understanding of what MOOCs do and achieve through a sociomaterial lens. This will be discussed further in the methodology chapter.

Having discussed the sociomaterial approach, I now move on to address spatial theory and its features for examining material and digital technology in an educational setting and review examples of online educational research by drawing on the spatial approach.

**Spatial Theory**

Space has been drawing attention in many fields of social science in recent years. In education, space can refer to a physical place, such as a class, lecture hall or laboratory, or to digital space that is constructed by a WIFI network, screen, camera or microphone and takes place in LMS or another online environment such as a Team collaboration or a Zoom
meeting. Space can also be used to described hyperspace with multiple forms of space. All of these different models of space are called educational space, as they accommodate learning and teaching activities.

Educational research often considers space from geographical and physical dimensions and asks how spaces become learning spaces, how they are constructed in ways that promote or inhibit learning, generate inequities or exclusions, or how they open or limit opportunities for new practices and knowledge. Edwards (2014) argued that ‘space is left unexamined as simply a different context, container or backcloth for curriculum and pedagogy’ (p. 526). It has also been argued that much of the discourse on educational space relies on social constructivism in a way that ignores the large number of non-human actors that shape educational activity and settings (Gourlay, 2022).

The emergence of digital technology in practice and the appearance of virtual spaces has necessitated finding a better way to account for the material and digital technologies that participate in constituting the space. A body of literature has questioned the traditional definition of space as a physical place where materials, people and buildings are situated. Consequently, a new definition has been adopted to conceptualise space as a constructed product of relationships, entanglements and interactions between different human and non-human entities (Lefebvre, 1991; Massey, 2005). This approach has been considered as an alternative to more traditional spatial and temporal conceptions in social sciences that conceive of space as a prior given. Rather, spatiality orientations are concerned with how human activity within space shapes, alters, colours and refracts space, as well as how spatial arrangements affect human mobility, identities and meanings (Fenwick, Edwards, et al., 2015).

Spatial theory offers an alternative understanding of the conventional meaning of spaces in education settings. ‘In such approaches, space is considered not as a static container into which teachers and students are poured, or a backcloth against which they act, but as a
dynamic multiplicity that is constantly being produced by simultaneous practices (Fenwick et al., 2015, p. 129). A prominent theoretical framework on space was developed by Henri Lefebvre (1991) in his book, The Production of Space. He argues that space is a social product (based on value and the social production of meanings) which affects social practices and perceptions. He distinguished between perceived physical space, representations of space that refer to discourses on conceived space and representational space that is produced by social interaction with the lived space.

Spatial theory considers the relations enacted between human and non-human components in educational practices. Fenwick et al. (2011) proposed that spatial analysis can help explore questions such as

how spaces become specifically educational or learning spaces; how they are constituted in ways that enable or inhibit learning; create inequities or exclusions, open or limit possibilities for new practices and knowledge; and how space is represented in the artefacts we use in educational practices, such as maps and pictures. (p. 129)

They suggested that, particularly in educational settings where media and digital technologies are incorporated, such as in online and open education, the ‘ordering of space – time’ has a critical influence on learning and working.

Social topology has introduced a practical approach to examining space in social practice. This was proposed by Mol and Law (1994), who defined space as being constructed through various orderings or operations of objects and social relations. Topology is a discipline of mathematics that considers several types of space and invents spaces by imagining various rules for determining the conditions under which shapes change or keep their form. Mol and Law (1994) examined the way in which tropical doctors handle anaemia cases and came to realise that ‘social’ does not exist as a single spatial type. Rather, it forms several kinds of spaces in which different operations take place. Law and Mol (2001) also conducted a study to explore the spatial characteristics of science and technology and argued that science and
Based on their observations, they introduced four types of space: regional, network, fluid and fire. This perspective on space, as Law (2002) notes, emphasises multiplicity, in which the structure of relations, borders and objects is dynamic and continually evolving and shifting.

Based on spatial theory, a variety of empirical research on education has been conducted to redefine the conventional meaning of school, university and leaning space. McGregor (2003), for example, drew on a topological conception to redefine ‘school space’. According to McGregor (2003), school space is not the traditional view of school as something that is simply ‘there’ because it is composed of a few walls inside which teachers and students are located. Schools are not fixed and limited to their geographical and physical location; rather, they are spaces constructed by relations between various actors that enact school space as a specific operation. Similarly, Bayne et al. (2013) made a distinction between the traditional university setting, projected as a defined campus bounded by buildings, and new forms that arise through online and remote learning settings. They showed how distance students enact the institutional form of traditional universities in such a way that not only bounded spatial understandings of the university emerge, but also other emergent dimensions of university space are enacted in these distance learning settings.

Likewise, learning space has been reconceptualised as being reliant on a complex and evolving assemblage of human and non-human actors that extends beyond pedagogy to embrace, among other things, university strategy, government policy, commercialisation, and digital technologies. The portability of the computer combined with the wealth of academic material available online means that students and teachers are increasingly able to conduct work and converse while situated in ostensibly domestic and social settings beyond the physical campus (Gourlay & Oliver, 2018). These are learning spaces where learning shifts from a static and bounded space to more fluid spaces and is performed by multiple actors.
During the time of conducting this research, the COVID-19 pandemic had caused the closure of university campuses. This had a huge impact on the way that teaching, and learning took place. The pandemic moved all conventional education spaces online and into homes. This raised the prominence of hybridity and led to a rapid migration to networked platforms, allowing higher education to function even when students and staff were geographically separated from the classroom and campus (Lamb et al., 2022). The pandemic and its devastating consequences encouraged researchers to engage in a more critical examination of the perceived separation of humans and materials. The consequences of transferring education online during the pandemic revealed the interconnectivity and interdependence of humans and materials, casting doubt on some pedagogic assumptions (Nelson, Segall, & Durham, 2021). Gourlay (2021) described universities at that time as being characterised by absence and uncertainty and asked where exactly universities were located during the lockdown. She argued that they resided primarily in the dispersed bodies of their students and teachers and were only able to endure through the contingent sociomaterial entanglements they made with digital devices at home.

This period of history has provided an opportunity to reconsider the performative role of materials and digital technology in producing multiple spaces and times. For example, Lamb and Ross (2021), by adopting social topology, show how lecture capture reconfigures shifting space–time relations in a way that was widely used during the COVID-19 pandemic. Although my research data was collected before the pandemic, the literature on the intersection between space and digital technology that emerged during and after the pandemic has enriched my data analysis and supported the position that I take in my research.

**Conceptualising MOOC Space**

Examining the spatial dimension of MOOCs can be valuable for expanding our understanding of them beyond educational purposes, as it identifies the kind of spaces potentially enacted by MOOCs. It allows us to see how MOOC spaces are evolving and in a constant process of
changing, rather than being bonded, singular and definitive. Knox (2014), for instance, investigated how the concept of space might be articulated and performed through promotion, participation and digital intervention by drawing on visual, discursive and technological features in MOOCs. By adopting spatial theory and addressing the mobilities turn, he showed how spaces are being (per)formed in growing MOOC domains. He described three different spatial formations, namely the ‘global institution’, the ‘homely’, and the ‘overwhelming’, that have been produced by the promotion of certain MOOC platforms and the activities in the courses. Homely space refers to space where the building of the local community is promoted through course activities, and the teacher role is prioritised and presented as central and authentic. Global institution space is concerned with how MOOC platforms develop a model that preserves the institution’s conventional structure while still claiming a worldwide reach. Overwhelming space emerges from course participants’ responses to an unconventional MOOC that engages with social media platforms and promotes student-created content.

Van de Oudeweetering and Decuypere (2019) also questioned the ‘openness’ that is promised by MOOCs. They used social topology to show how openness is enacted in multiple forms. In another study, Van de Oudeweetering and Decuypere (2021) show through the lens of social topology how European online learning projects have integrated long-term visions with crisis remediation and, as a result, provide continually ongoing spatial and temporal enactments. They argued that social topology, which derives from the mathematical analysis of forms, explains time and space as being interrelated, dynamic and constantly unfolding while also expressing powerful agential forms.

This research shows how MOOCs can be a source for re-examining concepts that are often defined from a social perspective. Adopting spatial theory to examine MOOCs has been a useful way to redefine gift-giving and entrepreneurship as a set of relations enacted by the interaction of the social and the material and form multiple spaces and times. My research
attempts to explore how MOOCs in the Arabic context might generate forms of spaces and teachers in Saudi Arabia.

Having discussed sociomateriality and spatial theory, I now move on to introducing key terms.

**Identity and Self-Presentation**

One prominent conceptualisation of identity construction was introduced by Erving Goffman (1956). He adopted a metaphor taken from dramaturgy in the study of human interaction and self-presentation in everyday life. He analysed how individuals interact with each other and how they ‘perform’ in order to present a positive image, using the theatre as an example of individuals’ contrasting front stage and backstage behaviour. When in front of an audience, they are aware that they are being observed and will perform by adhering to specific norms and social conventions. However, the individuals would act differently in a private, backstage environment, as performance in specific way was unnecessary. This observation led to him considering the self as an entity that is constructed based on the absence or presence of others. According to Goffman (1956), individuals have both expressions that they give and those that they give off that were not intended to be given but received by others.

Goffman’s work has inspired social science researchers to consider identity as being produced through interactions in online settings. For instance, Bullingham and Vasconcelos (2013), in their investigation of self-presentation and interaction, particularly in the context of blogging and SL, found that online identity is ‘anchored’ to the offline identity by reducing the gap between the two identities. Their participants were motivated to recreate their offline identity in online settings by developing a blogging voice that was authentic to the offline self, publishing personal information about their offline identity or constructing an avatar in SL that would resemble and disclose the offline identity.
From a spatial perspective, identity is co-constituted by space. As Massey (2005) argued, ‘identities/entities, the relations “between” them, and the spatiality which is part of them, are all co-constitutive’ (p. 10). This tells us that identity is emergent and performative according to the relationship constituted between the human and space. Al-Mahmood (2008) argued that ‘spatialities are inextricably linked with identity performances and teaching practices - these configure and are configured by each’ (p. 11). By adopting sociomaterial theory, she investigated transformations in online teaching in terms of identity, spatiality and online teaching practices through the experiences of online teachers.

In this study, we will see different forms of MOOC teacher identity enacted by the interaction among teachers, materials and digital technologies. Since I have adopted a relational approach, teachers’ identities in this study are considered emergent and enacted in the spatial arrangement of MOOCs. This assumes that identity is always in the process of being entangled with space. The cultural values and traditional norms of the research context may add further meaning to the knowledge and understanding of MOOCs. The following section reviews some of the literature on technology and identity in both Arab and cultural contexts.

**Identity in a Digital and Cultural Context**

Online communities and social network platforms are considered fertile environments for understanding the presentation and construction of identity, particularly in societies that are profoundly influenced by traditions and cultural norms. There is a growing number of studies in this regard, but more are needed to understand how digital technology participates and contributes in a cultural context and what kind of identities may be produced when culture is considered to inherently form practices. Rawas (2016), for example, examined virtual communities and online social networks in conservative societies, and in Saudi Arabia in particular. She defined ‘lead users’ as individuals who are not only first to adopt new technologies but also first to apply them for social reform and social change, which would
usually be achieved through social freedom that is allowed by social rights (individuals have the right to their own beliefs, opinions and speech) and safeguarded by the state. The lead users’ identity in social media platforms serves to raise awareness about particular concerns in their society, despite the fact that their actions may conflict with its social norms and existing censorship system. Social networks are considered a means for a specific identity to respond to collective actions and express the social change sought in such societies. Aljabre (2013) discussed the internet censorship system in Saudi Arabia and the role of the individuals in shaping its application. The Communication and Information Technology Commission (CITC) uses an internet filtering service to fulfil its role of monitoring the internet for immoral or illegal content, including pornographic, gambling and drugs material and web sites insulting the Islamic religion or Saudi laws and regulations. The service is both effective and transparent. According to filter.sa (2020), the goal of the filtering service is to provide a safe Saudi community that is free from harmful content. The CITC actively informs users about what is restricted and explains why it is censored. Moreover, it allows internet users to participate in the censorship process by sending requests to block web pages that are contrary to maintaining a safe environment and unblock those that are not. The CICT reviews requests and takes action accordingly. Many Saudi internet users actively participate in the censorship of the internet, since the CICT receives hundreds of requests daily to have websites blocked/unblocked based on their content. The internet filtering website enacts an identity of collaboration with authorities in operating the online filter system.

While websites are actively censored for digital material that is harmful to a society’s cultural and religious views, social media platforms such as Twitter and Facebook transcend censorship by allowing conversations that would be restricted on conventional media or websites. By having different spatial characteristics, social media enable different kinds of identities. These include authority figures such as ministers becoming actively engaged on social media platforms to express their desire to communicate with Saudi citizens, speak their language and understand their needs (Aljabre, 2013). This corresponds with Al-Saggaf and Simmons's (2015) findings in their examination of the nature of social media interaction in
Saudi Arabia, specifically in relation to two cases of flooding in Jeddah. Saudi citizens’ responses on social media put great pressure on the government to take action against the corruption and nepotism that were behind the tragic incidents.

In a similar vein, Abokhodair et al. (2017) explored how online privacy is constructed on social media from the perspective of traditional norms and social values in the Gulf. In particular, they looked at the notion of khososyah, which is loosely translated as ‘the enactment of and pursuit of privacy’, that individuals try to maintain while being online. They interviewed social media users from Saudi Arabia and Qatar to understand how they managed privacy concerns that are imbued in local social and religious values while interacting with and adopting technologies. They found that social media users employ unique strategies to refashion social media sites structured around different individual ideologies and notions of privacy. New online identities were formed to embrace modernity while still observing tradition.

From a feminist perspective, Aljuwaiser (2017) investigated how Saudi women adopt and appropriate their social media practices by considering cultural contexts such as Saudi traditions, norms and values. The findings show the relationship between Saudi women’s online practises and offline identities to be non-linear, such that online practises influence offline identities and vice versa. Offline identities can be represented online as a part of their online identities. Furthermore, Saudi women were found to form multiple online identities across different platforms as a result of adopting the respective platform’s features and scope. Likewise, Hurley and Al-Ali (2021) reconceptualised various responses of Arab female students in the digital environment. They argued that silence, invisibility and disconnection in technological interaction are not necessarily a deficit but a refractive response and a means to enable students and educators to stay connected below the radar. They used mashrabiyya (geometric designs on a wooden window that deflects the light rather than let it in) as a theoretical metaphor to not only consider what learners say and show, but also count silences, blank space, technologically veiled uses of filters and avatars that can also convey responses.
These studies of identities in a digital and cultural context show how identity is spatially constructed and formed by human and digital technology interaction. It shows how cultural values and tradition interrelate with technology by producing spaces, identities and practices. Adopting sociomateriality and spatial theory can generate insights into how MOOCs might intersect with the culture and traditions of Saudi Arabia to produce new identities. This will be discussed further in Chapter 6.

Agency
Agency from a social perspective is defined as an individual’s ability to act (Emirbayer & Mische, 1998; Giddens, 1986). Agency is mostly associated with humans and is isolated from material surroundings. By contrast, material agency is defined as the capacity for non-human entities to operate in the absence of prolonged human interaction, such as natural phenomena that occur without human involvement (Pickering, 1993). Rather than being characteristic of either humans or their material and technological artefacts, sociomateriality redefines agency as the capacity for action achieved through the inherent sociomaterial entanglement of the human and materials.

Agency has been critically reviewed in terms of ANT by Latour (2005) and other sociomaterial researchers such as Bennett (2010), who has long argued that agency is a capacity manifested through the interactions of human and non-human actors and hence is relational, emergent and shifting. Other researchers, such as Barad (2018), have addressed the subject of material agency and its relationship with human agency. They were especially interested in defining the link between observed phenomena and the observer. Materiality, according to Barad (2018), is a performed entity rather than a given one. They claim that those practices are not solely human-based activities but ‘specific material (re)configurations of the world through which boundaries, properties, and meanings are differentially enacted’.
From a sociomaterial perspective, the transversal combination of humans and non-humans (bodies, materials and ideas) can be described as assemblages. Power relations flow from these assemblages rather than solely from human action and interest. Several educational researchers have drawn on the sociomaterial understanding of the power to reconceptualise teacher and learner agency. Fenwick and Edwards (2010) and McGregor (2004), for instance, show how materials place the teacher in a ‘knowing location’ stance. The timetable places the teacher in a specific room with specific students and among textbooks, computers, class plans, bulletin boards and stacks of graded papers that the teacher uses for interaction and to teach ideas.

Regarding teacher agency, Heikkilä and Mankki (2021) investigated primary teachers’ agency in online teaching during a school lockdown during the COVID-19 pandemic in Finland. They argued that teacher agency cannot be understood solely from a human perspective but rather as the outcome of assemblages of both human and non-human entities. The findings suggest that the shift in the materiality of teaching has both positive and negative effects on teachers’ agency. On the one hand, it limits their agency by preventing them from using their teaching strengths, and on the other, it promotes their pedagogical inventiveness and self-efficacy. For example, pens are extremely important for teachers, but when the teacher is not physically present with their students, the power of a traditional object—a pen—is unavailable, leading to a sense of powerlessness. At the same time, teachers found a space to experiment with new practices while they could not be in the classroom. The findings also show how agency was expressed relationally through different human–human and human–material assemblages.

In the chapters that follow, I will show how teacher agency can be reconfigured through MOOCs and how different MOOC models, such as gift-giving and entrepreneurship, might form agency for teachers.
Ownership

From a social perspective, ownership is defined as the feeling of possessiveness and attachment that humans develop toward things. We own things by buying, exchanging and giving them as gifts. In the previous chapter, we saw how gifts related to ownership. In Mauss’s (1954) view, gifts rely on reciprocity that is driven by societal obligations to give, receive and reciprocate. The reciprocity that is involved in gifts transfers the ownership from the giver to the recipient, who is obliged to return the gift, whereas sharing, in Belk’s (2007) view, retains ownership in its place. From Belk’s perspective, sharing is unlike gift giving, in the sense that it does not emphasise ownership.

Sarstedt and Neubert (2017) referred to the ‘psychological ownership’ that IKEA customers develop by assembling materials. They found that individuals place a comparatively higher value on the things they are involved in creating, such as by assembling furniture themselves rather than paying for pre-assembled items. They called this the ‘IKEA effect’. The time and effort that is invested in assembling product enacts psychological ownership. This shows us that ownership can be performed and relationally constituted by practices and relations with things, not just humans.

In the MOOC context, ownership is a place of concern. MOOC studies have highlighted ownership as an important issue that relates to privacy in MOOCs. Knox (2014a), for instance, pointed out how MOOC participants’ content, such as forum entries, can cause issues regarding ownership in courses characterised as ‘open education’. Such issues are not well-defined in MOOCs. Similarly, Kaushik (2016) found that copyright of MOOC materials is ambiguous. Moreover, Anastasopoulos (2014) questioned the issue of faculty members’ intellectual property rights of MOOCs that serve to promote universities and achieve additional revenues through the medium.

In my research, the self-directed courses that were developed and introduced by MOOC teachers raise questions of ownership. I observed that ownership and intellectual property
were among the teachers’ concerns. The interviews revealed how the teachers were worried about being exploited in MOOCs in ways that would subject their work to plagiarism, academic integrity violation and dishonesty. The teachers developed multiple strategies to protect themselves; however, they were also challenged to balance between being closed or protective and open in spaces such MOOCs that project them as open.

This issue also appeared in another area of MOOCs, when the course is introduced as a collaboration between the teacher and the platform provider that gives the course a space and makes it visible online. The question emerging from such collaborations is of who owns the course. This is particularly crucial when the course is introduced as fee-paying. Who has the right to earn the financial return generated by the course? And if it is shared, how is each party’s portion defined?

In my discussions with the teachers, I came across many issues regarding course ownership and intellectual property and its implications. Such issues exist but are not well studied in MOOCs. I will explore how MOOCs reconfigure ownership and how it can be conceptualised, taking into account the materials and digital technology that can also be performative in shaping course ownership in the MOOC context.

**Conclusion**

This chapter has highlighted the theoretical foundations of the research, which has been influenced by a posthumanist stance. It has proposed sociomaterial and spatial approaches to account for the materiality of MOOCs. Examining MOOCs and teachers’ experience from sociomaterial and relational perspectives can enrich and expand our understanding about implications of digital education technologies. Fenwick et al. (2015) argue that sociomaterial approaches provide researchers with tools to examine relations, connections and disconnections that constitute things in education such as activities, spaces, teachers, knowledge, curriculums and students. Such components and things are perceived as effects
of heterogeneous relations and assemblages rather than existing as foundational objects with capabilities.

By adopting sociomaterial approaches, I aim to examine Arabic MOOCs and how they form space and time in the context of Saudi Arabia. I have shown the rationale of adopting sociomaterial and spatial theories in my exploration of MOOCs and teachers in cultural settings. In the discussion on gifts, we have seen the significance of gifts in the form of teaching and sharing knowledge in the Islamic culture. Several teachers have engaged in MOOCs as a means to fulfil this moral obligation. By this, they mean that they are not looking for the gift to be reciprocated, for instance by the recipients paying a course fee. However, the reciprocity can be relational and spatially formed (as shown in Chapter 6). We will see a type of reciprocity formed by the relationships enacted in MOOCs. A gift in this sense is not equivalent to the humanist understanding of a gift.

Sociomaterial and spatial theories can be useful for understanding teachers’ agency, identity and ownership that has often been discussed from a humanist perspective. These concepts can be understood relationally, rather than as merely being shaped by human intentions and interests. It is useful to engage with material and digital technology to attend to the complexity of MOOC teaching and understand how MOOCs work and what space and time they form.

Throughout this chapter, I have highlighted a lack of research exploring MOOCs in a cultural context and from a relational perspective. The cultural values and traditional norms that shape people’s behaviours also shape technology and the way they engage with it. MOOCs can be different in different contexts, and this thesis will show the case of MOOCs and MOOC teachers in a Saudi Arabian context. This can be different from how MOOCs are perceived and what they lead to in other contexts.
The following chapter will introduce the methodology employed in this research. It will discuss the methods employed to collect, manage, translate and analyse the data in order to answer the research questions.
Chapter 5: Methodology

Introduction

Having introduced the contextual and conceptual background of this research and identified the knowledge gap, I now discuss the methodological approach that enabled me to fill this gap and answer the research questions regarding the MOOC project in the Saudi Arabian context. While educational studies investigating the social and material components of educational activities have emerged in recent years, most of these studies—and particularly those on MOOCs—tend to place the traditional human subject in educational practices front and centre. Advocates of these orientations often neglect the material components of educational practices, which can play a significant role in their construction. Recently, inspired by ANT theory, a number of educational researchers have caused us to rethink the role of materials in education by adopting relatively new sociomaterial approaches that consider the material realm in a more equitable manner (e.g. Fenwick & Edwards, 2010; Fenwick et al., 2015)

In this research, I approach MOOCs from a posthumanist perspective. This means that humans involved in MOOCs are no longer treated as a central and primary source of meaning. While I am still interested in studying teachers and their experiences, I adopt a relational approach in my analysis, which shifts the focus from teachers to relations. This approach embraces the premise that both humans and non-humans constitute parts of the social world. Materials are as significant as humans but are often treated as passive, without or under human control. The sociomaterial approach adopted in this study allows rethinking MOOCs and teachers’ practices from a different perspective, which can reveal the social implications of MOOCs in the Saudi Arabian context.

This chapter outlines the rationale for the series of decisions that were made in this research. Specifically, it justifies the choices made regarding the methodology and method and outlines
the process designed and followed to achieve the aims of the research described in the introduction.

The chapter is structured into three main sections. It begins with a discussion of the nature of the study and the theoretical approach that informed the methodology. This research adopts a sociomaterial approach with a relational perspective grounded in posthumanism that does not draw a distinction between subject and object—or between human and non-human. This relational thinking challenges the methodology and does not privilege the subject/human (e.g. the researcher or participant) over objectives/materials in practice. The second section describes the fieldwork and data collection. It outlines the research procedure, including the pilot study, the sampling approach, and the methods utilised to collect the data. Further, it discusses how the interviews, observations, and visual methodology were reframed according to the theoretical framework of the study. The third section discusses the positionality, reflexivity, reliability, and ethical issues that were considered in the study.

The nature of the research

The sociomaterial approach is based on a relational or “becoming” ontology. Its underlying assumption is that all assumed actors, entities, and categories are understood as relational enactments or material configurations of the world’s becoming. From this perspective, the ‘practices of knowing and being are not isolable; they are mutually implicated’ (Barad, 2007), and the inherent quality of the entity is denied since ‘people and things only exist in relation to each other’ (Orlikowski & Scott, 2008, p. 455). Accordingly, the environment, animals, objects, and artefacts are considered fundamental to the enactment of human existence and social activity (Fenwick & Edwards, 2013), where ‘social’ is viewed as an outcome of sociomaterial practices rather than as a bounded category. Sociomaterial researchers begin from the assumption that everything emerges primarily in relation to other things through the arrangement, coherence, and reconfiguration of specific entanglements.
The focus of relational ontology is ‘on the relations among entities through which actions occur, rather than entities themselves as the source of actions’ (Fenwick et al., 2015). It assumes that the world is not ‘out there’ as individual ‘things’ or constructed socially but rather enacted as sociomaterial practices. The relational lens reconceptualises normative definitions of human, agency, practices, presence, learning, learner, knowledge, and other notions that are defined from a humanist perspective, challenging the assumption that humans have the inherent ability and capacity to act, interpret, and understand the world. Likewise, the materials are not perceived as passive or under human control. Rather, they are viewed as co-constitutive components that play a fundamental role in determining what we perceive as social. This has implications for the way I view myself as researcher and the act of the research (discussed further in this chapter).

Based on the becoming or relational ontology underlying the sociomaterial approach, it is assumed in this study that the materials and digital technology as well as the teachers involved in MOOCs practices are relationally produced. Further, it is assumed that materials act, perform, and participate in constructing teaching practices, and they are not always under the teacher’s control. Agency does not belong to any one actor and is not established prior to action in a cause-and-effect relationship. Instead, agency develops and changes continuously within the action itself. This also has implications for the methodological approach adopted, as I will discuss later in this chapter.

The social and material relationship in sociomaterial studies

The social and material are related and produced in relation, but the question is how this relationship is defined. Existing sociomaterial lenses share key assumptions, such as posthumanism, performativity, entanglement or imbrication, agency, and relationality. However, the nature of the relationship between the material and social dimensions differs between sociomaterial approaches. One approach is that the material and social are inextricably linked and that separation is simply an analytical convenience (Orlikowski &
Scott, 2008). This ‘relational ontology’ asserts that the social and the material are ontologically inseparable due to their entanglement in practice. Entities such as individuals, digital technologies, or materials become a sociomaterial assemblage in which the material and the social are only separable analytically. Consequently, it is not only humans that have agency; the material does as well. Both are performative in the sense that only when they are combined can they generate reality. Recognising that neither the social nor the material has precedence over the other, sociomaterial theory aims to resolve the challenges introduced by both technological and humanist determinism (Orlikowski, 2007).

The other sociomaterial approach assumes that the social and material worlds are ontologically and analytically distinct (Leonardi, 2011). This ‘substantialist ontology’ supports a perspective of imbrication that assumes that the social and material are separate but interdependent entities that are intertwined. ‘Imbrication’ is a metaphor that refers to ‘the gradual overlapping and interlocking of distinct elements into a durable infrastructure’ (Leonardi, 2013, p. 70). In this sense, they are not only separable analytically but also ontologically. This assumption takes a different approach to agency: human agency takes priority over material agency since humans act with intention, whereas material agents do not.

In this research, I adopt a relational perspective on MOOCs, teachers, and the context. I assume that the material and social dimensions of MOOCs are inextricably related. This means that MOOCs are not universal and come in only one form; rather, MOOCs are sociomaterially, spatially, and relationally constructed. The same can be said for the teachers and teaching practices, which are enacted in relationships with materials. Therefore, this study is based on the assumption that the material and social are inseparably related, and that separation is used for analytical purposes.
Relational methodology

This study is theoretically situated within a group of relational approaches that share a criticism of the dualisms between subject and object, agency and structure, and human and material and view education as a set of practices carried out contingently through relations between people and matter. Relational research focuses on relationships, doings, events, and affects while moving away from artificial structures, particularly those seen in social science research (Vannini, 2015). It calls methods into question and challenges their prescription, arguing that standardised methods do little more than provide a false sense of security that knowledge is stable or even knowable (Ulmer, 2017). Thus, this assumption questions the methodological approach, reframing the methods, researcher position, and ethics in alignment with relational, performative, and becoming ontology.

Law et al. (2011) criticise the conventional understanding of methods that informs much of social science research. It is assumed that methods are tools for learning about the social world. This belief entails a separation between theory, material, and methods. In this sense, methods are understood as techniques that are used by researchers to capture knowledge that is believed to be ‘out there’. It results in a binary division that differentiates between the world and the observer, and it represents the role of methods in bridging this gap. Moreover, it categorises instrumentalism and humanism as two distinctive understandings of social research. According to the instrumentalist viewpoint, it is critical to get the methods right in order to provide adequate representations that correspond to existing realities. Meanwhile, humanist methods take a more constructionist approach, such as a phenomenological focus on lived experience as a means to generate and understand reality. However, social reality is more complicated to be captured through rigidly defined methods. Therefore, relational thinking embraces the uncertainty of knowledge and the forces that accumulate to produce events. It views the uncertain messiness of knowledge production as an ongoing opportunity in the politics of hope, creativity, and imagination. It also assumes that methods, researchers, and knowledge all constitute each other.
Relational methodology resonates with other endeavours, emphasising the inadequacy of the ‘methods as usual’ approach (Taylor, 2017). Law (2004) criticised traditional sociological methods for their analytic grasping and clinging to notions such as clarity, rigour, and regularity, which he claims leave social scientists unprepared to deal with the ‘vague, diffuse or unspecific, slippery, emotional, ephemeral, elusive or indistinct’ that comprise the mixture of experience in the everyday social world. Whereas conventional social research has sought to establish the existence of a singular reality, the method of assemblage suggested by (Law, 2004, p. 122) sees reality as ‘interactive, remade, indefinite and multiple’

Neither instrumentalist nor humanist approaches were appropriate for answering my research questions. Although I adopted a qualitative methodology, the methods were reframed to allow approaching teachers and materials from a relational perspective and to challenge the separation that underlies much of educational and MOOC research.

**Sociomateriality methodological approaches**

Having discussed the theoretical assumptions of the research, the question becomes how to put them to work. What methods are most appropriate, and how can they be applied to study Arabic MOOCs and teachers’ experience? According to Hultin (2019), the sociomaterial stance, which is based on a relational ontology, not only entails a new method of understanding the subject–object relationship but also a new understanding of our epistemological practices and how to explore and account for this relationship. From reading extensively about sociomaterial methodology, I realised there are no definitive methods to apply. Sociomaterial approaches to research imply a sensibility rather than a specific set of research methods (Fenwick, Edwards, et al., 2015). Cassell et al. (2019) emphasise three commitments that can be used as guidelines for developing sociomaterial research designs, fieldwork, and data analysis: relationality, action, and in situ processes. They argue that collection and analysis methods must be sufficiently sensitive to the assumption of inextricability that underpins sociomateriality, taking care not to underestimate or privilege
each area or to unwittingly maintain a false sense of separation. Recognising the interdependence of the social and material does not suffice. The complex ideological, cultural, symbolic, embodied, and physical manifestations of sociomaterial processes in situ must also be considered.

Researchers have encountered challenges while using a sociomaterial ontology, such as the process of recognising material elements and their arrangement as well as the interpretation of how to measure their agency and analyse and interpret the relationship between non-humans and humans in practice (Fenwick & Nimmo, 2015). According to Fenwick, Doyle, et al. (2015, p. 122) ‘the important question is not what theories say, but the kind of work they can do when we are in “the field” of the research site collecting information, or sitting at home amidst masses of notes, photos, and interview transcripts trying to discern useful patterns’. In designing the methodology, I attempted to apply a sociomaterial sensibility rather than follow pre-defined methods.

**Research design**

I now move to describe the design and method of my study, which can be considered an online ethnographic study since it examines MOOCs and MOOC teaching practices. It has been argued that ethnography is a suitable method for studying practices and for finding answers to open questions about the nature and formation of those practices (Sørensen, 2009). Ethnography has generally emphasised the ‘importance of studying at first hand what people do and say in particular contexts’ (Hammersley, 2006). While sociomateriality blurs the lines between humans and materials, online-based ethnography reshapes what ethnographers might study—the ethnographer’s objects and subjects of study are no longer strictly humans and the human perspective. It should be emphasised that the ethnography applied here includes the materials, platform infrastructure and digital technology, and other non-humans along with MOOC teachers and providers.
Based on the way in which sociomateriality is approached in various fields, such as management and organisation studies (MOS) (e.g. Orlikowski, 1992), STS studies (e.g. Law, 2012), and educational studies (e.g. Gourlay & Oliver, 2018), I developed the research procedure to maintain sociomaterial sensibility. Table 1 shows the research design that guided me in conducting this research.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Pilot study (Exploring the context)</th>
<th>Data collection (Generating the data)</th>
<th>Data management (Working with data)</th>
<th>Data analysis (Working across data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
<td>Observing three MOOCs and interviewing three teachers</td>
<td>Sampling MOOCs and recruiting participants</td>
<td>Storing and organising the data</td>
<td>Transcription</td>
</tr>
<tr>
<td></td>
<td>Observation, screenshot captures, online semi-structured interviews</td>
<td></td>
<td>Initial coding</td>
<td>Coding</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Translation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Writing</td>
</tr>
<tr>
<td>Outcome</td>
<td>Shift the focus from teachers to the material–teacher relationship in the courses and engage with materials</td>
<td>Audio and video interview recordings, textual fieldnotes, and images</td>
<td>Organising and preparing the data for analysis</td>
<td>Research findings that answer the research questions. What spaces are formed by MOOCs in Saudi Arabia? How are gift and entrepreneurship defined? How do MOOCs relate to teacher’s identity formation?</td>
</tr>
<tr>
<td></td>
<td>Revise the interview questions and observation tools</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 Research design

It is worth noting that the process was not linear and involved separate stages and processes that were often overlapping and intersecting. For example, the data generated by the interviews and online observation informed the interview questions and observation tool, which were constantly evolving. The data were analysed throughout the data collection.
period, and I kept going back and forth between the observed courses and analysis and writing. The observation drew my attention to specific areas of the courses. Similarly, the transcription and translations were performed during the data collection and throughout the data analysis. The overall research process was unstructured and messy, and I had to adapt to accept this messiness and complexity as part of the sociomaterial reality under examination.

In the following section, I will discuss how the pilot study was conducted as well as the outcome generated. Then, I will discuss the Arabic MOOC typology in the KSA context that I developed following the pilot study. The Arabic MOOC classification was developed as a guide for sampling MOOCs and teachers. Subsequently, the process of recruiting the teachers will be described. Finally, I will discuss the method applied for generating and analysing the data.

**Pilot study**

After receiving ethical approval from the research ethics committee at the School of Education in the University of Edinburgh, I conducted a pilot study on a small sample consisting of three MOOCs and three teachers. The courses were presented on three different platforms. A pilot study is usually performed to test the suitability and efficacy of the proposed methodologies in the framework of the larger research (Van Teijlingen & Hundley, 2001). However, my aim was to explore the Arabic MOOC context and get a sense of the MOOC teaching experience on different platforms. In other words, I wanted to understand the similarities and differences in the teacher experiences using different platforms, and use this to determine how to approach MOOCs and teachers in Saudi Arabia context.

During the pilot study, which took one month, I joined three courses on the Rwaq, KKUx, and Shorfaa platforms, respectively. The course on the Rwaq platform was individual-led,
meaning that the teacher was fully responsible for most aspects of the course, including choosing the subject, designing, and delivering the materials, and interacting with students. The second course, on KKUx, was run by King Khalid University and involved collaboration with teachers. The design and delivery tasks were shared by the different involved parties. Meanwhile, the Shorfaa platform was entrepreneurial-based, meaning that it was run by a private institution in collaboration with the teacher, and the courses are offered for a fee. I was a participating observer in the Rwaq course, while in the other two courses (KKUx and Shorfaa) I was a non-participating observer, as only minimal interaction was possible in these courses. I also conducted semi-structured interviews with one teacher from each of these three MOOCs. Table 2 presents information about the courses and teachers involved in the pilot study. The teachers’ names presented in the table are pseudonyms.

<table>
<thead>
<tr>
<th>Platform</th>
<th>Platform approach</th>
<th>Course modes</th>
<th>Course subject</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rwaq</td>
<td>Individual led</td>
<td>Free of charge</td>
<td>English language learning</td>
<td>Ahmad</td>
</tr>
<tr>
<td>Shorfaa</td>
<td>Entrepreneurial based</td>
<td>Fee paying</td>
<td>Design thinking</td>
<td>Eyad</td>
</tr>
<tr>
<td>KKUx</td>
<td>Government led</td>
<td>The course is free to access, but the certificate requires a fee</td>
<td>Basics of launching a start-up</td>
<td>Mosab</td>
</tr>
</tbody>
</table>

Table 2 participants and MOOCs involved in the pilot study

The pilot study drew my attention to the complexity of MOOC teaching practices and the diversity of MOOCs and teachers. It also showed the connection between technology and the cultural conception of giving. I learned that MOOCs sometimes appeared as gift-giving practices and other times as entrepreneurship practices. The pilot showed how teachers appeared differently on different platforms and the role of materials and digital technology in presenting the teachers and courses. The teachers used various materials and digital technologies.
Drawing on the pilot study outcome, the interview questions were revised to include questions about the materials and digital technologies involved in the teaching practices. In addition, more attention was given to the materials that appeared in the course videos, such as the place of recording and the teacher’s physical appearance. Based on the outcome of the pilot study, I categorised Arabic platforms based on course providers as individually-led, government-led and private-sector-led. The courses are provided free of charge and in fee-paying modes.

**Approaching MOOCs**

As mentioned above, the pilot study revealed different types of Arabic MOOCs, shown in Table 3. The platforms can be categorised based on the provider, such as individual teachers, the private sector and the government. Courses led by teachers are entirely under the teacher’s responsibility for choosing the subject, designing the course, preparing the materials, and delivering the courses. The platforms can also be categorised based on courses they offer as free of charge and fee-paying.

These different platforms present teachers in different forms, such as academics, experts, entrepreneurs, and volunteers. I will discuss the form of teachers further in Chapter 7. It is worth noting that in practice MOOCs and teachers do not always clearly align to just one of these different forms. Rather, MOOC and teacher forms often overlap and intersect. This categorisation was nevertheless useful for my study purposes because it allowed me to select different platforms and courses to study from across a range of purposes and structures, revealing how materials and technologies acted, performed, and participated in the different types of MOOCs.
<table>
<thead>
<tr>
<th>Platform</th>
<th>Provider</th>
<th>Courses</th>
<th>Certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rwaq</td>
<td>Individual teachers</td>
<td>Free</td>
<td>Free</td>
</tr>
<tr>
<td>Mahara</td>
<td>Private sector</td>
<td>Free and paid</td>
<td>Free and paid</td>
</tr>
<tr>
<td>Doroob</td>
<td>Government</td>
<td>Free but restricted to</td>
<td>Free</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Saudi citizens</td>
<td></td>
</tr>
<tr>
<td>KKUX</td>
<td>Government</td>
<td>Free</td>
<td>Paid</td>
</tr>
<tr>
<td>Shorfaa</td>
<td>Private sector</td>
<td>Paid</td>
<td>Paid</td>
</tr>
<tr>
<td>Anaab</td>
<td>Private sector</td>
<td>Paid</td>
<td>Paid</td>
</tr>
</tbody>
</table>

Table 3 Platform classifications

The sampling of MOOCs was further shaped by the time allocated to the fieldwork and the courses that were offered during that period. I attempted to diversify the sample across different platforms to understand the relationships between the platform, teachers, and materials. I started with the Rwaq platform and looked for courses that were actively running. The front page of the Rwaq platform presented its courses under three main headings: current, upcoming, and archived courses. The teachers had an active role in the current courses, interacting and answering students’ questions, whereas archived courses were open to attend, but teachers were no longer actively engaged.

I joined one of the current courses and contacted the teacher to ask about the possibility of them participating in the study. Once the teacher agreed to take part, I considered the course for further examination and observation. I joined many MOOCs. However, not all of them were considered in my study for several reasons (e.g., the course was not actively run during the fieldwork period, or the teacher did not respond to the participation inquiry). Although I did not study these courses or use their data in my research, they influenced and
shaped my thinking and gave me an overall view of the state of MOOCs in the context of Saudi Arabia.

**Recruiting participants**

After the MOOC platforms were categorised and the courses were chosen from each category, I made a list of possible participants and their contact information. I started to contact the teachers of the courses one by one, waiting for a period of time to receive their responses. The contact was made through direct messaging in the course and the teacher’s email if it was provided on the profile page. The recruiting of MOOCs and teachers was influenced by the time scheduled for data collection, as mentioned earlier.

Once the agreement and signed consent was received from the teacher, I scheduled an interview time. Since the interviews were conducted online, and as the participants were located in a different time zone (in KSA), some interviews were scheduled during unsociable hours (in the UK), such as late at night or early in the morning. However, most of the interviews were scheduled at a convenient time for both parties.

The participants included fifteen teachers and two MOOC platform founders. The teachers taught MOOCs on various platforms. Seven of them had courses on Rwaq, three on Shorfaa, three on Maharah, one on Annab, and one on the Masaq platform. The participants were all Saudi, represented both genders, and had a range of different levels of experience with MOOCs and online teaching in general. Table 4 presents information about the participants and their courses.
<table>
<thead>
<tr>
<th>Participants</th>
<th>Gender</th>
<th>Position</th>
<th>Platform</th>
<th>Course type</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maria</td>
<td>F</td>
<td>Teacher</td>
<td>Maharah</td>
<td>Paid</td>
<td>First</td>
</tr>
<tr>
<td>Rema</td>
<td>F</td>
<td>Teacher</td>
<td>Rwaq</td>
<td>Free</td>
<td>Second</td>
</tr>
<tr>
<td>Dina</td>
<td>F</td>
<td>Teacher</td>
<td>Shorfaa</td>
<td>Paid</td>
<td>First</td>
</tr>
<tr>
<td>Jamal</td>
<td>M</td>
<td>Teacher</td>
<td>Maharah</td>
<td>Free</td>
<td>Second</td>
</tr>
<tr>
<td>Maryam</td>
<td>F</td>
<td>Teacher</td>
<td>Rwaq</td>
<td>Free</td>
<td>First</td>
</tr>
<tr>
<td>Hassan</td>
<td>M</td>
<td>Teacher</td>
<td>Rwaq</td>
<td>Free</td>
<td>Second</td>
</tr>
<tr>
<td>Rahaf</td>
<td>F</td>
<td>Founder</td>
<td>Shorfaa</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Yasmine</td>
<td>F</td>
<td>Teacher</td>
<td>Shorfaa</td>
<td>Paid</td>
<td>First</td>
</tr>
<tr>
<td>Fahad</td>
<td>M</td>
<td>Founder</td>
<td>Rwaq</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Maha</td>
<td>F</td>
<td>Teacher</td>
<td>Rwaq</td>
<td>Free</td>
<td>First</td>
</tr>
<tr>
<td>Sara</td>
<td>F</td>
<td>Teacher</td>
<td>Shorfaa</td>
<td>Paid</td>
<td>Multiple</td>
</tr>
<tr>
<td>Liyla</td>
<td>F</td>
<td>Teacher</td>
<td>Annab</td>
<td>Paid</td>
<td>First</td>
</tr>
<tr>
<td>Omar</td>
<td>M</td>
<td>Teacher</td>
<td>Masaq</td>
<td>Free</td>
<td>First</td>
</tr>
<tr>
<td>Ali</td>
<td>M</td>
<td>Teacher</td>
<td>Rwaq</td>
<td>Free</td>
<td>First</td>
</tr>
<tr>
<td>Yusef</td>
<td>M</td>
<td>Teacher</td>
<td>Rwaq/Maharah</td>
<td>Free/paid</td>
<td>Second</td>
</tr>
<tr>
<td>Ayman</td>
<td>M</td>
<td>Teacher</td>
<td>Rwaq</td>
<td>Free</td>
<td>Multiple</td>
</tr>
<tr>
<td>Hamza</td>
<td>M</td>
<td>Teacher</td>
<td>Rwaq</td>
<td>Free</td>
<td>First</td>
</tr>
</tbody>
</table>

Table 4 Characteristics of the participants and courses

Methods

To avoid separating or prioritising components of the sociomaterial landscape, multi-method approaches are recommended (Cassell et al., 2019). Thus, diverse methods were adopted.
that acknowledge both the human and non-human components of Arabic MOOCs and the MOOC teaching experience (Table 5).

<table>
<thead>
<tr>
<th>Methods</th>
<th>Description</th>
<th>Data generated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation</td>
<td>I joined 18 MOOCs on four different platforms. Some questions were asked during the observations: <strong>Platforms:</strong> What does the interface promote? For whom does it speak? What kind of knowledge is produced? How are platforms promoted on social media (Twitter)? <strong>Courses:</strong> How do teachers present themself in video lectures? In the discussion forum? What materials appeared in the videos? What knowledge do they produce? Where was the course recorded (indoor – outdoor)?</td>
<td>Fieldnotes Images Questions for the interviews</td>
</tr>
<tr>
<td>Visual methodology</td>
<td>I took screenshots of the platforms’ interfaces and course materials. Some images were sent by teachers and shows their workplace and materials.</td>
<td>Visual data (screenshots and images)</td>
</tr>
<tr>
<td>Semi-structured interviews</td>
<td>Interviews were conducted with 15 MOOC teachers and 2 MOOC founders. The questions are presented in Appendix 1</td>
<td>Recorded interviews and transcripts. Included data about the role of materials and digital technologies in the teachers’ experiences</td>
</tr>
</tbody>
</table>

Table 5 Methods adopted in the research
1. Observation

Observation allows for consideration of the empirical fabric of materiality (Aagaard & Matthiesen, 2016). It offers a way to investigate how humans cope with materials, as opposed to how they make sense of materials or of themselves using materials (Sørensen, 2009). Moreover, the field notes generated through observation are useful for articulating practice outside of verbatim narratives. These field notes allow researchers to zoom in on the possibilities offered in the interaction between seemingly distinct items or activities by focussing on the actual relationship between multiple individuals and objects.

Further, observation provides insights on the constitutive interplay between human and non-human factors. Several observation techniques have been recommended for use in sociomaterial-based studies, such as zooming in and zooming out (Nicolini, 2009b), which focus on the areas of entanglement between people and materials. Czarniawska (2014) also proposed shadowing and following objects as an observation methodology, which involves acting as a ‘shadow’ for the actors—both human and non-human—during the practice in order to observe and understand the dynamics and interactions of the phenomena under study from the participants’ point of view.

In this study, I joined 15 MOOCs on five different MOOC platforms. The observation attempted to capture the presence of materials in the course, such as the background, teachers’ outfits, and other materials (e.g. digital pen handwriting). I observed the interaction in the discussion forum, which also generated meanings and insights about the performance of the materials, such as discussing technical issues or asking for further materials. The observation generated field notes and helped to refine the interview questions. It also allowed me to capture visual data from the courses.
2. Visual methodology

Comparing textual data such as field notes with visual data can generate fruitful insights about the materiality of social practices (Moura & Bispo, 2020). The images serve as a record of material features of the study setting, similar to how a transcript serves as a record of an interview (MacLeod et al., 2019). The visual methods adopted in this study made it possible to capture information about the materials in MOOCs and MOOC teaching practice.

Visual data were generated in three main ways. The first set of images were of the interfaces of MOOC platforms. The second set were collected during the observation and were taken from inside the online courses. The third set of images were provided by the participants, showing the working place, tools, and technologies involved in the process of designing and recording the course. This set of image depicts materials that were not physically visible in the course but whose performative action contributed to the construction of the MOOCs.

Photo elicitation was used to encourage the participants to discuss the material elements of these practices (Fenwick, Doyle, et al., 2015). During the interviews, I used the screen sharing feature of the online video communication software to share the teacher’s course. This prompted questions about the materials that appeared in the video, such as the appearance of the teacher, the recording place, room decorations, and books.

3. Interviews

To add more depth to the data, the observation of the platforms and courses was accompanied by interviews with the teachers. It has been argued that the interview method is problematic and incompatible with a sociomaterial approach grounded in relational ontology, as it focusses more attention on human rather than non-human agency and fails to capture or flattens the materiality of practice (Moura & Bispo, 2020).

From a humanist perspective, the voices captured in interviews are produced by distinct, essentialist subjects. Mazzei (2013) encouraged reconsideration of interviews and interview
data as a *voice without organs* (VwO). The voice in this sense is formed through the relation between the research, data, participants, theory, and analysis rather than coming from a single subject. In Mazzei’s view, interview data from VwO concept are produced by and produce different knowledge than interviews based on the humanist assumption that considers the voice produced by a unique, essentialist subject.

According to Hultin (2019), in order to move beyond the representational account we must expand our understanding of what an interview is and what kind of data it can generate. Instead of considering the interview as representative of the subject of the study, we should perceive ‘the interview as a relational practice through which the researcher and the researched, subjects and objects, simultaneously become in a relationship of entanglement’ (p. 96).

Sociomaterial researchers have adopted several interview-based strategies to engage with the materiality of practice. For example, Hultin (2019) proposed ‘inviting materiality’ into the interview, and Gourlay and Oliver (2018) utilised an ‘interview plus’, where artefacts were used to inspire and ground the discussions, and participants were asked to write narratives about their experiences and what they meant to them. Nicolini (2009a) also proposed a descriptive viewpoint in interviews, where participants are asked to describe their routines as if they were training the investigator to substitute for them.

In my research, I incorporated material objects in the interview by asking questions about the materials and software used during the process of recording and constructing the course. I included questions about the appearance of the teacher and the place that appeared in the videos. The screen sharing was useful for encouraging the participants to talk about the materials that were visible in the video lectures as well as the software that was adopted in their experience of constructing and teaching the MOOC.
The interviews were conducted based on a semi-structured protocol that developed over time. This means that some questions were added and changed depending on the flow of the conversation and the field notes generated from the observation. The interviews were divided into four main parts (the interview questions are presented in Appendix 1). The first part focussed on the teacher’s past experiences in formal and informal online teaching (formal means institutional led, while informal means individual led). The second part was about Arabic MOOCs and what caused the teacher to choose a particular platform for presenting the course. The third part discussed the actual teaching experience, including choosing the topic, preparing the materials, recording the course and modes of engaging with the course. The final part consisted of reflective questions and encouraged the teacher to talk about the opportunities and challenges that were encountered during the experience, how the challenges were managed and what lessons were learned to inform future courses. An example interview transcript can be found in Appendix 2.

Immediately after the interviews finished, I made notes about the salient points. Halcomb and Davidson (2006) emphasised the importance of documenting the interviewer’s initial impressions of the interview immediately after the interview to ensure that their observations are still fresh. There were three main stages of the interview process, see (Table 6).
<table>
<thead>
<tr>
<th>Stages</th>
<th>Actions</th>
</tr>
</thead>
</table>
| Before the interview| • Join the teacher’s course  
• Observation and note taking  
• Get to know the teacher based on information published online |
| During the interview| • Introduce myself and the research and ask for verbal permission to record the interview.  
• Guide the conversation using questions attached (Appendix 1)  
• Screen sharing of the course and inviting materials into the discussion by sharing the screen |
| After the interview | • Make notes about significant points and impressions of the interview  
• Upload the recorded interview file to OneDrive  
• Send an email thanking the participant  
• Transcribe and translate the interview |

Table 6 Interview design

The interviews were conducted in the Arabic language since the participants were all native Arabic speakers. The role of language, symbols and discourses in generating meaning and power in interviews is emphasised in post-structuralist philosophies. I will discuss the translation process further later in this chapter.

All interviews were conducted online, as the participants were located in different regions, mostly in Saudi Arabia, while I was based in Edinburgh during most of the data collection period. It has been argued that internet-based interviews provide greater flexibility because they allow for mobility (Deakin & Wakefield, 2014).

The interviews were conducted using Microsoft Teams, which was considered the most secure option compared to other videoconferencing software. According to Microsoft’s website, Microsoft Teams supports end-to-end encryption, which protects any content generated during the communication. This setup prevents anyone, including Microsoft, from
being able to access the decrypted conversation (Microsoft, 2022). The software also offers screen sharing and recording features, which were required to consider the materials and conduct an in-depth analysis (Hanna, 2012). The choice of turning the camera on was left to the participant. Some participants used the camera to show me their workspace and recording location, while others shared their personal account on the course to show me, for example, how they were engaging with course statistics. Thus, the camera expanded the discussion in the interviews and incorporated spaces and physical materials.

Moreover, the online interview format created a culturally acceptable space for mixed genders. In my case, it was useful for engaging with both genders equally while maintaining cultural traditions and considerations. In addition, it introduced new meanings of distance and nearness. The video conference software produced a new space that allowed meetings between different genders whilst maintaining physical separation. Abokhodair (2017) described the challenge of finding male participants who were willing to meet in person and the need to find a secure mixed-gender location to conduct interviews. Similarly, Hamdan (2014), an academic in a Saudi university, only recruited female participants in her study since she only had access to female students in the university. While the situation has changed in KSA recently, with more mixed-gender locations being introduced, it is still challenging to find a person who is willing to meet a strange person, particularly of another gender, in a public space.

It has been argued that online interviews may be less effective in building rapport (Deakin & Wakefield, 2014; Hanna, 2012), which is important because rapport building is a general human desire and social practice. However, in my case rapport emerged through the relationship between humans and the technological and material actors involved. Indeed, the online interviews brought me closer to the participants as it allowed communication across different locations. Online interviews have also been criticised for their inability to capture and observe non-verbal cues, resulting in diminished rapport (e.g. Hay-Gibson, 2010). This is because the body is assumed to be essential for establishing presence. Al-Ali (2022) argued
that ‘invisibility’ in online settings is different from the simple absence of the body. Rather, presence is sociomateriality enacted and performed. Thus, non-verbal cues are just one form of presence of participants. For example, the background sounds that could be heard in some interviews conveyed meaning and produced knowledge.

As soon as the interviews were complete, new relationships began with the interview data. The following sections address the transcription and translation procedures.

**Transcripts**

Transcription is the process of converting spoken data into written text (Halcomb & Davidson, 2006). It is usually performed to manage qualitative interview data but rarely discussed when describing the methodological approach adopted in the research, although it is full of meaning-making and represents a point of power exercise (Lapadat & Lindsay, 1999; Wellard & McKenna, 2001). The researcher makes choices about whether to transcribe, what to transcribe, and who conducts the transcription process (Lapadat & Lindsay, 1999).

Ross (2010) drew on translation studies to show the complexity of equivalence and the central role of the situated transcriber in transcription. While the selectivity and meaning-making involved in transcription cannot be avoided, Ross urged researchers to be aware of the negotiations and assumptions that transcription entails.

Transcription is connected to the philosophical approach of the research. Several theorists have claimed that transcription is a fundamentally theoretical process that is influenced by the researcher’s theories and affects the analysis and interpretation processes (e.g. Lapadat & Lindsay, 1999). While many transcription techniques are used in social research, it has been suggested that a combination of verbatim transcription and researcher recordings of participants’ nonverbal behaviour could improve the reliability, validity of qualitative data (Silverman, 2013). This belief is based on viewing humans as central to meaning-making. As I argued previously, my research does not neglect the importance of humans, but it does
rethink the position of humans in social practices. Therefore, attempting to achieve equivalence by capturing what the participant said word by word does not guarantee the quality and reliability of the data or accurately represent the knowledge. In my research, the interview data underwent transcription and translation. Therefore, seeking accuracy in the transcription using a verbatim technique was not helpful, as the data were subjected to major reconstruction during translation, which I will discuss further in the next section.

I conducted 20 interviews in total, each between 40 and 60 minutes in length. Part of the interviews were transcribed by professional transcription service after identifiable data had been removed. The interviews were conducted in different Arabic dialects, as the participants were from different regions of Saudi Arabia. Some words and sentences were not captured by the transcription specialist because the voice was not clear enough or because the specialist was not familiar with the specific dialect. In such cases, a note was made, highlighted in a different font colour, specifying the exact time in the audio recording.

During the analysis and coding, both textual and audio file of the interviews were used. The audio records allowed me to consider nonverbal cues, such as pausing, laughing, and stumbling, and to recognize the background sounds of the place where the interviewee was located, which added to the meaning. The qualitative data software I used (MAXQDA) allowed me to match the transcripts with the original audio files. In other words, the coding software used the audio file that matched the highlighted text (see Figure 6). Although the interviews were transcribed and transferred to a textual form, I did not rely solely on the textual version of the interviews. Rather, I engaged with the data in its different forms.
Translation

This is considered a bilingual and cross-cultural study, as the data were collected and presented in two different languages. Not only were the participants native Arabic speakers; the MOOC platforms, courses, and educational materials were all presented in the Arabic language. In addition, the Islamic literature on gift giving has mainly been published in Arabic with little translation, which did not serve my research purpose. I recognised the substantial role of translation in the early stage of my research. The translation was both a point of challenge and power in this research. It added a valuable contribution and showed the state of MOOCs in an under-represented context, challenging how MOOCs are projected in the dominant MOOC literature. Translation in cross-cultural studies requires considerable time and decision-making, and thus the process of translation in research must be addressed (Temple & Young, 2004; van Nes et al., 2010).

Language is considered a powerful tool for expressing meaning, but it also influences how meaning is constructed. Some linguists claim that the experience of social reality is unique to the language that humans speak; people who speak different languages perceive the world differently (Chapman, 2017). Recent linguistic and philosophical movements define language
as ‘a cultural resource’ that (re)produces the social environment (Duranti, 2011) and identity (Bucholtz & Hall, 2005) rather than just a means of communication. The importance of language, symbols, and discourses in constructing meaning and power is highlighted in postmodern and poststructuralist ideologies (e.g. Welch & Piekkari, 2006).

Traditional qualitative research seeks to study meanings in subjective experiences. Therefore, it is considered valid when the gap between the meanings the participants experienced and the meanings interpreted by the findings is as small as possible (Polkinghorne, 2007). Humanist researchers treat the text as a ‘vehicle’ through which meaning is ultimately transferred to the reader (van Nes, Abma, Jonsson, & Deeg, 2010). Therefore, several techniques have been proposed to achieve valid translations, such as back translation, which is a process used to secure agreement on a ‘proper’ version of a text (Rosalind Edwards, 1998). However, it has also been argued that it is impossible to generate a single accurate translation of an interview from one language to another (Temple, 2005).

From a sociomaterial perspective, language is considered a co-constitutive component of social reality, which is relationally produced rather than located in a specific entity. A translation is not a representation of the meaning because the meaning is constantly changing and always in a state of becoming. Hence, attempting to approach translation in one proper or correct way is problematic and impractical from a relational perspective.

In this research, the data were collected and analysed in the Arabic language. The data were translated during the writing of this thesis. I translated one of the interviews in full (Appendix 2). Other translations were made of quotes rather than the whole interview. I personally performed most of the interview translations. Sometimes, I used a digital dictionary to look up equivalent English words, and in some cases I consulted a translation expert. The visual data and platform interfaces were translated by the Google Translate plugin embedded in the web browser. However, the automated translation was not always correct and often had errors because it relies on the letters in words without considering their sounds, which are
also used to convey meaning in the Arabic language. The translated visual data were edited using PhotoScape X graphics editing software, which I used to edit and add translations to the visual data.

It is worth noting that some words have not been translated, such as *waqf* and *zakat*, which were identified in Chapter 3 and are considered one of the main themes of my study. *Waqf* and *zakat* were kept in their Arabic language in the thesis because they are culturally rooted Islamic concepts. Therefore, using alternative English terms to describe them might miss the richness of their meaning.

**Data management and co-researchers**

It is been argued that the devices and software used in conducting research act as assistants or co-researchers, as they not only transform, extend, and support but also deform, disrupt, and circumscribe the research practice and knowledge construction, inevitably introducing new tensions and contradictions (Adams & Thompson, 2014, 2016). Thus, it is essential to acknowledge that digital technologies were involved in managing, storing, analysing, and presenting the data.

This research generated various forms of data, such as audio and video records of the interviews, textual field notes and transcripts, and visual data. I had to develop a systematic way to organise these data because the amount continued to grow during the data collection and analysis. Initially, I specified a folder for each participant, which included screenshots from the teacher’s course and images sent by the participants, interview records, and my field notes. I also designed an Excel spreadsheet to gather all the collected data as well as the time of collection into a single document. This was updated regularly. Figure 7 shows a screenshot of the data collection sheet. Microsoft Excel was also used to arrange and handle translations of the interviews’ excerpts. The images containing Arabic content were edited
using PhotoScape X. Figure 8 and Figure 9 show some images illustrating how the translation of textual and visual data was handled.
All data were stored in cloud-based storage, particularly in Microsoft OneDrive. Moreover, MAXQDA was used as the coding software because it supports the Arabic language. This was beneficial for working with Arabic transcripts and coding the various types of data, such as audio recordings, images, and text (Figure 10). However, I could not introduce the translations of the interview quotes that were coded in the software, as MAXQDA does not provide a space for writing a long text as a translation. Therefore, I developed a record to collect the translations of the interview quotes, as explained previously.
In addition to using a wide range of software programmes to manage the data, there were also different hardware digital devices such as my laptop, wireless headphones, and monitor screen, in addition to non-digital materials, such as a desk, laptop stand, and Post-it notes. Figure 11 shows my workspace in different locations.

![Figure 11 My writing workspace in different locations](image)

While it is hard to list all of the human and non-human actors that were implicated in my research, it is important to note that I shaped this research in collaboration with other actors, who participated in forming the knowledge presented here.

**Positionality**

From a sociomaterial perspective, agency is not located in humans, as discussed in the previous chapter. This means that the researcher is not in control of the research and does not have unique abilities that enable him or her to observe, make meaning, and interpret the
knowledge. This kind of separation between knowledge and practice and between the researcher and the world being researched is denied in relational thinking grounded in the sociomaterial approach. Knowledge and the practice that is performed to enact it cannot be separated. This approach challenges the notions of the researcher and researched and calls us to rethink the positionality of the researcher.

Sociomaterial researchers are not considered as exterior observers of the world as in the positivistic and empiricist perspective, nor as internal agents as in the idealist and relativist view, but rather as active ‘agents’ who are part of the world in its differential becoming (Niemimaa, 2014). According to Barad (2014, p. 181), posthumanist researchers ‘do not exist outside of the diffraction pattern, observing it, telling its story’. On the contrary, the researcher is ‘neither inside, nor outside’, but the ongoing (re)patterning of the story (re)configures the researcher. According to this perspective, the researcher is formed by the field of inquiry and is inextricably intertwined with rather than separate from it, at its centre or located in relation to it (Bayne, 2016). In other words, the researcher does not necessarily interpret data; rather, data infects and infest the researcher (Knox, 2014a). This mutual interaction relocates the researcher from an inside/outside position to a constitutive component of the research. The researcher is neither an objective observer of the event under investigation nor a situated subjective spectator. Instead, the researcher is intertwined with others across multiple sociomaterially mediated contexts (Chimirri, 2013) and is a constitutive part of the research and is always shaped by it.

While conducting this research, I was in the process of becoming, and I was and am still entangled with other actors who were part of the research. It is true that I am relevant to the context, and I share some common characteristics with the participants, such as language, culture, and religion (discussed further later in this chapter). However, I do not assume that I or my research reflect the reality or represent the knowledge; instead, we—me, my research, and other human and non-human actors—enact it as such. This means that as a researcher I am neither an outside objective observer of the study phenomenon nor a subjective located
onlooker. I am always and already part of this phenomenon, and I am constitutively entangled with my research; we both shape each other. I consider myself as ‘part of the world in its open-ended becoming’ (Barad, 2013, p. 821).

Reflexivity

Reflexivity, which is frequently regarded as a distinguishing characteristic of qualitative research, can be defined as the process of examining the ways in which researchers’ subjectivities influence how an investigation is planned, collected, understood, analysed, and presented. Throughout this process, the researcher should always monitor his or her assumptions and perspectives (Cohen et al., 2002). Therefore, the concept of reflexivity presupposes that the researcher must be visible and influential in the inquiry to ensure the credibility, transparency, and trustworthiness of the research.

The way in which reflexivity is adopted in qualitative research has been criticised by posthumanist researchers. For example, Barad (2007) viewed the notion of ‘diffraction’ as an alternative to reflexivity. They argued that diffraction can be used to acknowledge the knower’s significant involvement in the formation of knowledge, particularly in how we learn about the ‘material configurations of the world’s becoming’. Diffraction, in Barad’s (2007) conceptualisation, is a useful tool for demonstrating the entanglement of material-discursive phenomena in the world. Accordingly, diffraction is based on a relational ontology, a continuous process in which matter and meaning are mutually constituted. It is specifically oriented toward differences and their effects in knowledge-making processes, in contrast to reflexivity, which is caught up in sameness due to its mirroring of fixed positions. Diffraction is also ontological and ethical in addition to epistemic. According to Bozalek and Zembylas (2017), diffraction encourages us to be aware of the entanglements of both the materials and the researcher, who is both embodied and embedded in the world.
Lunkka and Sutela (2019) presented ways to investigate how continuous material-discursive actions in and around academia actively produce reflexivity. They argued that participating in academic activities, such as research diaries and dialogues, workshops, conferences, and conversations with scholars, allow various reflexivity realities to be performed.

In this research, reflexivity is understood as something that emerges through practices rather than a cognitive process. Reflexivity is always relational and contingent as well as materially embedded and embodied. In my research, reading and writing parts of the chapters while conducting the research and analysing and data as well as presenting some of the findings in online seminars have been important material-discursive practices in my on-going process of becoming reflexive researcher. These activities involved both human and non-human components. For instance, the writing and presentation involved myself, other researchers, Word documents, PowerPoint slides, textual and visual content, and connected devices. Reflectivity was produced during the research process and enacted by these sociomaterial arrangements.

**Validity and reliability**

From a non-representational perspective, evaluating the quality of research is a challenge. Establishing research trustworthiness based on validity, reliability, generalisability, and objectivity is problematic in sociomaterial research. It has been argued that there is no universal criteria to ensure validity and reliability, as evaluating the quality of study findings is not straightforward and cannot be measured by specific criteria (Denzin et al., 2005). A representational approach to research assumes that there is a reality ‘out there’ that can somehow be known ‘in here’. However, in the sociomaterial view the reality is emergent and enacted. Therefore, evaluations of truth cannot appeal directly to objective reality because this reality is not itself directly accessible.
According to the becoming ontology underlying sociomateriality, the validity and reliability of research are not measured by the researcher. Subject and object from this perspective are human and non-human, produced and producing, material and discursive, and neither precedes the other. Validity, reliability, and generalisability are unthinkable because there is no unified subject separate from other entities; rather, all are interwoven as a whole, because the posthuman subject is emergent, unpredictable, and nonreductive (Zapata et al., 2018).

Tracy (2010) proposed eight essential criteria for high-quality qualitative research: (a) worthy topic, (b) rich rigor, (c) sincerity, (d) credibility, (e) resonance, (f) significant contribution, (g) ethics, and (h) meaningful coherence. These principles can be adopted depending on the goal and theoretical foundation of the study. Accordingly, I suggest the quality of my research could be measured not by generalisability but also through the worth of the topic and the different approaches adopted to examine the research subject topic in addition to the meaningful knowledge added.

My research project is not built on a realist or being ontology or on a positivist epistemology. Therefore, it should not be surprising that the standard understandings of reliability and validity are not relevant. Although my research adopted triangulation (a combination of methods) and transferability (a detailed description of the methodology), which are recommended by qualitative researchers, I argue that it is difficult to assess its trustworthiness since the knowledge regarding the MOOCs and teachers in Saudi Arabia is emergent and performed through the research.

**Ethics**

The relational approach proposes an alternative meaning of ethics based on the assumption that individuals are not the main source of meaning making. Thus, it reconfigures ethics away from the single ethical subject, an independent person capable of making moral decisions.
Haraway (1997) discussed the performative nature of ethics. From her perspective, ethics is articulated through body, artefacts, and physical movement rather than any pre-defined concerns or methods. Haraway (1997) and Barad (2007) adopt the *response-able* notion, rethinking ethics as mutual responses and worldly reconfiguration. This encourages us to consider how we are *response-able* in all of the lively relations in which we are entangled daily.

While I agree with the posthumanist understanding of ethics in its performative form, I also considered ethical issues in a more pragmatic way prior to and during the research. This did not prevent me from being *response-able* during all stages of my research. I also obtained ethical approval from the ethics committee at the University of Edinburgh School of Education before conducting the pilot study. Moreover, the participants, including the MOOC teachers and MOOC providers, were asked to sign an informed consent form, which they were emailed prior to the interviews. Both the information sheets and informed consent form were Word documents that were translated into the Arabic language. They introduced me and my research and listed the rights of participants to ask questions and withdraw before and during participation without offering justifications. The consent form included the participants’ agreement to record the interview, observe the online course, and take screenshots from the course. The information sheet and the consent form are presented in Appendix 4.

Another ethical consideration concerned the online space. Hewson (2015) examined ethics issues in Internet-mediated research and highlighted the dilemmas that emerge from research in a digital context, such as questioning the boundary between ‘real’ and ‘pseudonymous’ identities or uncertainties in what constitutes ‘public’ and ‘private’ spaces. This research was conducted in an online space, specifically MOOCs, raising a question about the nature of the space, as it could be considered as both public and private space. While the online courses are presented publicly and can often be attended freely, the registration process draws boundaries and questions the nature of the space. To address this issue, with
permission, I introduced myself as a researcher in the discussion forum for the courses to let the course participants know that I would be observing the course, including their comments in the discussion forum and comment space in the courses.

I also considered ethical issues during the data analysis and interpretation. Anonymity was ensured by removing all identifiable data from the interviews and observations. The participants were given pseudonyms to ensure their anonymity. However, MOOC founders were informed that their responses would be used, and their identities could be identified even with the pseudonyms they were given. Confidentiality and privacy were considered in all stages. Moreover, the data was saved in secure locations and can only be accessed by the researcher.

Regarding the visual data, Gourlay (2010) stated that it is essential to provide participants with an explanation for and reasons behind the use of visuals, starting with more ‘traditional’ research techniques which may help participants become comfortable with more unfamiliar practices. In my research, I informed the participants about the rationale for using images and screenshots of their courses and gave them a space to ask any questions that might arise regarding this matter.

One of the main challenges I encountered was how to address the ethical issues related to using visual data, particularly images showing the teachers’ identities. Although I obtained informed consent from the teachers to use their images in my research, I preferred to find a way to anonymise the images to maintain the privacy and anonymity of the participants. Anonymising visual data is problematic and considered a key ethical challenge (Wiles et al., 2012) if not impossible (Banks & Zeitlyn, 2015). It raises a series of questions that must be addressed, such as whether it is necessary to anonymise, when to anonymise, how to anonymise, and how to handle ethical regulations related to identifiable images. This places the researcher between two competing desires: to use visual data because they reveal more about the phenomenon than text alone and to protect the participants from potential harm.
I preferred to keep the images since they convey valuable meaning about the materials and teachers in the courses, but I sought to remove the identifiable data. Many strategies have been proposed for anonymising visual data without harming the images or destroying their usefulness, including blurring faces, pixilation, cropping, applying black-out bars on faces using animation, drawing a sketch, and representing the data with actors (Wiles et al., 2012). I decided to reproduce the identifiable images through drawings, see Figure 12, for example. This allowed me to keep the materials and teachers’ bodies highlighted while concealing facial features that could disclose their identities.

![Figure 12 Example of hand drawings](image)

**Opportunities and challenges**

While conducting my research, I experienced several opportunities as well as a number of challenges. Regarding the opportunities, I was fortunate because I am related to the study context. My knowledge about the Saudi culture and traditions informed the design of my methodology in a culturally sensitive way. The participants in my research were from both genders, which generated valuable insights regarding technology, gender, and space, particularly in the Saudi Arabian context. My knowledge of the Arabic language allowed me to take part in Arabic MOOCs and to interview Arab MOOC teachers and MOOC platform founders, which expanded my knowledge about MOOCs in the Arab context and revealed how Arabic MOOCs are similar to and different from other high-profile international MOOCs.
Moreover, my academic experience working in one of the Saudi Universities gave me considerable knowledge about the higher education policy and its orientation in relation to digital technology. This knowledge informed the tools I applied, such as the interview questions, particularly with academics and faculty members. The national transformation based on the National Vision 2030 has led to rapid changes in recent years, as I discussed earlier in Chapter 2, and the MOOCs appeared to be tied to this transformation, as will be apparent in the analysis chapters.

The greatest challenge I faced during my research was the shift in the research direction from studying Arabic MOOCs and the teacher experience from teachers’ perspectives to engaging with the materiality of MOOCs. The theoretical foundation shifted from the being to becoming ontology, which underlies the sociomaterial approach. This shift occurred after conducting the pilot study, which revealed the complexity of MOOC teaching practices and the amount of materials involved in the teachers’ experience. Teachers were entangled with the materials and digital technologies before, during, and after the MOOC teaching experience. This shift in the way of looking at humans and materials and how they relate to each opened the door for posthumanist philosophy. I spent a considerable amount of time reading about posthumanism, sociomateriality, spatiality, and relation ontology. It has been noted that sociomateriality approach constitutes a challenge for researchers who adopt this approach (e.g. Hultin, 2019). I encountered this challenge in developing the methodology and designing the research procedure. For example, it was difficult to develop research tools, including interviews and observation, to be compatible with my view of reality as emergent, messy, entangled, and beyond humanist assumptions. I also encountered challenges in developing and searching for approaches to evaluate the validity of my research and defining my position as entangled with the research rather than being positioned outside it and the implication of this on the research practices.

Furthermore, bilingual research faces a challenge in dealing with data in a different language. In my research, I was challenged by the translation of the collected data from the Arabic
language into the English language, not only in terms of the amount of time required for
translation but also the amount required for thinking systemically about the process. What to
translate and how as well as who should do the translation were questions that arose in the
translation process. Dealing with non-dominant languages (e.g. Arabic) caused difficulty in
terms of finding coding software supporting the Arabic language.
In addition, the Covid19 pandemic that occurred while conducting my research has adversely
impacted me as a researcher. Although the data was collected before the Covid-19 pandemic
hit, analysing the data was a challenge during a prolonged period of uncertainty and isolation.

Conclusion

This chapter began by outlining the theoretical basis of sociomateriality. It introduced the
ontological and epistemological foundation of this study. It also discussed relational thinking,
which framed the methodology. Moreover, it described the research procedure and methods
for generating and collecting the data and the rationale for adopting them. It outlined the
sampling process and presented information about the teacher participants and MOOCs.
Furthermore, it presented the data management approach and addressed the issues related
to translation and transcription.

In this chapter, I introduced how the relational ontology grounded in sociomateriality
reframed all stages of the methodology. I also introduced methods from a different
perspective, acknowledging the materiality of the practices and repositioning humans.
Further, I explained how I understand my position as a researcher, and I discussed how
reflexivity and reliability are understood from relational and posthumanist perspectives.
Finally, the chapter concluded by addressing the ethical issues as well as the opportunities
and challenges I encountered in the study.
Chapter 6: Gift and Entrepreneurship

MOOCs and Spaces

I introduced this course on Rwaq platform after I finished my MSc in school counselling in the USA and came back to Saudi Arabia. I was struggling to find a job at a time when the entrepreneurship sector was thriving and getting massive support from the government. This motivated me to think about launching a private counselling and training centre, as there were not enough professional mental health services in the city where I live, so having a private counselling centre would help more people access services.

There were two main challenges in my way. The first was the lack of awareness regarding seeking professional support, as people in the city held a conservative view regarding mental issues and seeking support from specialists. The other challenge was that I was not well enough known to engage with society and raise mental health awareness.

Despite all my efforts to engage in professional practice in schools, for example, I did not get much attention. I then thought about designing an online course to help people understand their mental health and to let them know who I am and what kind of work I offer. I designed a course on trauma and its effect on academic performance, which was to be presented on the Rwaq platform. The platform is professional and well-known, and its policy is flexible and straightforward in terms of teaching on the platform. I prepared the material and recorded the videos but got distracted, which delayed the course start. However, two incidents happened at that time that prompted me to publish the course. The first was my sister's death. She was younger than me and did not have children. Thus, I intended to dedicate the course’s spiritual reward to her. The second was a tragic incident that happened as a result of conflict between two students in an elementary school that resulted in an unintentional killing. It was in the media and attracted public attention. The course topic was relevant to what happened and could offer guidance to the teachers and those working with traumatised children in schools. (Maryam)
Introduction

I interviewed Maryam as she was introducing a free course on the Rwaq platform. During our discussion on how she came to do so, the conversation sometimes shifted to contextual conditions such as national policy, the state of the economy and a lack of employment and governmental support for small- and medium-sized enterprises, as well as to personal circumstances such as the loss of her sister and her sense of belonging and social responsibility. While it was challenging to separate the external and internal factors that shaped the experiences of teachers in my study, it appeared that MOOCs comprise a complex field that is interwoven with different factors within and beyond the educational landscape. At the same time, they produce various meanings, spaces and identities.

MOOCs and what it means to be a MOOC teacher are defined by a collection of factors including national policy, economic statistics, educational policy, cultural and traditional norms, time and technology. Indeed, Law and Hetherington (2000) argued that ‘technologies are shaped by social circumstances’ (p. 35), which means what is recognised as a technology such as a MOOC is not static and defined; rather, it is formed by social, material and environmental conditions. In Islamic societies, for instance, the cultural interpretation of gift-giving in terms of sharing knowledge profoundly influences the meaning of the teaching, particularly in an online context. MOOC projects, as will become evident from the analysis, participate in enacting new spaces for practicing gift-giving. The vignette above presents an example of how the online space is enacted by an entanglement of factors to produce meanings and practices. The course was published after Maryam’s younger sister’s death because it is believed in Islam that sharing beneficial knowledge sustains a human’s deeds after life, as I showed in Chapter 3. In this sense, a MOOC performs a sustained and continuous form of charity.

It is worth noting that MOOCs should not be seen simply as a medium or tool for delivering educational materials (Decuyper, 2019); rather, they appear to be shaping the social and
educational context in Saudi Arabia (e.g. Alhazzani, 2020; Brahimi & Sarirete, 2015) and are producing multiple forms of space and time (Van de Oudeweetering & Decuyper, 2019). This chapter shows how MOOCs actively contribute to enacting gift and entrepreneurship spaces as two main themes in MOOCs teaching in the context of Saudi Arabia.

This chapter comprises three main sections. The first traces back to the emergence of Arabic MOOCs and shows how the first platform, Rwaq, adopted a specific network of relationships between humans and materials. The second section moves on to discuss the space of gift-giving as it has emerged through MOOCs and highlights two Islamic giving practices, zakat and waqf, as spatial arrangements performed in the MOOC context. The final section discusses the entrepreneurial space as another prominent model of MOOC spatial formations in the Arabic MOOC domain. The chapter concludes by arguing that the gift-giving and entrepreneurial spaces are neither distinctive nor predetermined; rather, they are intersecting and overlapping. In putting forward these ideas, I draw on a series of interview excerpts and screenshots of platforms in addition to my own observations.

**Tracing the emergence of Arabic MOOCs**

If we want to understand phenomena such as global capital flows, the transmission of information, cultural hybridity, or economic inequality, it is also important to ask how the relations that produce these are materially brought into being and sustained in particular locations. (Law & Hetherington, 2000, p. 36)

To know how MOOCs have become established and sustained as forms of open education in the Arabic context, it is essential to go back in time and explore the processes and relationships that were constructed as they were created and introduced. I reviewed the historical background of Arabic MOOCs in Chapter 3 and showed how they began with the launch of Rwaq, which is considered to be the first local model of an Arabic MOOC platform (Sallam, 2017). Here, I discuss the infrastructure practices and social arrangement underlying
the development of Rwaq to understand how the concept of MOOCs as an educational online space emerged, materialised and was sustained in the Arabic context.

Rwaq was founded as social enterprise by two Saudi entrepreneurs inspired by technological evolution and the MOOC movement in the USA, where they had been studying. When they returned to Saudi Arabia, they decide to transfer the MOOC model by launching Rwaq as the first Arabic MOOC platform. As I explained earlier, Rwaq uses a local model of course production. This means that courses were designed and presented by native Arabic speakers (Badi & Ali, 2016; Macleod, Haywood, Woodgate, & Alkhatnai, 2015). Rwaq differentiated its approach from that of other platforms that offered translated courses from well-known platforms such as Coursera.

Arab initiatives had been announced that translate Coursera courses into Arabic. We encouraged and supported this trend, but at the same time, we believed that the Arab world deserved its own educational platform in which Arabic speakers would meet with qualified Arab teachers from both the practical and scientific fields who would speak directly to them in Arabic without translation. We believed that there were experts around the Arab world who would be willing to share their knowledge and expertise with an Arab audience if they could find an appropriate educational platform, and this is the role that Rwaq has come to play. (Rwaq, 2022)

However, when the platform was announced in 2013, it faced many challenges. The international MOOC approach that relied on academic institutions offering courses was not suitable for the context in which Rwaq would operate. The participation of Arab universities and academic institutions in MOOCs was weak (Sallam, 2017), which impacted the MOOC development and prevalence. While MOOC technology had been transferred successfully, it became obvious that the technology alone could not ensure success. In an interview with me, the co-founder of Rwaq explained the challenges they had encountered at the beginning when inviting universities to be part of the platform by introducing courses:

MOOCs are considered epistemological and technological projects. We did have all technological resources set up, but the most important thing was the educational
content, which we could not have unless there were teachers willing to provide educational content and share their knowledge. (Fahad)

As I explained in Chapter 2, online education was introduced in Saudi universities to address the issue of an increasing population and lack of physical capacity in campuses (Al-Asmari & Rabb Khan, 2014; Alkhalaif, 2013; Alsaysi, 2016). This had been criticised for a lack of quality (Alrashidi, 2014), which affected online education’s reputation, particularly in the marketplace and for job opportunities (Alsaysi, 2016). To address this issue, the government launched the eLearning Center (NELC) and Saudi Electronic University (SEU) to manage and enhance the quality of online education; at the same time, online programs that were run by different Saudi universities were reduced. This made Saudi academic institutions reluctant to engage in online education projects. In addition to that, common assumptions and promises promoted by international MOOCs that they offered free education for anyone who could not attend a university was not sufficiently convincing in Saudi Arabia, where free higher education was already being provided (Almuhanna, 2018)

There was no desire among the universities to take risks and engage in such a new experience. We had to work independently with academics as individuals who would represent themselves. This gave us a great deal of freedom but prevented us from offering accredited courses. Therefore, the knowledge remained solely for those who valued it, rather than looking for certificates. (Fahad)

It is obvious to see how the platform started to take its own approach. Academics and faculty members became independent teachers representing themselves, and the students became knowledge seekers. The universities’ absence shifted the power structure and left a space for individual teachers to teach independently with more agency to design courses based on their expertise. Teachers’ identities and agency were reconfigured by the space where they would teach. The spaces were inextricably related with identity performances and teaching practices (Al-Mahmood, 2008).
In order to introduce Rwaq and what it would do for society, an initiative named ‘Rwaq ambassadors’ was launched to represent the platform in schools and universities and at events such as conferences and exhibitions. This was responsible for introducing and promoting the platform among teachers and act as a link between the platform and the teaching communities.

We created a team called ‘ambassadors’, who are voluntary students at different universities in the Arab world. New members are nominated every six months. They are active students at different Arab universities. What they do is simply they knock on teachers’ doors, speak to them and invite them to teach on Rwaq. (Fahad)

Moreover, those with this role of ambassador had to meet certain requirements listed on the Rwaq platform, such as good communication skills and the ability to persuade and manage conversations confidently. The ambassadors were organised into three groups: the first was responsible for inviting teachers, the second was responsible for presenting the platform at conferences and exhibitions, and the third was responsible for helping teachers to produce, present and edit their courses (Rwaq, 2021a). Online meetings were conducted regularly to evaluate the work completed, exclude inactive members and update workplans. The members were changed at intervals to increase distribution and reach locations further afield.

In this sense, the Rwaq became an active agent that enacted a new role for human actors who move, speak and socialise with people on behalf of the platform. In social topology terms, the platform forms a fluid space that is characterised by its resilience, in that continuity can be maintained even when absences of universities increase. According to Mol and Law (1994), objects in fluid spaces do not collapse easily because they have the ability to transform themselves from one arrangement into another without discontinuity. They show how in the absence of a laboratory, the world does not collapse for the clinician. Doctors in the tropics are fully aware of this absence and numerous others; nevertheless, they adapt and continue with their work. Continuity is contingent on mutations and changing shapes. Applying this to the context of Arabic MOOCs, Rwaq in particular continued to present itself
as Arabic model of open online education by absorbing the surrounding factors and generating new relationships represented by ambassadors and their roles.

Along with the ambassadors, social media appears to have contributed to promoting Rwaq. Figure 13 shows an example of a Twitter post promoting the platform as a space for sharing knowledge and enriching digital Arabic content. This is quite different to how courses have been promoted by high-profile MOOCs. Sharing knowledge can imply gift-giving, which was different to the business model of the international MOOC platforms. As Figure 13 shows, Rwaq’s tweet targeted teachers who would collaborate with the platform in its mission to share knowledge and create digital Arabic content. The platform attracted teachers who wanted to share their knowledge, rather than teaching knowledge, which might imply acting differently beyond the academic institutions that aimed to develop digital Arabic educational materials for non-English speakers.

The point here is that MOOCs are spatially constructed. As the example of Rwaq showed, it was affected by the context and its circumstances. Although MOOCs had been imported to Saudi Arabia from overseas, the concept took on a local meaning that accounted for the contextual factors, including the educational policy, technological infrastructure and social context, to form a sustained open education.
In describing the Arabic MOOC inception in Saudi Arabia, I follow Law's (1989) notion of heterogeneous engineering which involves explaining the way in which different people and things have been brought together to enable something to happen. In this sense, the concept of MOOCs in the Arabic context becomes entrenched and persistent through an interrelation and connection between the social and material components. These include MOOC founders’ technological infrastructure, teachers, students, ambassadors, technicians, designers, language, culture, social media, algorithms and connected devices. Each of these did not act independently to form MOOCs; rather, the interaction of different components produced the spatial formation of them. All elements that participated in the process of introducing the concept of Arabic MOOCs made up a network space that was enacted by combination of heterogenous components (Latour, 2005).

Furthermore, Law (1989) pointed out the active role of the environment in designing technology by responding promptly to the challenges that may be encountered. He introduced the ‘trails of strength’ concept that was involved in forming the strength and stability of the technology. In the case of Rwaq, there were several challenges involved in running MOOCs and introducing them as a form of open online education, such as the absence of academic institutional collaboration, which caused further difficulties in designing, operating and funding MOOCs. The trails of strength here are represented by the creation of a team of ambassadors who arranged regular online meetings, set up a workplan, designed early MOOC models and promoted the platform on social media. All these processes and relationships confirmed that MOOCs did not simply exist as a tool but were enacted and performed through active practice. These trails of strength contribute to forming Arabic MOOCs as an entrenched and stable form of open education in the Saudi Arabian context.

Van de Oudeweetering and Decuypere (2019) showed through an examination of ‘invisible’ infrastructures beyond this interface practices or as they called it ‘betoned-interface’ practices of online platforms how boundaries are formed and how such platforms establish hybrid knowledge and common interest and workflow. Similarly, Sørensen (2009) examined
the spatial formation enacted by designing virtual platforms and emphasised the importance of defining the technology to be entangled with the social rather than situated in a social context. In this sense, MOOC was not only material but also social and constituted by heterogeneous relationships among humans, materials and digital technology actors. I want to highlight the point that Rwaq utilised the voluntary work of its ambassadors and teachers who acted within the platform’s mission in offering free education in the Arabic language. I discuss this further in the following sections.

Gift-giving as spatial formation

Gifts have been described in the literature as total social interaction (e.g Mauss, 1954; Godbout, 1992) and a means to establish social relations—‘If friends make gifts, gifts make friends’ (Sahlins, 1965). It also has been argued that gifts act as self-expression and self-presentation (Schwartz, 1967). They contain within them part of their giver: ‘To make a gift of something to someone is to make a present of some part of oneself’ (Mauss, 2002, p. 16). Most of the gift literature that has studied gift-giving in the digital context approaches gift-giving practices from a humanist perspective (e.g. Skågeby, 2010) and overlooks the role of the materials and digital technology that are part of the practice. This assumption creates a separation between the subject (gift-giver) and the object (the gift) and assumes that materials and technology are passive and instruments and under the control of the giver. I want to propose here an alternative view of gift-giving by drawing on the MOOC digital environment.

To do this I build on arguments from Komter (2007) and Lévi-Strauss (1996) that gift-giving is complex, multifaceted and too layered to be defined by certain definitions. Understanding gift-giving in the digital context is even more complex if we consider multiple non-human components that take part in forming the gift. By engaging with the complexity, we can broaden our understanding of MOOCs and the digital technology and materials involved in them. I have already argued that gift-giving is sociomaterially, spatially and relationally enacted in the context of online teaching. I now take this argument further by analysing the
visual presentation of MOOC platforms and interview data to show how zakat and waqf, which are forms of Islamic giving practices, have been emergent in the Arabic MOOC context.

**Rwaq, gift-giving and space**

We now move from examining the sociomaterial construction underlying the Rwaq platform to analysing its interface. Rwaq, an Arabic word taken from Islamic architecture that translates to ‘portico’ (Contemporary Dictionary, 2019), refers to a place where knowledge was exchanged in ancient times. The platform introduces courses characterised as free of charge. On the homepage (see Figure 14), Rwaq introduces itself as an ‘Arabic platform for open education – Free Arabic academic courses in various fields and specialities’. Its instructors are introduced elsewhere on the platform as ‘distinguished teachers from all over the Arab world who are keen to expand their circle of beneficiaries with their specialised knowledge repertoire and seek to deliver their knowledge outside the walls of universities’ (Rwaq, 2022).

The visual presentation of the platform indicates its orientation as Arab-based, rather than Saudi-based. The use of Arabic sets the platform’s boundaries and provides ‘communal knowledge’ (Sørensen, 2009) that enacts a feeling of interconnectedness and draws participants together. On the homepage, Rwaq presents one of its earliest courses about the history of Andalusia as a model course (see Figure 14). The topic is historical yet presented in a modern and professional way. Showing a course about the geographical history of Islam on the homepage illustrates the nature of the platform, its direction and its boundaries—it reflects Arab and Muslim identity. Although the platform offers courses on various subjects (e.g. entrepreneurship, computer science, medicine and public health), they all have a common feature, which is that they are locally designed and presented by teachers from the Arab world.
The different devices listed on the homepage indicate how the platform promotes mobility and accessibility in a way that enables users to access the platform regardless of the kind of devices they own. Smartphone users explicitly welcomed through the imagery of a Rwaq course displayed on a phone screen.

The process of becoming a teacher on the platform starts by clicking the ‘Join Rwaq as a lecturer’ button located on the homepage. Doing so is free and open to anyone who is willing to practice teaching and share their knowledge. A hyperlink on the homepage takes the user to an application form that is divided into two parts. The first asks for information about the proposed course, including its title, content, structure, starting date and duration. The second part asks for information about the teacher, including a brief biography, contact information and social media links that will appear in the teacher’s profile page. Here, the teacher can exercise some degree of control over their self-presentation. They can highlight specific biographical information and add contact information, which will allow them to gain more of a following beyond the course domain and after the course ends. During the field work, and while I was contacting teachers to invite them to join my study, this contact information was particularly useful for finding teachers who did not appear frequently with courses but who replied to my requests through private messages. For instance, I contacted them through their personal email and their accounts on Twitter and Instagram.
The application form not only acts as a ‘gateway’ for teachers but also provides information and serves as an ‘entrance for others’ to contact and follow teachers beyond the platform. Once their application is accepted by the platform administrators, the teacher is notified with an acceptance confirmation email and asked to upload an introductory video to announce their course and reserve a space on the platform. All videos and other course materials have first to be sent to the platform’s administrators so that the Rwaq logo can be added to the videos, which determines the ownership of the course. Here, ownership refers to the person who presents the course and to the platform on which the course takes place. Thus, the course enacts co-ownership between the teacher and the platform provider.

Teacher identity and Rwaq as a platform are changing in the process. A teacher’s identity as a gift-giver ‘becomes’ the interaction with the platform and the practice of teaching, which requires interaction with the materials and students. Identity in this sense is enacted rather than presented. According to Schultze (2014), performative understanding of identity directs attention away from the intentions, interpretations and interactions of human actors in favour of understanding it as a dynamic and contingent sociomaterial configuration entailing the ongoing performance of multiple, distributed and diverse agencies. I discuss this further and show different forms of the identities enacted by certain Arabic MOOC platforms in the following chapter.

Similarly, Rwaq as a platform ‘becomes’ the process. It is changing as each new course is added, bringing teachers, students and materials together. These new components from outside generate an ongoing pattern of relational mutation and enact a fluid space. Mol and Law (1994) described fluid space as a pattern of relations that transfers without friction and continuously changes by including new parts. Unlike the network space that maintains stability by fixed relations, the fluid space takes shape by continuous mutation and constantly changes. Therefore, it can be said that the platform enacts fluid space in the sense that it is
formed by continuously changing and absorbing new components from outside, as I have previously discussed.

The policy of the Rwaq platform allows teachers to freely share their knowledge without earning direct financial benefit from either the platform or course participants. This behaviour of teaching in such open spaces can have various meanings, including the Islamic interpretation of serving and helping others by sharing knowledge with them. The Rwaq platform presents itself as a free online platform that contains a collection of courses (gifts) produced by teachers (gift-givers). The platform provides teachers the opportunity, regardless of their nationality, qualifications or experience, to act as a MOOC teacher, which is what makes it lasting and recognisable, compared with other Arabic MOOC platforms. The co-founder of Rwaq explained the effect of the cultural context on framing the platform as follows:

Offering paid courses requires a market. It is too early for us; people are not keen on paying for learning ... We do not have this culture in our society. What we can do in this case ... is to listen to the atmosphere, to listen to the reaction. This is what has enabled the platform to keep going and create a communal movement, even in rural areas. (Fahad)

Clearly, the context has had an influence on forming the platform’s approach. The business model, that makes profits from courses, partnerships and subscriptions, was developed through allowing teachers to offer free courses. The platform founders were challenged to build a business model as it initially did not fit within the culture and context in which MOOCs take place. Teachers and their courses served to promote the platform and expand its distribution, which in turn has led to the development of a viable business model. As a well-recognised Arabic platform, Rwaq has recently started to collaborate with educational institutions. This confirms the complex and overlapping relationship between gift-giving and entrepreneurship.
Zakat space

*Zakat* is an Islamic concept that involves giving to fulfil individuals' responsibility to God and to society. It is a broad concept that can be applied in different contexts, such as in terms of wealth, health and education. *Zakat* can be given in a tangible form, such as through money or food, or in an intangible form, such as through sharing knowledge. Some forms of *zakat* are monetary and must be given regularly by qualifying individuals, whereas other forms are non-obligatory but still desirable. My focus in this thesis is on one form of *zakat*, known as *zakat of knowledge*, which is technically the same as other forms of *zakat*, in that it refers to distributing power and establishing sustainable development in Muslim society (Al-Salih, 2020).

*Rwaq* often promotes itself as space for performing *zakat* of knowledge. Figure 15 provides examples of how it relates teaching on the platform with the notion of *zakat*. One tweet says, ‘We welcome all lecturers who wish to perform their *zakat* of knowledge ... for students, all courses offered are free,’ and it provides links to the teacher’s application form and to the platform itself. In the other tweet, *Rwaq* uses a well-known saying in Islam, ‘*zakat* of knowledge is by sharing it’. The platform acts as a space in which *zakat* of knowledge is donated by teachers and provided free to students. The spatial arrangement of the materials, the platform’s digital technology and the social representation of teachers and students is performing *zakat* as spatial formation.

![Figure 15 *Rwaq*’ Twitter messages mentioning ‘Zakat of knowledge’ (Translated by Google)](image-url)
Zakat entails a sense of giving to enable one to fulfil one’s responsibility and moral obligation towards others (Alkahlout, 2021). This meaning emerged in my interviews with teachers. While analysing the data, I considered the meaning of zakat rather than the term itself. Teachers who practiced professionally differentiated their work in universities from their moral obligations through MOOCs. Although this differentiation was not contradictory, the focus here is on teaching beyond its professional meaning and the relationship between the space and understanding of the teaching. I have provided some examples from teachers’ interviews that indicate how zakat and its meanings were enacted by the courses they presented.

Hamza comments on the spatial effect of courses and the influence of Islamic culture on teaching practices, as follows:

> Each product is a product of its culture. We as Muslims truly believe that good deeds such as helping other people represents our responsibility towards God, His creation and society. (Hamza)

Helping people and serving them is constructed by the act of sharing knowledge and the material and technical aspects of the course. This combination refers to a cultural interpretation of an individual’s moral responsibility to perform gift-giving.

In the following example, Maria introduces herself as an academic but also shows an interest in teaching in a public setting, which is indicated by the course she presents. Her openness towards public teaching is embodied by her words:

> As an academic, I teach at a university for a small number of students who have the privilege to have access to 10 years’ education abroad. I have always been interested in teaching the public. Because educated people and specialists at university can speak English, it gives them access to many resources. But there are not many resources in Arabic for people who do not speak English. (Maria)
The emphasis here is on the Arabic language aspect of her course, which will enact relationships with Arab communities. The spatial formation of the sociomaterial assemblage of the course makes it accessible for non-English speakers. Thus, we could say that the course enacts the teacher’s sense of inclusivity and equality. While MOOCs have been criticised for ignoring linguistic diversity (e.g. Perrotta, 2016), the data from this research show that they can promote local epistemology and languages, even where universities and educational institutions are influenced by neoliberalism and the knowledge economy that is supported by the English language.

For Ahmad, a sense of responsibility emerged through his realisation of there being a lack or absence of knowledge. As an academic who specialised in writing, he noticed misspellings and errors in writing not only in students’ work but even in that of teachers. He designed a course in response to this lack of knowledge and based on common writing mistakes. Designing the course for a MOOC platform has allowed audiences with different skills and knowledge to attend the course, which acts here as responsive space.

> Once somebody feels that he or she has something that people need, I think it becomes moral obligation to give it to others. At work, I noticed the need for such a topic, and this caused me to think about how to introduce it to a wider society beyond the university community. (Ahmad)

Ali emphasised the temporal aspect of his course, which provides an opportunity for students who live in areas with weak technological infrastructure to participate. The course Ali recorded highlights his sense of empathy and understanding.

> Technical infrastructure issues, such as there being weak internet service in the participants’ regions, may hinder continuity and engagement in live session courses. Rwaq has targeted the Arab world, and many Arab regions have issues with the internet. By introducing courses with recorded lectures and attached materials, students in such regions can engage with them in their own time. (Ali)
Another aspect that represents teachers’ moral obligation to help can be shown through courses that provide certificates for their completion.

You never know—someone joining the course may have financial difficulties or a family or other responsibilities and getting a certificate at the end of it could open the door for them to engage with the marketplace and other opportunities. (Sara)

In Sara’s case, her sense of giving is illustrated by the outcome of the course, as she emphasised that certification from it would potentially give participants their own authority and agency to engage in professional work.

These examples, among many others, show how *zakat of knowledge* is performed by a sociomaterial assemblage of social and material entities, including teacher, language, culture, the materiality of the course and digital technology. The relationships between these entities enacted spatial formation that can be characterised as *zakat of knowledge*. In broader terms, the course constructs a gift-giving space and enacts the teacher’s gift-giving identity. The gift in this sense does not necessarily mean that it is free; rather that it is more complex, as it involves other non-human components that act with the teacher in performing gift-giving. We should go beyond course fees to notice the relationships between actors that are involved in MOOC teaching practice.

It is evident that one active role of Arabic platforms such as Rwaq is in forming a cultural meaning for teaching and enacting a space for gift-giving. These platforms not only project teachers as knowledge providers, they also make sense for their communities.

**Waqf space**

*Waqf* (endowment) is defined as the perpetual donation by Muslims of property for charitable purposes (Alomair, 2018). It is characterised by its sustainable and infinite nature that differentiates it from other forms of charity. *Waqf* is considered a form of collective social responsibility and is based on providing a service to help the greatest number of
people for the longest period of time (Al-Bishi, 2001). The act is on behalf of waqf donor in perpetuum. As the prophet Mohamed said:

The rewards of the good deeds that will reach a believer after his death are: knowledge that he has taught and spread; a righteous son whom he leaves behind; a copy of the Qur’an that he leaves as a legacy; a mosque that he built; a house that he has built for wayfarers; a canal that he has dug; or charity that he gave during his lifetime when he was in good health. These deeds will reach him after his death. (Sunan Ibn Majah 242 - The Book of the Sunnah, 2022)

Waqf, as defined earlier in chapter 3, refers to offering the usufruct of property for charitable purposes (Zaman, 2019). Recently, digital forms of waqf have emerged and become prevalent. Alshaye (2017) defined digital waqf as ‘any moral right that has been held in digital form through an appropriate medium to benefit from it or its revenue’ (p. 33), with the moral right including, for instance, copyright and creative commons. I discussed the concept of waqf in Chapter 3; here, I go beyond explaining its meaning to show how it can be enacted as a space in the Arabic MOOC teaching context.

Waqf as a concept has appeared in online teaching in Islamic societies. Online courses can be seen to generate relationships that act in a similar way to donating waqf. In this sense, waqf is a space for heterogeneous and dynamic spatio-temporal and material arrangements. It is sociomateriality and spatially constructed through an ongoing ordering of materials, teachers, students and the digital technology behind MOOCs. In a seminar recorded and published on YouTube, the founder of Rwaq discussed digital waqf and how people should rethink it in light of the digital revolution. Waqf is one of the prominent giving practices in Islam, yet the traditional understanding of it remains dominant, which limits waqf’s role to such practices as building schools and mosques, digging wells and engaging in other concrete construction. The Rwaq co-founder said:

If we want to build a school as waqf, would the waqf be performed through the school, or what should the school do? If the answer is the effect of the school ... then we should ask if there is any other way to have the same effect without the building ...
In past years, these was no other option, but I think we have now to reconsider the core meaning of waqf in Islam (Fahad; Horizons, 2020)

One of the misunderstandings in waqf marketing is the belief that waqf relies on the building, not on the outcome. It is promoted in such a way that the donation will go to the foundations of the building, not the finishing. The outcome of a waqf project for a Quranic school in education or in health is not the building but the beneficiaries and the knowledge that they will generate for the next generation, for our children and grandchildren, and all their good deeds. (Fahad)

In other words, the relational pattern that generates ongoing outcomes is more important than the entity itself, which can be varied, such as a well, a school or a book, which can all be donated in the form of waqf. The pattern of relationships involved in the construction of the waqf has the ability to be sustained through continuous transformation and gradual evolution that continuously generates new relationships and involves new elements from outside. From a social topology understanding, this pattern of relationships performs in a fluid space. De Laet and Mol (2000) explained fluid space by giving an example of a bush pump in Zimbabwe that served to provide a village with clean water and at the same time brought people together and created a community and even Zimbabwe as a nation. Drawing on Mol and Law (1994) and Law and Mol's (2001) explanation of spatial topology, it can be said that the pattern of relationships that form waqf enacts fluid space. Waqf acts as a sustained good deed for its donor while generating benefits for society.

Rwaq promotes itself as a space for producing courses for gift-giving, as I showed earlier. It also attempts to integrate the Islamic understanding of perpetual giving in the form of waqf by referring to its teachers as believers in the value of giving. Figure 16 shows an example of a message of thanks posted on Twitter during the month of Ramadan, which is much revered and blessed time for Muslims and known as the ‘giving month’. Rwaq’s message said:
In the month of giving and good, we remember those who have been part of our journey—those who believe in Rwaq, in the principle of giving and in the importance of education, and those who have gifted the world their knowledge and time. We thank them and recognise their giving by praying for them and sharing their course statistics. May Allah make their contribution ongoing charity and beneficial knowledge. Follow us to get to know them and to thank them with us. (Rwaq)

![Message of thanks to Rwaq's teachers](image)

The platform named on Twitter the teachers who had presented Rwaq courses and provided their course enrolment rate in such a way as to show how it valued them and to illustrate the impact of their courses by demonstrating how they had reached a massive number of participants. The statistics provide representational knowledge. According to Sørensen (2009), representational knowledge constructs knowledge out of human agency and is a representation of what is ‘out there’. The visualised and linguistic promotion of Rwaq contributes to the production of spatial formation for *waqf*.

*Waqf* is often associated with legacy, long lasting effects, suitability and looking for the self beyond life. These meanings came up in the interviews, including in the following:
Our lives are short and will one day come to an end, so what do I want to be known for? I feel regret when somebody dies and his life is full of stories and experiences without them being documented. Everything disappears suddenly and comes to an end with his death. (Liyla)

Liyla was pointing to the documentation aspect of materiality through the course she constructed. This generates a space that can be considered to be a biography of a teacher which perpetuates their knowledge.

I hope this [the course] will have a long lasting effect that enables me to be remembered. Even in what I am doing in fashion and business, the idea of creating a legacy is what has most inspired me to engage in online teaching. (Dina)

Dina emphasised the spatial effect and the relationships generated by the space rather than the course’s subject. The course she presented on fashion and business would become outdated and useless in the future. However, the space that is occupied by the course may sustain and maintain the teacher’s identity long into the future. The example of Maryam in the vignette at the start of this chapter showed how a course’s space can generate multiple subjectivities, identities and spaces. Her course was presented after her sister’s death as an act of Waqf, one that would generate good deeds for her forever.

It is worth noting that the experience that some teachers have had of teaching free courses was not always as they wanted it to be. The data showed that MOOCs enact power dynamics whereby teachers negotiate their power and agency. Some teachers had concerns concerning copyright, intellectual property, ownership, exploitation and the effect of the course on their offline teaching continuity.

Maha, for instance, differentiated how she was remembered as a MOOC teacher from her reputation as a teacher in an offline setting.

When I do in-person teaching, I maintain my reputation as a teacher. I mean, I always get asked after each course if I will do the course again and again, which keeps me
actively engaged in teaching. It is true that online courses remain archived for students, but your image and reputation as a teacher could be affected. (Maha)

According to Maha, the interaction and engagement that occur in the offline teaching setting can lead to further participation in other different locations and with other different people; however, the recorded courses can reversely impact her offline identity as a teacher.

Sara mentioned an issue concerning how the course projected her as always being available. The hardest thing is coordinating between presenting the course and my own work, studies and other responsibilities. I noticed recently how people see me; for example, I am facing all the greed in society, to be honest. That is, many look at me as if I were created for voluntary work, like an ascetic who has no intention in this world other than being volunteer. No! I mean, I offer paid courses, just as I do free ones. (Sara)

Another issue surrounds the copyright of courses, as mentioned by several participants.

No, there is no copyrights in online teaching. Once you teach online, you should know that your course content will be distributed everywhere. I became aware of this because I presented the course several times offline. I kept some parts of the course for one I do in person. For the online course, I published things that I would not care about if somebody wanted to take them. I just get annoyed when somebody takes my work and refers it to it as their own without mentioning my name as a reference. (Hassan)

To sum up, the data showed that Arabic MOOCs enact a gift-giving space in which zakat and waqf appear as types of MOOC that are relationally produced through visualisation on the platform, promotion and practice. The space here is understood as a dynamic multiplicity that is constantly being enacted by simultaneous practices (Fenwick, Edwards, & Sawchuk et al., 2015). It is not out there to be experienced; rather it is co-constructed or performed relationally and is in a constant process of being made and remade (Massey, 2005). The MOOC gift-giving space can be characterised as being fluid and maintaining its continuity through ongoing change. As Mol and Law (1994) put it, the ‘world doesn’t collapse if some
things suddenly fail to appear’ (p. 659), for instance, in the case of teacher absence or die. I now move on to discuss another form of space emerging in the Arabic MOOC context.

**Entrepreneurship and MOOCs**

MOOC platforms are based on a business model that has been growing in Saudi Arabia, where neoliberal and knowledge-based economy orientations are being guided by Saudi Vision 2030, as discussed in Chapter 2. MOOCs are employed to support this national policy by offering courses on subjects required in the marketplace. They also appear to be creating a new marketplace in which teachers are engaging in entrepreneurial activities by designing online courses and teaching them. In this section, I draw on three Arabic MOOC platforms and discuss the spatial formations they enact.

**Doroob**

Doroob in Arabic means ‘paths’, and the courses on this platform are depicted as tracks that lead to a destination. The platform is operated by the Human Resources Development Fund (HRDF) of the Saudi Ministry of Labour in partnership with Harvard and MIT (Alanazi, 2020). HRDF is concerned with the resettlement of jobs to the private sector and the empowerment of a productive national workforce that contributes to the development and progress of the country (HRDF-KSA, 2021). It supports Saudi Arabia’s goal of reducing its dependency on oil by empowering people and developing the knowledge-based economy.

On its homepage, Doroob introduces itself as ‘The national e-training platform’. It seeks to empower the workforce and develop their capabilities and skills (Doroob, 2021). Courses on Doroob are constantly updated based on demand from partner companies in Saudi Arabia. The courses are self-paced and in practical subjects that are needed to implement the national vision and its mission to create a knowledge-based economy. The platform also promotes a localisation initiative that aims to increase Saudi participation in the private sector, which is dominated by non-Saudis in terms of sales and services, insurance, car rental
and customer service and practical skills such as financial accounting, taxi driving, sales management and mobile phone maintenance.

The platform has two portals, one for individuals and the other that enables companies to propose the courses they need. The interface (see Figure 17) shows people wearing traditional Saudi clothes (*thobe* and *abaya*) in a work environment surrounded by desks with stationery and digital devices and seeming to be busy at work. This image depicts the modern concept of a mixed-gender space; it clearly demonstrates that Saudi Arabia is changing, and the platform acts to implement these changes (Almuhanna, 2018).

![Figure 17 Doroob platform interface](image)

The banners that appear on the front page of the platform promote competitiveness and relate knowledge with employability, saying, ‘Go ahead with merit to the Saudi labour market’ and ‘The more educated you are, the more distinguished you will be at your job’. Doroob, in this sense, serves to generate employment opportunities and promote the economic growth of Saudi Arabia. It works to bridge the gap between educational institution outcomes and the Saudi market. Statistics of the training courses, course hours and their beneficiaries also appear on the homepage, serving as evidence of the effectiveness and success of the platform and its courses.
Doroob has significant power and agency in KSA, as it is linked with several national initiatives. For instance, the Hafiz ‘incentive’ is a national programme introduced by the Ministry of Labour and Social Development to support and assist jobseekers. This programme provides employment support services as well as a financial allotment for 15 months while its members search for jobs. Financial support alleviates the financial burden of unemployment and allows jobseekers to concentrate fully on training to find work. These benefits are intended for active and serious jobseekers with a desire to gain knowledge and skills while looking for employment. The platform is able to determine who is active and deserving of the financial support, as this is contingent on completing and submitting assessments for a set of assigned courses on Doroob each month. Failing to attend or not completing assigned training in a given time leads to a reduction in financial aid and lowers the chance of acceptance for further online training programmes on Doroob (Hafiz-TAQAT, 2022). Job seekers’ seriousness is measured by how active they are in the courses they are assigned on the platform.

Hafiz and Doroob have indeed succeeded in reducing the unemployment rate by providing financial and training support for jobseekers. However, a large section of their target, unemployed audience live in areas with weak technological infrastructure and have limited technological skills, which hinders their access to online courses on the Doroob platform. This issue has created work for others who have technological skills, material and digital technology to enable them to access services and update jobseekers’ participatory status to avoid being cut off from the Hafiz financial support. This kind of work is called ‘technical service support’.

This was not the initial aim of the platform, but it has emerged as a result of the entanglement between context, policy, technology, materials and social actors. This confirms how technology is actively generating spaces, practices, and identities through a combination of relationships between social and material actors. As Sørensen (2009) argued, ‘even when technologies do support our educational aim, they also always produce other effects’ (p. 7).
Doroob enacts a regional space that is defined by boundaries. Mol and Law (1994) introduced the regional spatial metaphor to describe space that acts in such a way that makes what is inside it homogeneous, in the sense that all inhabitants of a region have the same regional identity. A region is defined by what is in it. In the case of Doroob, it is defined by who is eligible to use it, such as Saudi citizens, jobseekers and private sector workers who have network devices and technological skills, and also by the workplaces that are located outside. Mol and Law (1994) found there to be different way to diagnose anaemia in the Netherlands and in Africa, and through this observation, they argued that anaemia enacts regional space where an ‘inside’ and an ‘outside’ are created. Therefore, it can be said that Doroob acts as regional space by defining the inside and outside components. The platform is a typical example of a regional MOOC in Saudi Arabia.

**Maharah**

Maharah means ‘skill’ in Arabic. The platform introduces self-directed courses in which individual teachers present courses on various practical subjects, such as car care and polishing, designing snapchat filters, packaging design and investment in cryptocurrency. The platform answers ‘what is Maharah?’ by explaining:

> Each of us has a skill. Each of us has something to teach others. Welcome to Maharah, an Arabic training platform that offers courses in many fields. Here, anyone can teach and learn. (Maharah, 2022b)

The language used to introduce the platform removes any boundaries between teachers and learners, and the online courses are presented by anyone who has sufficient knowledge, regardless of their qualifications or other professional requirements. Elsewhere on the platform, it is emphasised that it is possible to receive income by presenting courses on Maharah.

> An Arab platform for all subjects and skills, to learn and teach. With Maharah, you will learn new skills, teach others and earn money, all in a few simple steps. (Maharah, 2022a)
The platform’s design specifically targets teachers, rather than students. Figure 18 shows an infographic that appears on the homepage that simplifies the process of introducing a course on the platform into steps (the various steps should be read from right to left, according to the Arabic language). The first step is to ‘think’ about any subject that you are good at and can teach others in an online course. The second step is to ‘prepare’ a structure and the course content, including videos, text, attachments and explanations. The third step is to ‘publish’ using the Maharah platform by adding your course and uploading its content. The fourth step is ‘win’, by which you can either offer a free course or set a course fee and earn additional income. There is a button saying ‘subscribe and add your course’, which opens up a form that allows users to register their course and upload their materials.

![Maharah platform interface](image)

Figure 18 Maharah platform interface (automated google translate).

These free and simple steps generate diverse courses comprising very specific knowledge and skills that are presented by individual teachers from all over Arab world. It has created an environment of competitiveness whereby every course is unique and distinctive. While introducing a course on the platform is free for teachers, any income from it will be shared between the platform and the course teacher. As it states on the platform, ‘Maharah gets 50% of the income of the course fee and 50% is yours as an instructor’. The teachers serve to generate the platform’s income, while the platform projects them as professional teachers. The platform also acts as a learning space and as space for developing entrepreneurial MOOC teachers. These kinds of platform are called labour platforms (Vallas & Schor, 2020), that
enact a type of work. The teacher’s entrepreneurial identity here is enacted by assembling relationships among the various actors (e.g. platform, course material, student, course fee).

**Shorfaa**

Another platform that works in a similar way to Maharah is Shorfaa, which means ‘balcony’ in Arabic—Shorfaa’s slogan is ‘your balcony to your creative fortune’. The platform specifically provides courses covering creativity and the arts. Unlike on Maharah, teachers on Shorfaa are invited and selected based on their specialities and expertise. The courses are designed in collaboration with the platform, teachers are in charge of the knowledge and the content of their courses, while the platform has the role of producing and delivering the course professionally. Courses are fee-paid, and revenue is shared between the platform and the teacher.

On the homepage, Shorfaa introduces itself by saying:

> Discover, share, develop – Shorfaa is an online learning platform in Arabic that provides courses on design, art and leadership.

The co-founder of Shorfaa explained the idea of the platform further:

> The platform focuses on three aspects: exploring, developing and sharing. It aims to allow students to explore their creativity and work to develop it, before sharing the results. They learn how to turn the skills they have developed into a project. The platform enables students to present the products they have created during the courses, such as a children story, a handicraft project or any other creative work they want to share. The platform supports them by presenting the results of this. (Rahaf)

The platform encourages students and teachers’ entrepreneurial identity by providing a space that allows them to present courses or complete projects as marketable entities. The code and algorithm underpinning the platform plays a significant role in shaping human agency. It presents courses based on enrolment rates and statistics, and it offers suggestions based on the course selected (see Figure 19). Teachers and their courses are projected here
as commercial entities as a result of the entanglement between the human ‘teachers’ and non-human ‘materials and codes’. Orlikowski and Scott (2015) argued that code is considered active, generative and performative in forming online spaces.

The data from my research show that entrepreneurial teachers engage in activity in online spaces such as social media to promote themselves and their courses. I have provided some examples from teachers’ interviews to illustrate this point:

This course is free because ... to be able to offer a paid course, you have to know how to promote yourself. I am not good at this. I prefer to offer the course on a well-known platform so I can fully focus on designing and teaching the course. (Rema)

Free tutorial videos on YouTube and Instagram are also marketing for other courses. I hope this free content is useful for people who are seeking their benefit ... and there are [paid] course available for those who are interested and want to know more. They simply can enrol in the course. (Nora)

The good thing is that I do not need a third party for promotion. Twitter and Instagram can do the job. I frequently—about every three or four days—share free information or simple sketches as tip and tricks that can be useful and are free. (Jamal)

Teachers are moving between two models, namely free-of-charge and fee-paying teaching, to maintain their identity as entrepreneurs. In social topological terms, this kind of pattern of relationship enacts ‘fire space’ that treats ‘the continuity of shape as an effect of discontinuity continuity’ (Law & Mol, 2001, p. 615). In the context of this study,
entrepreneurial MOOCs depend for their ‘constancy’ on the flickering patterns enacted between the ‘presence’ and ‘absence’ of teachers. The topology of fire allows one to ‘flicker’ between the worlds. The entrepreneurial space enacts spatial formation that enables teachers to flicker in and out to form the course space.

Conclusion

This chapter begun by analysing the relationships underlying the Rwaq platform and argued that the MOOC project is established through network relationships that maintain stability by heterogeneous human, materials and digital technologies. This corresponds with Latour’s (2005) argument that ‘technology is society made durable’. The findings showed how the culture and social context of Saudi Arabia partly define what MOOCs are and what teaching in such online open space means.

I then showed, based on the data, several forms of spatial formations that emerged through MOOC teaching practices in Saudi Arabia. The gift and entrepreneurship were the main themes enacted through visualisation, promotion, material and digital technology. Moreover, teachers’ interviews and observations data highlighted how new understanding of zakat and waqf were formed in Arabic MOOC teaching domain. Drawing on spatial terms, gifts in MOOCs appeared to constitute a fluid space that is constantly changing through shifts in relationships. The analysis also highlighted the entrepreneurial MOOC space as another prominent theme emerging from a pattern of relationships in what can be characterised as a fire space, as it moves between different modes to maintain its shape. Entrepreneurial teacher appeared shifting between free MOOCs and fee-paying MOOCs to constitute their identity. Furthermore, MOOCs that have a neoliberal orientation, such as the Doroob platform in KSA, form regional space with clear borders that define what entities are located inside and outside. The data also showed that MOOCs produce a competitive marketplace and empower individual teachers to present their professional identity and be financially
independent through engaging in MOOC teaching practices, as will be apparent in the next chapter.

It is essential to emphasise that these spaces are changing, overlapping and intersecting. Space is perceived as dynamic multiplicity that is constantly being produced by simultaneous practices (Fenwick, Edwards, et al., 2015). The multiplicity concept proposed by Law (2002, 2009) claims that each practice generates its own material reality where the structure of relations, boundaries and objects are mutable and constantly shifting. Massey (2005) also claimed that spaces are dynamic, overlapping and changing in a shifting geometry of power. The space of MOOCs is emerging from different relationships that are enacted in practices. In other words, MOOCs are part of an ‘active and shifting process in which educational space is continually produced in hybrid configurations’ (Knox, 2014b, p. 539). Based on the multiplicity notion of MOOC spaces, what appears as a gift space can also act as an entrepreneurial space and vice versa.

In this sense, the gift-giving and entrepreneurial MOOC models cannot be determined or defined merely based on their fees. For teachers who claim that their courses are gift-giving, the relationships constructed in the practice of teaching and the different components involved while doing so may project them and their courses as marketable entities. Several studies have shown that gift-giving practices and market exchange are becoming less defined in the digital context (e.g. Cockayne, 2016; John, 2013). The term ‘sharing economy’ that has recently appeared shows that the concept of sharing and the economy have become entangled. In the context of MOOCs, Shah (2021) noted that their initial promise was to provide free education to everyone, everywhere. However, the meaning of free has evolved over time, and MOOCs have shifted from ‘free’ to ‘free to audit’.

The following chapter moves from analysing the platforms to the components of MOOCs. It introduces representational MOOC spaces and shows how different forms of teacher identities appear in Arabic MOOCs. The identities will be approached from a relational point
of view as they are enacted and performed through practices and generated by a combination of social, material, and digital MOOC technologies.
Chapter 7: MOOCs and Teacher Identity

Modernity and authenticity

My course aims to support people who are interested in entrepreneurship and looking to start their own businesses. A few years ago, people who owned small businesses were not confident to show up in society. They would often work from home and preferred to hide their identifiable personal information. Instead of directly contacting customers, they provided their services through mediators so that their identities could remain anonymous. All this is now completely different, and entrepreneurs are proud of their identity and even look for opportunities to make themselves recognisable and visible.

In my course, I have been asked how I would like to appear in videos. I want to present the unique features of Saudi culture, in that we are open and developed yet still maintain our traditions and values. I feel proud of myself and what I have achieved as a businesswoman, a successful entrepreneur and a certified trainer, and I want to let people know that maintaining principles, values and traditions does not hinder their desires and ambitions.

The course was recorded at my florist shop. It was a little tricky to find some quiet time without car noise coming from the street and the sounds of customers entering the shop. Nevertheless, I never considered choosing another place, as I feel this one is part of who I am. (Yasmine)

Figure 20 Screenshot from flower arrangement course
Introduction

Yasmine is an entrepreneur, florist and instructor who has introduced a MOOC on flower arrangement. In her interview, she talked about her experiences and how the course presented her to an audience that was unfamiliar with Saudi culture. Her course video shows her in her flower workshop wearing traditional women’s clothing (abaya); in the background are boxes arranged in a pyramid to show the shop’s logo. The way that all the materials and the technological infrastructure of the course are arranged portrays Yasmine’s identity.

Teacher identity has been studied from perspectives such as motivation (Han & Yin, 2016), agency (Usma, 2007) and emotions (Beauchamp & Thomas, 2009). Most studies on teacher identity have confirmed the idea that identity is dynamic, continually evolving and contextually dependent on a variety of circumstances, including those that are either internal to the human, such as emotion, or external, such as policy and the social environment (Goffman, 1956). This view considers a teacher’s identity as fundamentally personal, based on their individual autonomy and ability to make decisions.

Recent studies on identity have proposed an alternative view. They argue that humans have less control, awareness and visibility over their identities, how they affect them and how the identities are represented (e.g. Cheney-Lippold, 2011). This perspective views teacher identity as not merely dependent on individual teachers; rather, it is constructed by relationships between different entities. Some sociomateriality theories reject the concept of intentionality and instead view people and materials as having symmetrical agency. For instance, in Sørensen’s (2009) study on the materiality of learning, she replaced terms that might imply meaning-making and individual intentionality, such as identity and self-representation, and instead used ‘presence’ to turn the focus from human to spatial arrangements that perform it. In my study, I take a ‘co-constitutive entanglement’ stance that does not locate agency exclusively in either the human or the material; rather, the capacity of action is produced through sociomaterial assemblage. This means that I do not
reject human agency altogether, nor material agency, but I see agency as something that mutually emerges from interaction (Barad, 2018). In Pickering’s (1993) view, material agency is entangled with human agency in a ‘dance of agency’. While humans may intend to utilise materials in certain ways, their intentions are not always realised, as material agency resists manipulation in unexpected ways. If resistance persists, humans may have to modify their goals, the material form of the machine and/or the surrounding social relations.

Organisational studies on sociomaterial approaches and identity have shown how the material agency of workplace devices that are apparently taken for granted, such as whiteboards and mobile phones, may function to regulate and enact identities beyond local discourse (Paring, Pezé, & Huault, 2017; Symon & Pritchard, 2015). In educational research, Howard (2022) shows how the imbrication of gamification with humans presents the professional identities of lecturers in situated practice. Introna and Hayes (2011) examined plagiarism detection software and showed how it had become an active agent in defining plagiarism and, consequently, who is characterised as a plagiarist. They found that the software performed mutual co-constitution of human and non-human agency. Recently, Arantes (2022) argued that digital education platforms participate in forming different types of teacher identity.

Drawing on the relational and sociomaterial approach of identity, this chapter raises questions about the formation of teacher identities in the digital environment of the course. It introduces MOOC representational spaces that are formed and produced by teacher interaction with different components of MOOCs. I argue that a teacher’s identity can be seen as it is performed through sociomaterial arrangements, including the digital components of the course. Several forms of MOOC teachers’ identities have been identified in the Saudi Arabia context. In putting forward these ideas, I draw on a series of excerpts from teachers’ interviews as well as observations and visual data from online courses.
MOOC representational spaces

As discussed previously, the ‘space’ is viewed here as a dynamic multiplicity that is continually performed and produced by the relationships between the individual, materials and digital technology. Lefebvre’s (1991) book, The Production of Space, differentiated between perceived physical space, representations of space that refer to discourses on space being conceived and representational space that is produced by social interaction with the lived space. Drawing on Lefebvre’s (1991) conceptualisation of representational space, I consider teachers’ interactions with different MOOC components to be the result of different online representational spaces. The classification of different spaces illustrated in Table 7.

The public space serves to introduce a course and its teacher to the public. What is significant about this space is that it relies on its ability to generate knowledge for a wider audience not necessarily related to the course. The second representational space is the participants’ space, which is presented through interactions between the teacher and the course’s participants. Unlike the public space, this space is accessed by specific people potentially with a common interest in the course’s topic. This space enables the teacher to present course materials and offer a space for interaction and engagement to take place in the course. The third space is the statistical space, which reflects participants’ activity and the technological infrastructure of the course. It can be accessed by authorised people such as teachers and administrators. It generates statistical knowledge about course enrolment, completion and dropout rate and demographic data from the course participants (e.g. age, nationality and qualifications). The fourth space is the outcome space, which is enacted by the extended relationships formed during the course and continues after its completion. This spatial implication can come in the form of knowledge, identity, materials and relations. This space may not take an obvious form, unlike the previous spaces, as it is presented through a combination of relationships established during the experience of teaching a course. This thesis is interested in studying the spatial formation performed by MOOCs. The previous chapter illustrated how gift-giving and entrepreneurship can be considered as sociomaterial
In this chapter, the focus is on teachers’ identities and how they can be conceptualised in relation to their MOOCs’ representational spaces.

<table>
<thead>
<tr>
<th>MOOC representational space</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
</table>
| Public space                | Represents the teacher and the course to the public; acts to generate knowledge in multiple forms about the course and the teacher. | - Course description  
- Teacher biography  
- Introductory video  
- Ratings and reviews  
- Participants’ projects and testimonials  
- Previous network communities |
| Participants’ space         | Acts as a classroom in which educational materials are presented and social interaction and engagement take place; can be accessed by authorised users (e.g. participants, teacher and administrators). | - Comments space  
- Discussion forums  
- Course videos and materials  
- Quizzes and assignments |
| Statistics space            | Acts as a control room; represents the course’s activity and can be accessed by the teacher; produces statistical knowledge generated by algorithms and the MOOC’s technological infrastructure. | - Course statistics  
- Students’ activity reports  
- Learning analytics |
| Outcome space               | Generated by relationships constructed by the course and teacher; represents the implications of the experience and can be fluid and unpredictable. | - Visible (e.g. student’s certification and outcomes, reviews and ratings, financial returns)  
- Invisible (e.g identities, recognition, ownership, knowledge, experience, rewards from God) |

Table 7: Classification of MOOC representational spaces
It is important to note that these spaces are not distinct, separate and well-defined; they can take different forms and arrangements in different MOOCs. The classification is proposed here to approach the data systematically.

**Public space**

I take the introductory video as an example of the components that contribute to presenting a course’s public space in order to analyse the different potential actions and meanings that are generated and enacted through the relationship between teachers and this part of the course. The introductory video is an audio-visual presentation of the course and considered a fundamental part of course design. It is presented in different forms and styles, such as textual, visual, audio and animated. However, introductory videos not only provide information about a course but also about how it will be presented, explicitly or implicitly, through physical appearance, tone of voice and accent and physical settings. This combination of social and material components works collaboratively and produces different forms of identities and spaces. In this section, I draw on my observations and the teachers’ interviews to investigate how the introductory part of courses is presented and the kinds of relationships that are enacted.

During my observation of introductory videos, I noticed that the teachers would present themselves and the courses they taught in different ways. Some teachers appeared physically, others showed parts of their bodies, such as their hands in art and handcraft courses; in some cases, teachers were absent physically but present verbally, and some appeared physically only in the introductory video and not in the other course videos. The subject of the courses can influence the way that teachers appear. In writing and drawing courses, for example, the focus is on the teacher’s hands, rather than other parts of the body. Nevertheless, some teachers mentioned other factors that would determine their appearance in a video, thereby revealing the performativity of this part of the course. The co-founder of the Shorfaa platform commented on the different ways that teachers appear in course videos, highlighting the platform’s policy of openness.
We at the platform welcome this diversity. If you notice, female teachers appear in different ways. Some teachers wear abaya [female traditional modest clothing], others wear hijab [head scarf], yet some appear uncovered and casual. There is a mixture. This diversity reflects the platform’s orientation in terms of accepting teachers and students for their differences. (Rahaf)

The platform reflects its policy in terms of visualisation of the course and teachers’ appearance. Shorfaa has adopted an entrepreneurial model, meaning that courses are offered for a fee, yet the openness has been enacted through a combination of technological infrastructure, course introductory videos on the homepage, teachers’ bodies, clothes, devices and more. These different components generate knowledge for the public audience and promote the platform as open in terms of cultural diversity and accommodating different opinions and perspectives. This is quite different from the common understanding of openness in the MOOC context, although there is no established agreement on the type of openness promoted by MOOCs and open education. One prominent argument relates openness to the desire to ‘open the doors’ to educational institutions, particularly for individuals who might otherwise be excluded (Weller, 2014). According to Van de Oudeweetering and Decuypere (2019), openness can come in multiple forms on MOOC platforms. By drawing on social topology, they show how openness can be enacted through relationships rather than by considering it as being free of boundaries. Adam (2020) also notes that openness can be embodied by MOOC providers themselves, rather than the courses they deliver.

**Being creative and productive**

In addition to the different forms of teachers’ appearance in the introductory videos, I noticed how some of the materials they had produced were in the form of videos. Figure 21 shows some examples of these materials. The first image shows a series of children’s books written by the course teacher, who specialises in children’s literature, for a course on creative writing for children. The second image shows a handmade ceramic pen holder made by the teacher of a creative thinking course. Similarly, the last image is taken from a jewellery design course and presents handmade jewellery along with some sketched designs on a wall.
These materials were silent but still present in the introductory videos. Their presence highlighted how the courses were presented by somebody with knowledge and the ability to transfer it into practice. These practical courses had been designed in such a way as to guide the participants towards completing a project by their conclusion. The self-made materials contributed to illustrating the teacher’s entrepreneurial identity and represented their creativity, productivity and innovation.

While in some courses, these materials simply provided visuals, in others, they had an explicit role, particularly when they reflected their teacher’s own publications. Teachers appeared to engage differently with their output in these courses. Figure 22 shows images of teachers holding or presenting books and referring to them in the course; in other parts of their courses, teachers appeared to be reading text from their books and providing further explanations in the video. Here, the materials play a central role; unlike in the previous examples, in which materials were displayed without much engagement between the teachers and the materials, these courses were presented free of charge and designed based on central references, such as a book. The courses provided multimodal representations of course books, including the teacher following their book’s structure. While the courses were provided free and online, the books had to be bought and were available in specific locations. The spatial arrangement of the social and material entities would enact in the teachers a gift-giver identity. However, the relationships constructed in courses may have extended beyond them when their participants decided to buy their teacher’s books. In this case, the relationships would enact the identity of entrepreneurial teachers. I do not claim that
teachers intentionally advertise their own works in their courses; however, the presence of such materials enacts certain relationships that constitute a teacher identity that is considered as being performed through relationships.

Figure 22 Teachers and their books in the videos

As I have previously argued, the relationship between gift-giving and entrepreneurship is complex, particularly in the digital context, in which many materials and digital technology evolve in forming practices. Thus, predefining the gift-giving and the entrepreneurial MOOC models is problematic, as they are performed through sociomaterial assemblage, rather than predetermined merely by humans.

The following example illustrates the complexity of relationships involving gifts and the complicated relationship between gifts and entrepreneurship. Nora is an artist and art teacher. She designed a colouring book and had made it available as a free download on her website. However, the file did gain many downloads. Seeing this, she thought about other way to promote the book. She thought about designing a course on colouring as a relaxation technique and used her book to illustrate the different ways to engage with sketching (see Figure 23). In order to design the course, she researched information about art therapy, which allowed her to collect the course materials. Then she designed the course based on what she had found online and also on her colouring book; she then recorded the lectures using recording devices and other materials. The course was placed online and required the colouring book to be bought by the participants.

I realised that free content is often neglected. People care more about things they have paid for. (Nora)
The spatial arrangement formed by the colouring book, recording devices, digital materials and teacher, platform and course participants constructed Nora’s teacher identity as an artist. The course projected the teacher in a certain way. Nora’s identity and sense of value and appreciation were constructed through sociomaterial entanglements of the social, the material and digital technology. Transferring free material to a paid course placed the teacher into a network of relationships and activities such as reading and thinking about the pedagogical and teaching style.

Being professional

Teachers engaged in activities and practices in order to present themselves in a certain way in their course videos. I noticed that the visualisation of the introductory video for one of the courses had been designed in such a way that the teacher appeared alone and talking to the audience while supported by short clips that related to what the teacher was talking about. The teacher, Maryia, recounted her experience in designing the video as follows:

As a nutrition specialist, lecturer and PhD student, I had no experience or interest in designing, recording or using audio and video editing software, but I had to learn these skills to present the course professionally. I learned how to use design software from YouTube. I also used free images and videos from Unsplash and Pixabay and integrated them into the videos. (Maryia)
This course was introduced using a fee-paying model. The teacher’s entrepreneurial identity was established through a sociomaterial combination of the teacher and the design software, YouTube and free images from Unsplash and Pixabay. The practice of learning how to use software and videos to design a course establishes a teacher’s professional identity. This is also shown in the following extracts:

The editing process takes so much time and energy—more than the recording ... Sometimes I mispronounce a word, so this definitely has to be edited before the video is published. I feel that editing software has made people less tolerant of accepting slips and mistakes. I make mistakes all the time in face-to-face teaching, and it does not affect the meaning—I just correct myself even without realising that I have made a mistake. But this is unacceptable in online teaching and when lectures are recorded. (Hamza)

In conventional offline teaching, when you mispronounce a word, nobody will notice. However, when it recorded, you feel more responsibility because even slips and small mistakes become more evident. The students may replay the video many times and memorise the mispronounced word ... it could stick in their minds forever. (Maryam)

Hamza’s tone of voice changed when he described his struggle with editing videos. He clearly did not enjoy this part of the process but had to do it anyway for them to be ‘acceptable’, which is translated here as being free from slips and mispronunciation. This definition of acceptable has been established by the agency of editing software that has the capacity of removing mistakes. The editing software agency is ‘captured by’ the teacher to maintain acceptance and professionalism (Pickering, 1993). For Maryam, editing the video would make her feel less guilty and enable her to construct an identity of being reliable and responsible.

In this course, I intentionally avoided using PowerPoint—I last used it in a course five years ago. I use new video software and Prezi to present the course. I think this gives a sense of difference and distinctive compared with other courses. (Rema)
I presented my course as a collection of activities, rather than by reading from PowerPoint, as I saw some teachers still consider this teaching. Course creation is an art and requires specific techniques. I recently read an article about course production on the Coursera platform. You may notice in some of their courses, the
videos are presented as discussions and monologues, rather than being presented by one teacher. (Yusef)

In terms of time context, this entails a sense of being up to date, modern and advanced, as it is performed through relationships between the course technology, the teacher and the presentation software. The presentation software participates in establishing that the teachers are modern.

Here, we can notice how the agency of editing software, including Prezi, YouTube, Unsplash and Pixabay, and other digital components have been entangled with the teachers’ desire and intention to establish a positive identity. The sociomaterial configuration here establishes a professional, entrepreneurial, mistake-free and up-to-date teacher identity. The identity here is enacted through a combination of relationships between the teacher and digital technologies, images, videos and materials.

**Being authentic**

Some teachers were concerned about being seen as artificial in the courses they taught. In contrast to the previous examples, where slips and mistakes can affect a teacher’s identity, other teachers considered that overediting prevented them from being perceived as real and human teachers.

I do not re-record my videos, even when the background noise interferes in the video, unless it is really distracting. I am not Amazon, Google or Apple, and I do not have their capacity to produce professional materials. I am human, and humans are not perfect. I read some criticism, but never mind! (Ali)

I admit that my course lacks professionalism. I have neither the capacity nor the tools that will enable me to present it in a better way. But I think the simplicity here serves me well in terms of appearing spontaneous and natural. I do not even use an editor; I press record when I start talking and stop it once I finish the lecture. Whatever happens, I do not re-record it or edit it. Nobody has complained, although I am pretty sure that my course presentation is below the required level, but I like student
interaction and hope that the course content achieves this, as it is the most important thing, whatever the medium is. (Majed)

There are comments criticising me for using ‘ah’ and ‘um’ sounds to provide a break for me to think when I talk in my videos. I think this is human nature. As an English teacher, I teach my student to use filling words when they speak, such as ‘you know’, ‘well’ and so on as breaks. (Dina)

The errors, mispronunciation and other unintentional slips are part of establishing the teachers’ human and authentic identities.

Authenticity has been established in MOOC teaching in various ways. The vignette at the beginning of the chapter showed how the teacher’s physical appearance in the video established how she maintained a Saudi cultural identity. Similarly, Rema, as a veiled woman, would appear physically in some parts of her course. She said in the interview that that she did not endorse appearing in this way in general, as it would not be practical for her to work while wearing a veil. The process of recording videos required body movements between the recording device and the location, as there were no assistants to help with the recording. She had to record, re-record or edit it when necessary. This process would be easier if there was somebody responsible for the recording process or if she wore a casual outfit. She also had to choose to record the lectures verbally without appearing physically. However, she believed that sometimes it is necessary to appear, even if done only briefly, as it changes how people perceive the role of female teachers and helps to promote cultural diversity.

Sometimes, I wondered where our representation is and whether we [as covered females] should appear physically to promote diversity, especially for younger people who grow up without seeing different examples of female representation in the online space (Rema)

Although this recording process was challenging for Rema, as she worked by herself, it established her identity and visually represented it online, as she was concerned about the effect that a lack of veiled females would have on younger generations. This concern caused her to appear physically on the occasions when it was needed. Her physical appearance in
the course projected a model that represented her cultural and religious identity. The complex interweaving of course visualisation, videos, a recording device, the teacher’s body and appearance and relationships, which together established Rema as a representative entity, can promote cultural diversity.

Sara is another example. She is active on social media and works as a writer and academic. In her interview, she said that she never considered appearing online, and the absence of her physical appearance has not affected her online activities. She has been able to establish her identity as journalist, writer and activist on Twitter. However, presenting an online course raised questions about her appearance during it.

I was given options on how to appear in the videos. As I was indecisive, I watched other MOOC videos on the platform, and I wondered in particular how female teachers appeared in their videos. I could not find many women of colour and veiled women. I believe seeing even one example would encourage others to follow. (Sara)

The course visualisation here not only enacts representational knowledge about teachers’ identities but can also provoke a response. In this case, the course video performs collective knowledge. Sørensen (2009) defined collective knowledge as a pattern of relationships that is constituted by connecting entities together and performing them as a collective. This collective knowledge is shown by a combination of relationships among different social and material actors.

In this regard, Hurley and Al-Ali (2021) explored Arab women’s online education practices and considered their use of technology such as filters and avatars, or not applying them at all. By adopting the mashrabiyya metaphor, which refers to a common Middle Eastern window design that deflects light rather than lets it in, they found silences, invisibility and disconnected responses to be not necessarily a deficit but rather refractive responses to enable students and teachers to maintain engagement.

The teachers’ cultural identity was clearly present through their physical presence in videos. Ayman expressed feeling responsible for projecting Saudi identity. The course space and videos combined to form a collective impression and to establish the teacher’s cultural and collective identity.
I know this course will be attended by different Arab nationalities. This is an opportunity to tell people who we are as Saudis. You are not representing yourself alone; rather, you are representing Saudi’s entire society. People will value the region you are from, not only you as a teacher. (Ayman)

This national identity was expressed in several ways. Hamza, for instance, expressed his patriotic pride through a map of Saudi Arabia that he used as an educational material in his course about networks and computers

In the CISCO course, a map of the world is used to explain routers and the network. In my course, I illustrated this point using a map of Saudi Arabia that showed different regions and cities in the country. I knew that there were participants from all over the world, but why shouldn’t I be proud of my national heritage? (Hamza)

The agency of the open and online space helped establish a particular identity to act for the public and wider audiences. Ayman, in his interview, described himself as an ambassador for Saudi Arabia through his online teaching. Cultural identity here is performed and presented visually in courses’ introductory videos (see Figure 24). This spatial arrangement enacts collective knowledge about Saudi culture, particularly for people who are not familiar with it.

Course videos, as the data show, enact one to many relationships and act to perform and project teacher’s identity. Knox (2014) described MOOC videos as ‘[holding] together the pedagogical arrangement in a network that is easily transported over the distances reached by Internet infrastructure’ (p. 193). The introductory video has a particular agency because it
initiates relationships beyond the course and enacts the course’s space as fluid, which allows it to include new entities from outside (Mol & Law, 1994).

Participants’ space

Moving attention to the participants’ space, I focus in this section on two MOOC components, namely comment spaces and course materials, and I show how each of these can have a role in establishing a teacher’s identity.

Comment areas and discussion forums enable two-way relationships, unlike video, which enacts one-to-many relationships. Based on the platforms considered in this study, I differentiate between comments spaces and discussion forums by their location in a course. The comments area is designed to enable participants to make comments on specific lectures, whereas a discussion forum is a more general space for all lectures that enables discussions of different aspects of a course, such as its educational content and administrative or technical issues.

According to Wise, Cui and Jin (2017), participants’ comments can either relate to the course content or be unrelated to it. However, based on my observation of the courses in my study, I have classified comments based on the actions they comprise. They can be in response to questions, they can propose external components (e.g. resources such as software), or they can consist of reports of technical issues, concerns or complaints. I noted on some platforms, such as Rwaq, the total number of comments displayed publicly in the course space for each lecture for a course. During data collection, this number of comments was helpful for me to identify how actively involved the teachers were in their courses before conducting interviews with them. Some lectures had a high number of comments, especially when the teacher would frequently reply to messages in the comments space, although the interactions could take different forms, such as direct messages. The number of comments acted as a signal to me, as a researcher, and probably to the course participants, to generate
representational knowledge about the teacher’s identity and level of engagement in the course.

In the interviews, the teachers appeared to have less agency, as they had limited control over what could be posted in this space.

No, not all comments are positive. I have come across annoying comments, but I have to be calm and hold my nerves ... because I am here to serve people and help them, but, you know, people react to even small mistakes, and they may attack you. So, even if I get a question that I have already answered, but it comes up again and again, I feel that I am obliged to reply to it. If I do not, it may create a negative impression about me as the teacher of the course. (Maha)

There is a difference between constructive criticism and offensive comments. You know you are in the online space, so this kind of comment is expected. I do not take them into consideration because I do not see myself as perfect. Even as a teacher, I have mistaken ... students in class. You should never make bad comments because you have authority as a teacher. (Liyla)

The online space leads to different relationships between a teacher and their students. Here, the sociomaterial arrangement of a course reconfigures the teacher’s agency. It also shows that a teacher’s image and reputation are linked to how they act, react to and interact with students in open spaces such as comment areas and course discussion forums. The agency of the comment space is captured by teachers by answering repeated questions and not replying to negative comments, thereby establishing the impression of being a good teacher and maintain the teacher’s reputation.

**Reciprocity**

I noticed for some courses that the interaction in the comment space generated insights and knowledge that went on to become integrated into the course. In other words, the discussion forum enacted collaborative relationships between the teacher and the course participants and allowed both sides to participate in developing the course. In the interview, Ahmad considered students’ comments as tools for development, as he had good knowledge of the
subject matter but lacked technical skills. During the course, some students helped the teacher overcome technical issues, although he did not directly ask them to do so. He singled out students by mentioning their names in lecture videos to acknowledge their contribution, whether they had asked questions or made suggestions. In the interview, Ahmad said that the idea of mentioning the students was to let them know that the idea behind a lecture was the result of the questions they had asked. This kind of reciprocal relationship performed in the comments and discussion areas established a particular teacher identity.

I recorded the videos one by one. After each lecture, I would gauge people’s reactions—their questions and problems. For instance, a student would say that the voice wasn’t clear, others would ask questions, some would make comments on the video … So I take these into consideration for upcoming videos. If I record a whole course at once, I may miss the opportunity to develop and enhance it, and it would also affect the interaction. (Ahmed)

The comment spaces construct relationships that serve to reciprocate gift-giving. While the course established the teacher as the gift-giver, the gift is reciprocated through the collaborative relationships that take place in the discussion forums and comment spaces. The teacher was projected as somebody with knowledge and the students were seen as having technical skills; their interaction allowed each side to exchange knowledge and skills in constructive ways.

Figure 25 provides an example from the discussion forum. Here, the teacher had been using an external recording device to record PowerPoint slides. One of students made a technical suggestion and attached the link to a tutorial.
Figure 25 Screenshot of comments to solve a technical issue

Student: Your performance is beyond great, and the information is consistent, structured and clear. The presentation is nice but not clear—especially the text. A small suggestion to enhance the clarity would be to use internal screen recording in PowerPoint. For more details, check out the attached YouTube link.

Teacher: Hi, many thanks. I appreciate your effort to share this link with me.

This collaboration went on to enhance the course’s production. The teacher implemented the suggested tool in subsequent lectures. This is an example of the reciprocal relationships that can take place in a course.

**Closeness**

I noticed that some teachers would adopt several strategies to create ‘closeness’ in comment areas. In the interviews with teachers, Ahmad talks about the closeness that he was trying to foster in his course. He was concerned about missing a reply to any of the comments, which might be seen as a display of superiority, arrogance or lack of respect.

I try as much as I can not to miss acknowledging any comments—even just to say thanks. If I do not have time, I at least I ‘like’ the comment and then come back to it later. I think this would show that I am not far away—I am not talking to them from an ivory tower; rather, I am at the same level as them and am here to support them.

(Ahmad)

The agency of the course space and students’ comments in the discussion forum were captured by the teacher by replying to them, which established the teacher as being close to the students.
In this regard, Ross, Gallagher and Macleod (2013) emphasise the importance of recognising the ‘nearness as effortful’ that entails a cost and demands an effort to support online student’s resilience in their engagement with the study. The nearness here is performed through the actions and relationships between social and material actors. The teachers’ responses in the interview show how their actions were performed through a sociomaterial configuration to reflect who they were and enact their subjectivity and identity.

Through observation, I noticed that one of teachers would include the student’s name in each of his replies. He mentioned in the interview that this added further meaning compared with replying without mentioning the person’s name. Mentioning the student’s name would make them feel valued, acknowledged and respected.

I believe that one’s name sounds like music to one’s ear. Mentioning the name adds further acknowledgment. (Ayman)

Other teachers mentioned that using a phone application enabled them to reply quickly and show up more frequently in the course.

Using the phone makes it much easier. While I am sitting with my family, I sometimes open the course and reply to students. In particular, there are some people who are just looking for you to acknowledge them—that you have seen their comments. You know, as a culture, we like flattery and compliments. I get a lot of compliments and praise, but if you pass over such comments without a reaction, it is like turning your face away; it portrays arrogance towards people and a kind of disrespect. (Omar)

Here, the interaction between the teacher and the smartphone enabled a new role of constant attendance to be performed, brought about closeness and projected a good impression of the teacher. As I mentioned previously, teacher image and representation here are performed through the sociomaterial arrangement of the course.

In their work, Symon and Pritchard (2015) examined connectivity and identity from a sociomaterial perspective. They argued that connection can be considered an effect of sociomaterial assemblage that establishes particular identities: being contactable and responsive, being involved and committed and being in demand and authoritative. They found that smartphones play a significant role in shaping and enacting these different
identities, as the capacity for action comes from enmeshing material affordances, human interpretations, situated practices and cultural discourses in a sociomaterial arrangement. This section shows that comment spaces and discussion forums are not just mediums for conveying educational content; rather, they shift relations, produce new ones and establish teacher identities. The data presented shows how participants’ space can redefine social interaction including respect, appreciation, closeness and acknowledgement. I now move on to discuss another component of the participants’ space.

Course materials
I now shift focus from comment spaces and discussion forums to the course materials that are provided to support and guide course participants. They can come in digital formats, including videos, presentations, audio files, reading lists as well as those that come in physical formats, such as in the case of handouts and printable materials. My focus here is on textual documents, as an example, which can have several functions in the course. They can act as the main resources for assessment or serve as additional supporting materials and activities. The agency of the textual materials, according to Fenwick, Edwards and Sawchuk (2015), relies in their ability to be available across broad spans of time and space to enlist supporters, shape opinions and behaviours and form new networks in the process.

I noticed how course materials serve and relate to teachers and their teaching. Ayman, for instance, described them as ‘touchable’, representing the only part of the course that could be felt by hand when they are printed. They can shift from online to offline and keep their form during the transition.

After I upload and publish the video lecture, I wait some time to let students watch the video, then I upload the handout to cover what was covered in the video. I think people still appreciate tangible and touchable materials. (Ayman)

In Ayman’s course, the main material was the course video, and it was supported by the printable text materials. The teacher excised his agency by arranging what came first. He provided the video and supported it with textual materials. This arrangement would lead
students to keep attending the videos. The teacher’s agency came from the capacity that the course gave him in terms of designing, managing and arranging it. Here, the textual material has an agency that may sometimes appear threatening to teachers when students overly rely on them as a primary source of knowledge.

The function of the materials used in a course can also reveal the teacher’s role. For example, if the course draws on primary resources, the teacher acts to represent the textual material in verbal and visual form. In some courses, the material acts to summarise lectures while the teacher acts as the primary resource.

The data show that this part of a course enacts extended relationships by reaching places that are not necessarily equipped by the internet and are also beyond the teacher’s agency. For instance, Hassan, as a programmer and teacher of computing, found that as technology is constantly changing, course handouts can be difficult to update after they are published. This can reach a point whereby he cannot attend to further changes.

Videos are more practical, particularly in software tutorials, than textual documents because it is difficult to update PDF files. Even when they are updated, it is difficult to deliver the update, and so I mainly provide videos for my courses more than textual material. (Hassan)

He realised that when software was updated, it would be difficult to update the corresponding textual material that had circulated and spread outside the course. Clearly, textual material has an agency that can sometimes threaten teachers if their students are over-reliant on them as a primary source of knowledge. Course content, and particularly textual materials, act as an ‘immutable mobile’ that moves through regional space while holding its shape (Latour, 2005). In this sense, the textual material is immutable, as it maintains its shape though fixed relationships that allow it to be stable wherever it moves.
Being empathetic

The immutable mobile nature of the textual materials can be part of a sociomaterial arrangement that establishes a teacher’s identity. Omar introduced a course on Arabic literature for which he provided detailed textual materials and highlighted some parts of them with colours, in addition to adding diacritics to the written text. Diacritics are special characters in Arabic that are used to clarify and illustrate the pronunciation of words. They are called harakat, which literally means movement. The textual materials provided in Omar’s course were in different digital formats (Word document and PDFs). They clearly show the effort that that teacher had put into writing them (see Figure 26)

![Figure 26 Textual material from Arabic literature course](image)

Omar explained in his interview the idea behind the textual materials in his course as follows:

Not all students are able to attend all the videos in the course. Some live in areas where the electricity cuts out frequently, while others cannot afford internet access. It may be challenging for them to attend the course videos, but they may have a chance to attend the course from time to time. These documents can help those who cannot attend all the course videos. (Omar)

The following excerpt is from a discussion forum, and it shows the role of textual materials in a course:

Student: I couldn’t watch all the video lectures ... as I do not have a good internet connection. I just watched a few of them. Thankfully, I managed to print out all the course material.
Teacher: The video provides further explanations and examples. Downloading the written documents and reading them guarantees achieving a 100% in the assessments.

A sense of empathy and understanding is provided by the action of writing and designing the course materials. The capacity of these materials to support students beyond the course and enable them to pass an assessment and obtain a course certificate with minimal online presence is entangled with teacher agency. In Omar’s case, the sociomaterial arrangement constituted the teacher’s understanding, materials, text, colour and vowels and other technological components to establish the teacher’s identity as empathetic and understanding.

**Being entrepreneurs**

As the presence of the course materials enacts extended relationships beyond the course, the absence of course materials also develops relationships and generates knowledge and identities.

In a course about learning styles, the teacher, Yusef, would explain the course content verbally without providing any text, while his eyes would move back and forth between the camera and laptop screen. In his interview, Yusef said that he had been reading from PowerPoint slides on his computer but intentionally did not show the slides during the course.

The teacher was highly engaged with students in comment spaces and discussion forums and showed a willingness to answer their questions. One of these questions concerned PowerPoint slides, as the course was presented only in the form of videos and very brief textual materials.

The following is an interaction found on the discussion forum:

Student: As a visual person, I was annoyed by the recording angle during the lecture [set to focus on the teacher and hide the materials].
Teacher: Sorry for that. If you are interested, I will do another course soon on the Maharah platform, for which nicely designed PowerPoint presentations will be used.

The following provides another example:

Student: Would you please provide us with PDFs summarising the course?
Teacher: I provided short summaries for each lecture 😊. If you are asking about the course presentation, you can find it on the Maharah platform.

In his interview, Yousuf was concerned about the intellectual property ownership of his materials.

I did it intentionally. I designed the course from A to Z, and I intended to do it as a paid course. I apologised to visual leaners, as they could see nothing apart from me in the videos. I announced my other course on the Maharah platform that would use PowerPoint slides and all other materials. (Yousuf)

Maharah, as I explained in the previous chapter, provides courses using a fee-paying model. The teacher suggests another course on Maharah on the same subject but with PowerPoint slides and detailed materials provided.

The sociomaterial arrangement in this course was free of charge, performed the goal of marketing and established the teacher’s entrepreneurial identity. I have presented the argument that gift-giving and entrepreneurship are performed through constitutive sociomaterial entanglements, rather than pre-defined ones based only on the course fee or individual intention. The entrepreneurial space here is performed by the relationships created in the course and the entanglement of the course materials’ agency and capacity with the teacher’s intention.

Course materials, as the data have shown, provide fluid components of MOOCs, as they have the capacity to establish different identities for teachers. I now move to another course space, to explore it performatively in relation to teacher’s identity formation.
Course statistics

The statistical space represents knowledge about courses, including the number of participants and completion and retention rates at certain times. A significant feature of statistics lies in their ability to perform representational knowledge outside human agency and represent what is ‘out there’ (Sørensen, 2009). These statistics can be accessed by teachers and administrators. However, platforms vary in how they present statistics, and some show the total number of course participants on the homepage (e.g. Shorfaa and Doroob, which were discussed in the previous chapter), whereas in other platforms, such as Rwaq, the statistical information is not available to the public and can be accessed only by specific people.

Teachers in the interviews referred to course statistics in different ways. For some, these statistics were a matter of pride, honour and achievement for reaching a large number of participants, while for others, they were a source of concern that caused them to worry about, for example, retention rates. Some felt a sense of commitment and responsibility from the statistics, while others used them to improve their performance and enhance the teaching outcomes.

In terms of a business model, statistics have a significant role in enhancing courses’ production and promoting income from them. Rahaf, the co-founder of Shorfaa, explained how the platform engaged with statistical data from audiences for producing and delivering upcoming courses.

The platform provides us with statistics regarding retention rate and the most enrolled courses, which gives us insight into courses’ design, production and delivery. We try to develop upcoming courses’ design, production and delivery according to the platform’s statistics. (Rahaf)

A similar point was mentioned by Jamal and Maryia, who both presented paid courses. Maryia noted that her course did not get much enrolment.
This made me want to understand why the course was not doing as well as I thought it should. I realised that I needed to learn about digital marketing and how to convince people and promote the course. I enrolled for a nano degree in digital marketing but could not complete it, as it was outside my interests. (Maryia)

Maryia’s interest was in teaching nutrition, chemistry and the physiology of exercise, which are very different from digital marketing, and she mentioned that the digital marketing course was boring and beyond the scope of her interests. She also sought a consultation from a marketing specialist. This represents the material agency of statistics, and the teacher captured it in an ‘intended form’ by engaging in learning and seeking consultation (Pickering, 1993). In this case, the assemblages performed prompted the teacher to engage in certain activities to maintain her identity as a professional and entrepreneurial teacher.

Jamal described how he responded to course statistics provided by the platform. He showed me some of the detailed statistics that he had received on his course’s video engagement (see Figure 27)

![Figure 27 Student engagement statistics](image)

Jamal explained further while sharing his screen and using a digital pointer, as follows:

Here, you can see there is a spike at 05:11. I wonder what raised the engagement at that point. What did I do differently here? Maybe I asked a question or used a
particular word. This gives me a clue that I should increase this action when designing
other videos. I do not check this frequently because the course is doing well and
producing sufficient income. But it is useful to identify weaknesses and work to solve
them. (Jamal)

The course statistics act as representational knowledge that presents what is ‘out there’ and
beyond human agency (Sørensen, 2009). The interaction between the teacher and the
statistics brings a new capacity to promote the course through teacher engagement in
marketing practices beyond the course space, such as through social media. Jamal mentioned
that he would regularly share knowledge on his speciality subject on Twitter and Instagram. I
explained in the previous chapter that the entrepreneurial space enacts a pattern of
relationships that act as ‘fire’ that holds its form by shifting between absence and presence
states (Law & Mol, 2001).

The statistics were a source of concern for some teachers. Maha, for instance, was surprised
by the completion rate relative to the enrolment rate. This raised questions regarding the
possible reasons for drop-outs and brought about the capacity for tracking an action.

The number of course participants was in the thousands, but only 600 completed it
and obtained the certificate! To make sure that everything was working well and to
exclude any technical issues, I created another account as a student just to check if
everything was working well. (Maha)

Ali was also suspicious of course statics, as the interactions did not match the enrolment
numbers.

The absence of interactions in some lectures made me worry if students could see
and hear the videos. The platform provides statistics but does not show how many
actually watch the videos. I could check this from YouTube, as the course is published
there. So I checked the viewer numbers and realised that that number did not equal
the number of participants. For instance, on YouTube, there were 137 viewers, and
the course has had 198 participants until now. It means that there are about 60
people missing. (Ali)

I would prefer 15 real attendees, rather than 2000 who I do not know. I do not know
whether they are able to hear and watch what I posted, or if they are fake. I think for
the next courses, I would include tasks after each lecture or maybe a quiz, to count real attendance numbers. (Ali)

Here, the capacity of the statistics is entangled with teacher’s agency and has the capacity for checking the validity of the course and integrating activities to promote engagement and interactions. This puts the teacher in charge of making sure their students do not encounter technical issues, even if nobody reports one. Here, sociomaterial arrangements place the teacher as an inspector.

I am totally new to the space. I have never been here before. I wonder what brings such a huge number of people to join my course, since I am not a famous person. (Yousf)

Yousf was pleased that his course had attracted such a large number of people, but at the same time, this brought about a sense of uncertainty and ambiguity. It raised the question of who the course participants were, what the space looked like and how it was constructed. Although the teacher had no previous relationship with students, the space had brought people from different backgrounds and across various locations to one space. The capacity of the MOOC digital space participates with other sociomaterial arrangements in elevating a teacher to being well-known and recognised.

**Outcome space**

In the previous sections, I have examined the agency of MOOCs’ digital components in relation to teachers’ identity formation. In this part, I consider the relations between the teacher and their overall experience of teaching MOOCs. I take the MOOC as one entity formed by different social and material relations that produces connections, activities, spaces, subjectivities and identities.

**Time shifting**

Dina is a trainer, entrepreneur and content creator with experience of in-person training. In her interview, she said:
I was thinking about designing an online course, and I finally took the decision when I was pregnant. The course was recorded a few weeks before I gave birth. I knew that I would be busy and unable to get much work done for a while after having my baby. I thought this would give me a sense of being productive, but I am not doing serious teaching tasks in reality. (Dina)

She described her personality as productive and active. Being a mother would be a huge transformation in her life. She was concerned about losing her productive professional identity. The course here performed her professional identity while she was in maternity leave. The presented identity would work 24/7 and be available everywhere.

In the previous chapter, I argued that the spatial formation of MOOCs enacts a ‘fluid’ space in the sense that it maintains continuity even with the absence of parts of it, in this case the teacher (Mol & Law, 1994). Relationships are formed by the presence of the teacher; this relates to the *waqf* concept that I discussed in the previous chapter. However, the course here performed entrepreneurial space as it continued practising the teacher’s activities as a full-time job.

For others, it takes them back to work after retirement, as Liyla expressed in a tweet:

> Thank God! It was a wonderful experience to fulfil my passion for teaching after retirement. Thank you Rwaq and all the participants who attended the course. (Liyla)

The agency of the course entwined with the teacher’s desire, shifted the time and established the teacher’s professional identity.

**Visible identity**

MOOC courses enabled the teachers to be visible online. This had implications on the way they continued presenting themselves after their courses had finished.

For instance, following her course, Sara became more active on social media, as this would enable the course she had presented to continue.
I had to create a YouTube account, launch a podcast and activate my Instagram account to be visible and allow people to know who I am and my style in teaching. If somebody is interested, they can join the course. I added the link to my profile so that people can easily join my course. (Sara)

It is obvious that the teacher’s identity and her course became integrated as a single entity. The teacher became more engaged and active. This constitutes a sociomaterial configuration of being active, visible and present that was neither performed by the teacher alone nor through digital technology, but it was constituted through multiple entities and relations.

Ownership
Ownership is defined as the possessiveness and attachment that people feel towards objects. People own things by social and market exchange; however, ownership from a relational perspective comes through the performance and effect of relationships. The interviews showed that some teachers had developed strategies to protect their courses from being exploited through plagiarism, academic integrity violations or dishonesty.

MOOC teaching constitutes a kind of ownership that comprises materials, digital technology and the teacher. The following interview excerpts demonstrate teachers’ views on course ownership.

Some platforms’ conditions do not allow the course to be published elsewhere, and they add their logo to the videos. Although the course is free, they own it by adding their logo and restricting the course to their platform. The most important thing for me is that I have full freedom over my course and can publish it anywhere, unless it is offered as collaboration between teachers and the platform. But if the course is individual-led, the platform should not have the right to have control over it. (Jamal)

I have been told that I am not allowed to post the videos on my YouTube channel or on any other platform. I felt this condition to be a little repellent. It means you want to take the advantage of me without anything in return. (Hassan)
The course was a collaboration with the platform. I have neither the technical skills nor the material to produce the course. I have to work with somebody with the necessary expertise while I focused on the material and the course content. I wish the course was free, to make it more accessible and reach larger a number of people. However, this is not my decision alone, is also the platform founder’s decision. (Liyla)

The ownership took place through a sociomaterial configuration. The course was conducted by the teacher as the owner of the course, who had the freedom to offer the course on other platforms. This feeling of ownership came as a result of a combination of relationships among social and material actors.

Conclusion

This chapter highlights the various identities of MOOC teachers as sociomaterial formations that develop through relations between the teacher and different parts of the course. This part of the analysis shifted attention from visualisations and presentations of the various Arabic MOOC platforms discussed in the previous chapter, to MOOC courses and their digital components. In order to examine the performance of different parts of the course, I introduced the representational spaces of the course, including the public space, participants’ space, statistical space, and outcome space. I then discussed each space individually while highlighting the different forms of teachers’ identities that were developed as a result of relationships between the teachers and other digital material components of the courses.

We have seen how the introductory video in the course’s public space interacts with other components to present teachers as creative, productive, professional and entrepreneurial. The digital technologies including the software used in designing videos, images and audio were intertwined with teacher’s agency to project positive impressions. The sociomaterial configuration emerged that ultimately emerged presented the teachers as error-free, modern and up to date. We also have seen how different forms of reciprocity emerge
through relationships between the social and material actors within the participants’ space, including the comments and course materials. In addition, the performance and participation of the course statistics appeared entangled with the teachers’ agency and actions. The course’s statistics and generated reports were central components in forming entrepreneurial teachers.

From a sociomaterial perspective, agency is co-constitutive, meaning that it is located neither in the human nor the material, but it emerges from a combination of both. Therefore, a teacher’s identity and subjectivity are performative and relational, rather than residing within the individual alone. According to Butler (1990, 1993), identity is ‘performative’, or a ‘doing’ rather than a ‘being’. Similarly, Barad (2007) argued that agency is a question of interacting. It is an enactment, not something that someone or something has. Drawing on this view, in this chapter, I have shown how a teacher’s agency is enacted through a sociomaterial arrangement of their courses.

Al-Mahmood’s (2011) study shows how students’ subjectivity of emotion and affectivity are (per)formed through a sociomaterial lens, rather than viewed as purely psychological states that are solely located within an individual. Mulcahy (2011) also argued that teachers becoming professional would involve them becoming relationally and contingently involved in practices that are as much material as they are social and psychological, challenging the established individualised psychological perspective whereby becoming is primarily seen in terms of the intrinsic capabilities or potentialities of people.

The following chapter will extend the discussion around the experience and identities of MOOC teachers by examining the places and materials that were participated in generating courses.
Chapter 8: Space, Material and Teacher Presence

Outdoor Recording Space and Materials

The course was self-recorded in the park close to where I live. I used to go there in early morning during the park’s quietest time and before the sun became really strong. I used my personal selfie stick to hold my phone and hung it on one of palm trees; the park is full of palm trees. So, I placed my phone on the tree – as the tree is recording me actually. My phone does not have a forward-facing camera so I wasn’t able to see myself during the recording. As I was not sure whether I was standing on the right place, I just estimated the distance between me and the camera. I did test record for two or three seconds by pressing the record button and standing in a particular place and talking. Then I checked the short video to see whether everything was ok or if I should change my position.

I found recording the course in the park interesting, especially because the topic of the course [Arabic literature] is quite serious and may not be very exciting compared to technology, sciences or other modern subjects, and on top of that, the course is free. I felt that I needed to consider the attractive factor to keep the students engaged in the course. I have found that people prefer nature to seeing walls and desk; they see green grass, blue sky, palm trees and hear the sound of birds, which made the course really attractive and out of the ordinary. The benefits were also reflected in my performance, as I felt more relaxed and focused. (Omar)

Figure 28: Outdoor filming for Arabic literature course
Introduction:

Omar’s description of his recording setting reveals the hidden actors behind the course. Although as he said that the course was self-recorded, a wide range of actors (e.g., phone, selfie stick, location, palms tree, teacher and his appearance) participated in the teacher’s performance and introduction of the course. While the previous chapter examined teacher identity formation in the digital spaces of the course, in this chapter, I consider the spatial and sociomaterial assemblage that were formed in different areas of teachers’ experiences. Here, I consider not only digital space, but also the materials beyond digital course space involved in the courses and available to the teachers. The data show that teachers performed through three main spatial formations: knowledge construction space, course construction space and engagement space.

This chapter aims to highlight nonhuman materials that took part in teachers’ experiences and examine their performativity in relation to the teachers’ presence and self-representation. I argue that teachers were performed through spatial and sociomaterial arrangements. To advance this argument, first I discuss the knowledge construction and show how spatial formations act for teachers as ‘knowing location’. Second, I examine the sociomaterial entanglements of course production and explore their enactment. Third, I explore the sociomaterial assemblage that informs the space. It will be imperative to notice the serial role of the relationships that inform the practises, teachers, materials and spaces.

Space one: Knowledge Construction

The courses presented by the teachers emerged from realising their value and importance. Teachers had different intrinsic and extrinsic motivations that compelled them to offer courses. The common theme among these motivations is their belief about the demand, importance and value of the knowledge of the course. I argue that this realisation of the
importance of course knowledge is spatially and sociomateriality performed rather than merely psychologically based. From sociomaterial understanding, knowledge, power and subjectivities are relational effects of material heterogeneity (Law & Hetherington, 2000, p37) that act as human ‘knowing locations’ or ‘points of surveillance’ because they are ‘at the right place in a network of materially heterogeneous elements’.

Hetherington and Lee (2000) introduced the notion of ‘blankness’ in order to draw attention to how empty spaces can be a pivotal contributor to action. Similarly, Sørensen (2009) found in her analysis that blankness and empty space made crucial contributions to fluidity, creating constant need for filling the blankness. In this sense, blankness performs an action by motivating the human to fill the blank space. The concept of blankness appeared in different forms in the interview.

**Lack of Arabic Digital Content**

What inspired me to do this course is that there is no sufficient Arabic online materials about networks. When I was doing my masters, I noticed the weakness of Arabic online resources on the subject of networks. Recently, I looked up ‘IPv6 address’ on YouTube, which is a well-known term in networks. Searching in English brought up plenty of videos; however, when I researched in Arabic, I got only one video and it didn't provide in-depth information. The dominant online material in the English language makes me feel that, as a specialist, I need to do something. (Hamza)

YouTube acted to draw the teacher’s attention to what was missing. The social and material here performed ‘realisation’ and enacted a sense of responsibility that drove the teacher to introduce the course.

I am one of first to offer this course in Arabic. You can look it up on Google, and it will show you my name as first to introduce this course. I think this is what brought a lot of people to join the course, as there is not sufficient Arabic information about this topic. (Maha)
Here, the lack of Arabic content on a specific topic not only performed for the teacher as knowing but also as the ‘first’ and ‘initial’ person to introduce the course. In this sense, the ‘recognition’ can be understood as performed as an effect of assemblage.

I have been writing posts and articles on my blog over the last five years. I am also active on social media, particularly in sharing this topic, and noticed people’s interactions, which exceeded my expectations. This indicated the crucial need for such a new approach in presenting this subject and made me feel morally responsibly, as a specialist, to introduce a completed course. (Ahmad)

Here, the scarcity of Arabic digital materials created an opportunity for educators and specialists to engage in introducing an online course and produce Arabic educational materials.

**Physical place is missing**

Another form of ‘blankness’ came in physical space form. Unlike the previous examples, where the knowing was performed in online spaces and through search engine tools, blogs, and Twitter interactions, in the following example, the knowing was enacted beyond online spaces but the response came in MOOC form.

Ali is an academic lecturer in linguistics and has a leadership position at a Saudi Arabian university. He introduced a course about writing skills on the Rwaq platform. The course addresses the most common errors in spelling and punctuation and frames these issues into three main writing principles. In the course, Ali said that undersetting these three rules can be helpful to guide the learner to overcome the most common spelling errors.

During the interview, Ali justified introducing this course, as he noticed common spelling mistakes all the time from undergraduate and postgraduate students, teachers, academics
and even specialists. The pervasiveness of the issue made him think about the possible causes for it being so widespread, as it seemed unrelated to the level of education. It also raised the question of what knowledge he had that related to this matter and how it could be beneficial and accessible. His speciality in the Arabic language made him aware of what already existed on this topic, so he tried to be creative and introduce the knowledge from a new perspective.

When you recognise that you have something others need, it becomes a duty to provide it! This is a moral commitment more than a professional one. (Ali)

Here, the social and material arrangements set the teachers in a network comprised of students, academics, emails, letters, assignments and dissertations, which positioned the teachers as knowing what the issue was and what action was required. The teacher in the previous example responded by introducing a MOOC, as no physical space suited the needs of the course, as the topic was not aimed at a narrow audience; rather, it needed to be accessible to anyone interested in learning strategies to overcome spellings issues. This also shows that the sense of responsibility is spatially and relationally performed.

As the interview excerpts show, the MOOCs they introduced were enacted as responsive space to what is missing. The empty space or ‘blankness’ (e.g., Arabic digital content, physical space) are spatially constructed and act as pivotal contributors to taking an action and for the teachers to perform as ‘knowing locations’.

McGregor (2004) redefined pedagogy as the enactment of knowing locations, rather than simply focusing on individual cognitive gain or collective participation, arguing that knowing location is not necessarily human alone. She traced how the teacher as knowing location is produced in science classrooms through ‘the laboratory, with its electricity points, water and gas lines. The Bunsen burners and flasks set up by the technicians, who have also ordered and prepared the necessary chemicals according to the requisition sheet, the textbooks and
worksheets that the students are using. Mobilised also are the teacher’s experience and education. These are further affected by networks of activity that composed and timetabled the student group in a particular way and allocated the teaching assistants’ (p. 366).

Space Two: Course Production

We now turn our attention to the second space, where the course contents are produced. This space accommodates activities related to course design, such as preparing course transcripts, course materials and recording videos. The interviews reveal that teachers adopted a wide range of materials and digital technologies to present the course and themselves in a professional way. This created assemblages of social and material actors where boundaries and agency were negotiated. In the following, I present three different cases and highlight the performance of constitutive entanglement.

Motherhood, Teaching, and Distributed Materials

Sara is a mother, handcrafts and YouTuber and designed a MOOC about sewing and making dolls on the Shorfaa platform. Here, she recounted her experience recording the course:

I am a mother, and I work from home. I started recording videos using available resources and materials, and it developed gradually. I was using my personal phone, and then later, I bought a camera. I used to record videos in the entrance of my home, where the light was perfect. Obviously, this place is not prepared for work. So, I used paper backgrounds to cover the floor, set items on the floor and put the camera to record from above.
The recording here is performed through the sociomaterial arrangement of teacher, recording devices and wall papers (Figure 29). This portable workspace – ‘hummable studio’, as the teacher called it – consisted of heterogeneous networks that suited the teacher’s conditions, allowing the performance of a professional identity through affordable materials and devices.

In videos, the focus is on my hand. I made these sleeves that I can wear when I record, as I do not have a lot of long shirts. I made them by cutting t-shirts and use them to cover my arms during recording... instead of changing my clothes every time or putting off recording when clothes are in laundry. I preferred to cover my arms because I do not usually show this part of my body in public spaces. I mean out... like on street and in front of strangers... Most of the clothes I wear at home are short sleeves. I do not have a lot of long-sleeve shirts. So, I made these particularly for the purpose of video recording.
These practices and the experience made the teacher develop new materials that facilitated shifting between the personal and public space (in this case, digital space). The agency of the video produced material ‘Sleeves’ to be used particularly for the recording process, see Figure 30. It is useful and practical but just for one situation (filming) and useless for other purposes. This shows how digital technology blurred the line between the personal and professional spaces and produced a new object that assisted the mother in performing as a teacher.

As I have other responsibilities, and I share the space with my family, I realised the importance of having a routine and dividing the work into small tasks, which makes the work much easier for me. I divided the process of producing videos into two stages. The first stage is filming without adding my voice. The second stage is recording my voice and adding it to the video file using iMovie. I like to do this in the evening when my children are sleeping, as the headphone and mic I use attracts even fine sounds and background noise from the next room. I also had to turn the air conditioner off during video recording to reduce noise.
The sociomaterial arrangements allowed the teacher to perform her motherhood identity and professional identity in one space by distributing the tasks throughout her day instead of having fixed work hours. Filming didn’t require a particular condition; however, recording the voiceover required quiet. The iMovie app made it possible for the teacher to record them separately and combine the visual and voice recording in one file, Figure 31.

The sociomaterial assemblage blurred the line between the personal and professional space and performed for the teacher as ‘on-off mode’ by distributing work hours throughout the day.

**Entrepreneurship, Space and Materials**

Jamal works for a company and also introduced fee-paid online courses in his interest in ‘sketchnoting’. In the interview, he describes his working pace and showed me some pictures, see Figure 32, for example. He dedicated a small room to teaching-related activates and equipped the space with several devices, materials and advanced technologies.
The space is very small, probably $2 \times 4$. I tried to arrange the space in a way that keeps everything I may need for recording, reading, and editing, and other activities. Although small, it serves me in many ways. I use the space at the back as storage for what I need; this is inks, pens, electronic tools, mics, and a camera, and the black box underneath each box is labelled with what stuff is inside. I know exactly where everything is located. This helps me to manage my time. I think a small space is better than a large space, as it forces me to tidy things up regularly to create space for working. Regular tidying up also makes me prepared; if I am invited to complete a live session, I can be ready in half an hour. I have a camera, mics, the light is available and installed... everything is set up and I can do a live session immediately. (Jamal)

This small, packed space is interesting, as it makes the teacher ready all the time (Figure 32). Unlike the previous case, where the materials moved and were distributed in the teacher’s home, here, the materials are organised and located in one place. The other side of the room shows the books on the shelf—organised by colour, see Figure 33. The teacher creatively displayed the books based on their colour to make them visually presentable in the background of the videos.
Jamal showed me some tools that are used specifically for teaching, such as the flip chart and the white graphic board, called Graphic Wally, which is paced on the wall with a fixed base. There are some tools he never uses but bought in case he needed them in the future. These tools engage the teacher to find a place to implement them in teaching.

My daughter is just three years old, and she does not understand that I have work and need a quiet space. The echo made the noise unbearable. The first thing I did was search on Google for a solution. I found that the first step is to locate the source of the noise. The wall is made of gypsum board material and already has insulation. I then realised that the sound comes from the door; especially around and underneath the door, there is a space where the noise comes through.

To hide the noise, I play white noise. ‘Alexa, can you play me some white noise please?’ [Alexa played white noise music from teacher’s Amazon music account]. This is another thing I often use to hide the noise. Even if somebody is screaming in front of the door, you cannot hear it.
The teacher used special material to seal the door and added white noise in the environment, see Figure 34. These materials separate two spaces and makes each accommodate specific tasks: the family space and workspace. This made it possible for the teacher to be focused and isolated and engage in teaching activities, designing courses, reading and researching and, at the same time, allowed the children to play and be active. He mentioned the role of the white noise in hiding the background noise and giving his voice power over other surrounding noises. He also used smart speakers, which are distributed in his home to facilitate communication with his family.

The sociomaterial arrangement here performed as a ready teacher and regional space (Mol & Law, 1994) that separates the personal identity from the professional identity.

**Materials and Professional Identities**

The third theme in the course construction space is the performed professional identity of the teacher. The following are three examples.

Eyad works as barista in a coffee shop and delivers courses in coffee-making. He introduced a course on the Rwaq platform about the principles of coffee-making. Figure 35 shows some pictures from the course. The materials required for this course located the teacher within heterogeneous networks of materials that performed his professional identity.
This course targets people who are interested in coffee making. It was recorded in the coffee shop where I work. It was offered for free on the Rwaq platform. I did not pay for particular material for the course because what I needed was already there.

Although the course was offered free of charge, it enacted marketing space, as the recording promotes the coffee shops. The logo also appeared on the food menus board and the barista’s t-shirt. As I argued elsewhere, the gift-giving and entrepreneurial spaces are performed, emergent and overlapping and the relationships between them are complex.

Similarly, Yasmine appeared in course videos in a flower shop, see Figure 36. In the interview, she explained further that it is her own flower shop:
I have never thought about why I recorded the courses here in my studio, but I think this is rational... the place where I feel comfortable and connected... this place is part of who I am. Although sometimes I get annoyed by the noise of cars passing on the street or the air conditioner. But I never thought to change the place and record elsewhere. It feels like my home.

The sociomaterial arrangement performs the teacher’s professional identity. The sense of belonging she described is spatially and relationally produced.

The data confirmed that sociomaterial arrangement, including materials, digital technologies and place, were all interwoven with the teacher and contributed to producing the teacher’s identities.

During the COVID-19 lockdown, universities and schools were asked to shut down, and learning and teaching took place online. Several studies were conducted to examine the spatial formation of the pandemic on teaching and learning activities. Gourlay et al. (2021) explored how spatial, temporal, material, digital and personal boundaries were negotiated. They argued that sociomaterial arrangements in teachers’ day-to-day practices played a significant role in ‘maintenance, negotiation, establishing, and also breaking down of a range of boundaries, which may be spatial, temporal, material, habitual, and personal’ (p. 387). Nurse & O’Neill (2020) also explored academic experiences during COVID-19 and how teachers reconfigured their living spaces to create workspaces. Gourlay (2020) questioned the location of the university during the lockdown, as educational activity continued while universities were closed. Pischetola et al. (2021) introduced the notion of ‘material moment’ and explored how the lockdown showed the agency of digital technology, which is perceived as invisible. Although the COVID-19, which is characterised by its urgency and uncertainty, is different from the cases of the teachers in my study, who were not under the same external pressure, the point here is that these spatial formations constituted by human and nonhuman actors perform as action.
Space Three: Engagement Space

We move our attention now to the engagement space, which in the previous spaces consisted of heterogeneous networks of relationships among different social and material actors. I have presented this in a previous chapter as formed of a teacher’s identities, enacted though participants’ spaces, discussion forums, course comment sections and other actors. Here are some quotations from the interviews illustrating how the engagement space was performed in the courses.

After the first week, I felt like I was very distant from those people. I do not know who they are and where they are, and they may feel the same. We arranged live session meetings announced ahead of time... I think this is very important to create a community. Sometimes, in such digital environments, it is easy to prejudge people, as their bodies are absent... which can create a gap, distance and separation... They also need to know each other to feel safe by sharing common intentions and interests, regardless of our differences, such as nationality, race and religion... This allows something to connect us; we all share the Arabic language after all. (Liyal)

The teacher described the gap and separation that often occurs in a digital context as ‘puzzle’ and ‘fragments’. The engagement was performed through the action that emerges through spatial formations.

Engagement appeared in the data in the form of relationships between the teachers and the materials and digital technologies adopted. For instance, Jamal showed me the camera he used, which can be twisted and directed to different locations (Figure 37).
This camera can be twisted and directed to the workspace or my face. When I want to send an important message or make an important point relating to life in general and not drawing and sketching, I switch the camera to capture my face, so people can get engaged with what I am saying. I sometimes use two cameras and then make the shift using editing software.

The engagement here was enacted by relationship between the teacher and other materials used.

What makes the process easy and the response quick is that I have the Rwaq application in my phone. Once I have free time I check the course and replay questions, I do not wait until I get home or to the office to check the course; even during my holidays, I am present in the course (Hassan)

The application and the phone here played a central role in making quick responses but also blurred the line between personal and professional space. Lamb (2019) argued that the flow of data has allowed a single environment to accommodate a variety of formal and informal activities at the same time, regardless of whether it was designated for teaching or relaxation. His study showed how classroom and campus conceptual boundaries are being reshaped by digital technologies.
Conclusion

This chapter discussed teachers’ experiences from the perspective of the materials and places that were part of the course design process. While the previous two analysis chapters shed light on the digital components of the platforms and courses, this chapter was concerned with the materials and tools that were essential to forming the teachers’ experiences. The data highlighted the fact that courses and teachers emerged mainly from three spaces: knowledge construction, course production, and engagement.

The first space is sociomateriality constructed to produce the teacher as a ‘knowing location’. The teacher’s motivation to design and deliver MOOC appeared to be the outcome of relations between the materials and the teacher. The sociomaterial arrangements produce a kind of knowledge that motivates teachers to take actions and make responses in the form of designing and introducing the course. The second space is the course construction space, which allows teachers to shift between different personal and professional identities. The spaces of constructing the course were also spaces to perform other actions such as parenting and working. This shows the flexibility and fluidity of spaces formed through sociomaterial arrangement. The third space is the engagement space, which allows teacher to react and respond to what might come up in the courses. The digital technology and materials that take part in producing theses spaces participate in enacting teachers and spaces that can be characterised as fluid, dynamic and evolving.

Examining the teachers’ practices allowed us to see how digital technology and materials were acting alongside the teachers to construct the gift and entrepreneurship modes of MOOCs. The gift appeared to be spatially and sociomateriality constructed rather than socially and personally centred. I demonstrated earlier how certain Arabic MOOC platforms, such as Rwaq, produce teachers who act to share their knowledge as waqf and zakat rather than simply viewing teaching as a job at academic institutions. The data also indicated that entrepreneurship was enacted through a heterogeneous assemblage of tools, places,
platforms, as well as digital, social, and contextual components. Each of these individual components does not have the agency to exert force; rather, the performative action of establishing an entrepreneurial model was enacted through assemblages.
Chapter 9: Conclusions

If space is the sphere of multiplicity, the product of social relations, and those relations are real material practices, and always ongoing, then space can never be closed, there will always be loose ends, always relations with the beyond, always potential elements of chance. (Massey, 2005, p. 95)

This research explored MOOCs, and teachers’ experiences of creating and teaching them, in a cultural context. I observed MOOCs on several Arabic platforms and interviewed MOOC teachers in Saudi Arabia, taking a sociomaterial approach. This approach acknowledged the entanglement of society and materials in shaping practices and producing identities and spaces.

Building on the research data and theoretical framework, this thesis argued that technology and culture are profoundly intertwined and shaping each other: MOOCs are shaped by digital technology, materials, culture and policy, and are also enacting spaces and identities in Saudi Arabia. Specifically, I identified and explored forms of gift-giving and entrepreneurship in Arabic MOOCs, investigating how these forms emerged and what they can potentially produce.

The nature of online and digital education in Saudi Arabia is influenced by a national vision that is centred on a knowledge-based economy and neoliberal ideology. Within this, MOOCs are perceived as an instrument to achieve the vision and promote the Saudi economy (see Chapter 2). This instrumentality, however, is complicated by contexts of gift-giving in Islamic culture. Gift-giving has been addressed in a range of literature from a humanist and social perspective (see Chapter 3), but giving in the form of zakat and waqf provide an additional, and alternative, perspective on how reciprocity, knowledge sharing and relationality emerge in Arabic MOOCs. Arabic MOOC platforms have been underexplored in the international MOOC research literature, and the complex interconnections between entrepreneurship and gift-giving they enact can offer researchers a valuable lens through which to examine open...
and online education in an Arabic context, and look for meaningful ways to analyse the impact of culture on MOOCs (and vice-versa) in other contexts.

The complex relationship between culture and technology was revealed in this study through theoretical foundations of post-humanism, sociomateriality and spatial theory. In contrast to the humanism of most MOOC research to date, these approaches are grounded in a relational ontology that shifts the focus from entities to the relationships established between them. The relational view recognises the materiality of practices and decentres the human subject (see chapter 4). The sociomaterial approach attends to the complex relationship between human and non-human agencies that are prevalent in MOOC teaching practices. Additionally, in this study it offered an alternative understanding of key concepts of teacher identity, agency, ownership, gift-giving and entrepreneurship.

The inception of Arabic MOOCs was sociomaterially and spatially constructed, and a spatial formation was enacted by MOOC platforms that created and occupied gift-giving and entrepreneurial space in topologically complex ways: shifting, changing and overlapping. Teachers and MOOCs were relationally entangled in four representational spaces: public space, participants space, static space, outcome space. Different teacher identities, including professional, authentic, empathetic, productive and creative, were displayed in each of these spaces; as such, these forms of teacher identity have been enacted in Arabic MOOCs. Beyond the digital environment of MOOCs, other materials and digital technologies are entangled with MOOC teachers to generate their teaching identities. I introduced three main spatial constructions among teachers: knowledge construction space, course construction space and engagement space. Digital technology and material were acting in producing these spaces and forming the gift and entrepreneurship modes of MOOCs in the Saudi Arabia context.
Contributions and implications

This research adds significant knowledge about MOOCs, their teachers and spaces in a cultural and digital education context. It challenges the common understanding of MOOCs, namely that they are promoted as being universal and global, by presenting an alternative evidence-based perspective. This thesis examines MOOCs and their teachers from an under-represented culture. The findings show that MOOCs are profoundly shaped by Islamic culture, education and policy in Saudi Arabia. I argue that MOOCs are never socially separated, natural and global; rather, they are entangled with social contexts and are active and regionally formed and produced.

The findings of this thesis also show that MOOCs have cultural implications in Saudi Arabia. The entanglement of MOOCs with the social environment has led to a digital space for Islamic giving practices, such as of waqf and zakat of knowledge. Digital gift-giving from a MOOC perspective is enacted by a combination of relationships among digital technology, materials and society. The thesis presents the argument that culture is inherently integrated into technology, and that this has cultural and technological implications.

This thesis also offers insights into how teacher identity is displayed through MOOC teaching practices. The interaction between teachers, materials and digital components of MOOCs enacts different forms of teacher identity, such as a gift-giving teacher or an entrepreneurial teacher. This thesis argues that MOOC teachers are not simply a medium for delivering educational material; rather, they are entangled with other non-human components which result in producing their identities. I argue that a teacher’s identity can be seen as it is performed through sociomaterial arrangements, including the digital components of the course. Several forms of MOOC teachers’ identities have been identified in the Saudi Arabian context.
Saudi national policy, the neoliberal direction of the country, and technological evolution have implications for both MOOCs and teachers. MOOCs generate entrepreneurial spaces in which individual teachers can competitively engage in teaching and present their professional identities. This thesis argues that MOOCs should not just be seen as tools operating under the neoliberal template; rather, they are entwined with policy and produce new entrepreneurial spaces and identities. From a spatial perspective, the entrepreneurial space enacts a spatial formation that can be characterised as a fire that enables teachers to flicker in and out to form the course space. The entrepreneurial MOOC model depends on its ‘constancy’ in terms of the flickering patterns created by the shifting ‘presence’ and ‘absence’ of teachers.

These contributions invite us to rethink MOOCs by considering the context as well as the materials and digital technology involved as active actors. MOOCs comprise a complex area constituted by multiple human and non-human components that requires a combination of students, materials and technologies while also generating different spaces, times, and relations. This dynamic nature requires different and critical approaches to researching MOOCs by moving beyond the early promises of MOOCs as effective, global, massive, open, self-directed and valid in every place and time.

Saudi Arabia is clearly showing its commitment to providing robust education opportunities by investing enormously in the digital education sector (discussed in Chapter 2). In light of the contributions introduced by my research, I argue that instead of thinking about ways to enhance integration and the adoption of technology by designing MOOCs to generate certain outcomes, we should question the implications that come out of technology, materials and social arrangements. As Sørensen (2009) claimed, the question of whether certain technology meets human aims should be replaced by inquiring about the practices created by this sociomaterial arrangement, the knowledge that is produced, the type of students and teachers who are produced and what sort of learning is accomplished. Taking this stance can
deliver a better understanding of the results of our significant investment in educational technology.

Although critical research on MOOCs has emerged in recent years, the human-centred view is still dominant not only in MOOC research but also in that on digital education in general. The issue with this stance is that it allows minimal engagement with the context, assuming that is separated, unrelated or privileged. The insights raised in my research have implications for the way that digital education should be researched, particularly in regions in which the social, cultural and traditional play a distinctive role in practices. Selwyn (2010) argued that a critical approach requires the development of educational technology analyses that are context-rich, rather than context-free. In my research on MOOCs and their teachers in Saudi Arabia, I show how cultural, political and economic status and MOOC projects are entangled and shaping each other. MOOC projects in the Saudi Arabia context have created a competitive marketplace where individual teachers present their professional identity. They also produce teachers acting to share knowledge as a gift rather than teaching knowledge as a job. This produces a regional understanding of MOOCs that I have shown in this research. There is a crucial need to have a comprehensive approach in educational research that pays attention to the context, as is done already with digital technology to address issues exacerbated by it, such as inequality, neocolonialism and neoliberalism. Our knowledge of MOOCs has changed since the MOOC project’s inception thanks to critical MOOC research. However, we do still have a partial understanding of the implications of MOOCs and other education technologies that cannot be addressed without considering the context.

Furthermore, I argue in this thesis that the gift-giving and entrepreneurship spaces I describe are not distinct nor predetermined but are intersecting and overlapping. In recent years, the sharing economy (or gig economy) has become prevalent, allowing people to make collaborative use of under-utilised inventory through fee-based sharing by using digital platforms or mobile applications that connect consumers to a service or commodity, such as Airbnb and Uber (Cockayne, 2016). Zervas, Proserpio and Byers (2017) pointed out the
inter-relationship between, and ambivalence among, the social and economic nature of these enterprises’ platforms. This confirms the complex relationship between gifting or sharing and entrepreneurship. In the context of MOOCs, I demonstrated how these models of MOOCs are emerging as an effect of assemblage, rather than being defined merely by MOOC providers. Additionally, it appears that these gifts courses have ‘fluid’ characteristics that hold various meanings and generate multiple practises and spaces. They also maintain continuity through constant change and do not collapse if some components abruptly fail to exist, such as when a teacher is absent or dies.

In the MOOC context, some MOOCs act as gifts; however, these also occupy the business space and vice versa. For instance, Figure 38 provides an example that shows how course fees are presented on the Shorfaa platform as gift cards that can be purchased and sent to others.

![Figure 38 Gift cards on Shorfaa platform](image)

Here, the gift concept is used entrepreneurially, which potentially generates a new understanding of the gift and online education. Presenting courses as objects that oblige the recipient to enrol in one or more courses on the platform to make use of them has implications for the aims and meanings of MOOCs. This research points out the intersection between the gift-giving model and the entrepreneurship model in digital education and redefines them as a set of sociomaterial arrangements. It has implications for considering technology and materials as an active factor that inherently integrates with the social factor in shaping MOOCs.
On a personal level, this research has taught me to be more tolerant and accepting of the uncertainty, messiness and ambiguity of reality. It has made me more aware of the influence of materiality in education beyond human expectations and intentions. It has broadened my perspective on digital and human relationships and the performativity of materials, and it has stimulated my critical thinking. In the future, I aim to engage in critical digital education research about open online education, MOOCs, technology, space, identity and culture in general and in the Arab context in particular.

Limitations and challenges

This research makes a significant contribution regarding teachers, spaces, culture and technology in the MOOC context. However, it does not present generalisable findings. Relational ontology views the world as being constantly evolved by relationships; thus, it cannot be captured by rigid methods or produce a general claim. According to Law (2004), our world is defined by complexity and multiple realities undermining the attempts of conventional social research in an effort to provide clarity and order to our surroundings. The findings presented within this thesis were formed through in-depth observation of the courses and the state of Arabic MOOCs, and considerable time was spent reading the relevant literature and about relational methodology and sociomaterial theories in addition to conducting in-depth interviews with MOOC founders and teachers. This generated data in multiple forms, which informed my thinking and allowed me to construct the presented arguments. This study is concerned with Arabic MOOCs for teachers in Saudi Arabia, and while the findings may not be applied to other contexts, it has brought valuable knowledge to confirm the dynamics, variety and complex nature of MOOCs that are enacted by sociomaterial assemblage. This will certainly inform our thinking about MOOCs and can guide MOOC researchers to pay more attention to the context and the materials, which are often currently neglected in MOOC research.
The data generated by courses and teachers involved in the study were contingent on the specific arrangement of social and material actors during that period of my fieldwork. The way the courses were sampled was shaped by the time scheduled for data collection. Only courses that were running were sampled, so that their teachers were taking an active role in those courses. This may have an implication on the data produced by the research; if the fieldwork were conducted at a different time, it would definitely have produced different data, and I also would have engaged differently with it. In a later stage of my study, I noticed that a new MOOCs had started to emerge, particularly with the appearance of business-based platforms that facilitate designing individual-led online courses such as Teachable platform and the implication of this in informing online teaching and teacher identities. I noticed that I had become more aware of the direction and development of MOOCs during the fieldwork and even after it. These observations were shaped by a specific set of subjectivities.

I also noticed that in later interviews, I paid more attention to teachers’ interactions with the materials and digital technology, and I asked detailed questions about their working spaces, day-to-day routines and course recording settings. This was because my thinking had been shaped by the initial interviews and the observations I had made from early courses. I discussed my paradigmatic position in Chapter 5 and emphasised my understanding of my position as a constitutive component of the research intertwined with multiple other human and material actors. This means that I consider myself as neither objective nor subjective but in the process of ‘becoming’ with the research and being shaped by it. The point here is that if the research had been conducted by another researcher, in another context or at a different time, it may not have produced similar findings. This research was enacted by a combination of relationships among different social and material actors.

In terms of the challenges I faced while conducting this research, as I discussed in Chapter 5, these were mainly related to the theoretical approach and the translation work. There is a common agreement that sociomaterial researchers face ongoing challenges in terms of
methodology and dealing with the data (Fenwick & Landri, 2012). In my own experience, I encountered difficulty attuning my senses to invisible relationships between actors involved in practice. By spending a significant amount of time reading about sociomaterial methodology, and with practice, I came to be in a better place. Observing the performativity of materials opened my eyes to numerous interactions and relationships and revealed the reality to be inextricably related. Furthermore, I was challenged to develop research tools, including interviews and observations, to be compatible with my view of reality as emergent, messy, entangled, and beyond humanist assumptions. This created the difficulty of not knowing where to start and when to stop, as all things seemed connected. I also encountered challenges in developing and searching for approaches to evaluate the validity of my research and defining my position as entangled with the research rather than being positioned outside of it. As expected, this had implications for the research practices.

A further challenge concerned the interviews and how to situate teachers’ opinions about their experience in my relational approach. I was careful not to privilege humans over the materials and vice versa. I learnt that what teachers said and how they acted during the experience were not necessarily identical. This does not mean that they were fabricating their responses, but they may themselves not be aware of the power relations enacted by the materials. I had some images from the teachers depicting how they engaged with materials beyond the course, but there were few of these compared with the verbal descriptions the teachers provided in the interviews. Including more visual data about constitutive entanglements that are productive but often invisible in the courses would be beneficial.

**Future research**

Based on my research that combines education, technology, identity, culture, religion, space, gifts and entrepreneurship, I would recommend future work on the following areas that may serve as productive avenues for further exploration.
This thesis explores Arabic MOOCs in Saudi Arabia and provides fruitful insights. I recommend more MOOC studies from under-represented contexts. There is a significant lack of understanding about MOOCs that results from too much attention being given to those in specific dominant contexts while neglecting non-dominant ones. According to Said (1978), post-colonial understanding recognises that the West, a dominant culture, produces knowledge about the East, a subordinate culture, and dictates who has the power to produce knowledge about others. Adam (2019) argued that coloniality and inequality is embedded within MOOCs through digital neo-colonialism. Bali and Sharma (2017) also criticised MOOCs for upholding Western ideology, having come from elite Western and mainly English-speaking universities. Although MOOCs have been introduced in other languages to meet the needs of non-English speakers, ‘the methodological and intellectual orientations of the English-speaking academic culture’ (Altbach, 2014, p. 6) persist. We need to know more about what MOOCs do, not what they promise to do. This would be possible if more researchers of under-represented MOOC contexts were to approach MOOC from a critical perspective. To date, most MOOC research has been conducted in the United States and European countries, with less from Africa (Rasheed, Kamsin, Abdullah, Zakari, & Haruna, 2019) and Arab countries (Almansour, 2020).

In Chapter 6, I show how space is performed through MOOCs by drawing on social topology and analysing visualisation and promotion by Arabic platforms in addition to presenting the participants’ interviews. The data showed several MOOC spatial enactments, mainly in the gift-giving space and the entrepreneurial space. Spatial theory can be effective for investigating educational practices and addressing educational issues beyond individuals and interpretations of their experiences to attend to the arrangement of human and non-human entities where particular spatial education practices are enacted (Fenwick, Edwards, et al., 2015). Space is still under-theorised in the MOOC domain (Jeremy Knox, 2014b), and there is a need for more studies that examine MOOCs from spatial and relational perspectives. According to a systemic review on MOOC research conducted by Meet and Kala (2021), 70%
of empirical studies were descriptive and adopted quantitative methods. I do not underestimate the value of quantitative MOOC studies; however, I claim that each MOOC is constituted by a combination of various human and non-human components, and such complexity requires in-depth investigation. I have adopted sociomaterial approaches in my study, but other critical methodological approaches can generate a productive discussion about MOOCs.

As new forms of online platforms for learning and teaching emerge, I recommend studying the spaces and the identities they adopt. I claim in my research that the platform is not passive and is more than a means to transfer educational content; it has significant actors who influence teaching and learning and perform particular operations (Decuypere, Grimaldi, & Landri, 2021). It generates overlapping gift-giving and entrepreneurship spaces, as I argue in my thesis. It would be beneficial to explore the relationships between the online platform and neoliberal orientation that is taking place worldwide. Vallas and Schor (2020) examined how platforms reconfigure employment and the labour market and perform different tasks. They found that social media network platforms produce content creators and influencers. Duffy (2017) termed this work ‘aspirational labor’; it is frequently offered free in the hope that the creator will become sufficiently well-known in the attention economy and develop a steady source of income. More educational research would be valuable for knowing more about the impact of the technology in potentially reshaping education.

Regarding the Arab context, I would recommend further research to consider the richness of the culture and go beyond an optimistic and enthusiastic view of the technology. There is a need to investigate the intersection between technology and the social and cultural aspects of it and its role in reshaping identities, spaces and practices in the Arab context. For instance, Abokhodair and Hodges (2019), in their exploration of how Arab social media users conceptualise ‘privacy’, found that it is a dynamic concept related to the fluid production of identities in online spaces (further research examples found in Chapter 3). I would recommend more studies investigating identity formation in the Arab online digital context.
I propose future work on the intersection between religion, space, digital technology and materials. Digital religion studies in particular examine how online and offline religious spaces and practises become bridged, blended and blurred (Campbell & Evolvi, 2020). Technological developments open up new spaces for the practice of religion, as well as for the formation of identities and communities. Bellar (2021) adopted the concept of affordances to explore how Muslim mobile app users would engage with prayer rituals in mobile space. The findings show how affordances are constructed through increasing adherence to religious rituals and practices, rather than by creating a personalised ritual practice through the app. The app formed affordance to coordinate their daily lives, during which prayers must be performed. I would recommend examining the implications of some materials designed specifically to be adopted for Islamic practices, such as an electronic Quran and Quran digital reader pen, which are increasingly used in educational settings. It is worth exploring how these materials act and what they performed from sociomaterial understanding. (Hutchings, 2017a, 2017b) pointed out that as digital technologies have increasingly become an extension of ourselves, are embedded into our day-to-day routine and house increasingly personal data, our devotion to these can be seen as a way to enact a new sense of personal and spiritual identity.

In Islamic societies, there is a noticeable emergence of online communities such as schools for memorising the Quran, known as ‘Dar Tahfiz al-Quran’. These communities are constituted through video conferencing software, online platforms and phone applications to facilitate synchronised interaction between the teacher and students. It would be useful to examine spatial formation constituted by combinations of human and non-human actors in this case. Evolvi (2021) pointed out the usefulness of examining online communities of Muslims who live in non-Muslim countries and adopt the Internet to create communities that are absent in their local environment; this may also be useful for exploring social inequalities and space in a practical way.
My research highlights the intersection between technology and concepts of giving in the Islamic religion and how MOOCs produce spatial formations that act as *waqf* and *zakat*. Although giving practices are increasingly appearing digitally and online, this area is still under-researched (Alshaye, 2017). *Waqf* has become entangled with designs, code, algorithms and software and appended in the form of social media accounts, phone applications, online courses and digital books, and it is still continuing to evolve. I would recommend studies to focus on Islamic giving principles in a digital environment and how these relate to education and teaching practices. It would be beneficial to explore how technology has blurred the line between entrepreneurship and gifts and the potential implications of this intersection.
Bibliography


About Maharah. (2022). Retrieved August 1, 2022, from https://www-maharah-net.translate.goog/pages/about?_x_tr_sl=ar&_x_tr_tl=en&_x_tr_hl=en&_x_tr_pto=sc


Al-Ali, K. (2022). To see or not to see; the withering boundaries of invisibility: A novice Kuwaiti tutor’s experience of teaching online. *Studies in Technology Enhanced Learning, 2*(2). https://doi.org/10.21428/8c225f6e.16fb2902


Alanizi, J. (2020). EFFECTIVENESS OF MASSIVE OPEN ONLINE COURSE (MOOCs) IN NATIONAL IDENTITY REINFORCEMENT AND IMPROVEMENT OF MOTIVATION AMONG UNIVERSITY STUDENTS. *The Islamic University of Educational and Social Sciences*, 3.


Manifesto for Teaching Online. In The Manifesto for Teaching Online. https://doi.org/10.7551/mitpress/11840.003.0001


Doroob Program - Tawteen. (2021). Retrieved April 18, 2022, from https://doroob-sa.translate.goog/ar/individuals/tawteen/tawteen_program_list/?_x_tr_sl=ar&_x_tr_tl=en&_x_tr_hl=en&_x_tr_pto=sc


https://doi.org/10.3917/dec.caill.2007.03


https://doi.org/10.1177/026327602761899165


Lightfoot, M. (2016). Education technology policies in the Middle East: Globalisation, neoliberalism and the knowledge economy. In *Education Technology Policies in the Middle East: Globalisation, Neoliberalism and the Knowledge Economy*. 244


https://doi.org/10.17169/fqs-11.2.1357


Teaching, 10(1), 57.


Rwaq Ambassadors Program. (2021). Retrieved July 28, 2022, from https://www-rwaq.org.translate.goog/pages/ambassadors?_x_tr_sl=ar&_x_tr_tl=en&_x_tr_hl=en&_x_tr_pto=sc


Appendix

Appendix 1 Interview questions

Part 1 Past experience
1. Have you had experience in online teaching before this course? If any, where? Was it institutional-based or individual-based?
2. What kind of technology have you used in your teaching, if any?
3. If you use technology as a personal choose, why?

Part 2 MOOC Platform
4. How did you come to MOOCs? How did you know about the platform?
5. What attracted you to teach MOOC? Why did you choose this platform in particular?
6. How much did the institution affect your decision to teach MOOC?
7. What was your expectation prior to the experience of teaching this course?

Part 3 The course (actual MOOC teaching experience)
8. Why did you choose to teach a course on this subject in particular?
9. Describe your experience in designing and recording the course. Who was involved in the process of constructing the course?
10. What software and tools did you use?
11. How would you describe your working and recording spaces?
12. How did you manage to balance between teaching this course and other responsibilities?
13. How would you describe the students? To what extent are they similar to or different from students you teach elsewhere?
14. How do you engage with the course and interact with students? What tools helped you to manage this aspect of the course?

Part 4 Reflection
15. What aspects of your experience do you find most useful and most frustrating?
16. How did you manage the challenges, if any?
17. Would you consider introducing another MOOC in the future? What would you do differently?

18. Would you like to add anything regarding your experience overall?
Appendix 2 Sample of anonymised and translated transcript

00:04 Can you introduce yourself, and if you have previous teaching experience?

0:10 I worked in teaching for ten years at the university, and after that, I shifted into several positions, but the most important thing to us now is that I have done many courses, whether online or face to face, among hundreds of courses, Rwaq platform was different for me. Because most of the courses that I used to teach finished by the end of the time in which I perform it, except the one I did on Rwaq platform. Using this platform was a very good opportunity for me because the subject is archived and preserved 24 hours a day throughout the year, and the students are all over the world. Hundreds of thousands of people have trained on it. It is still a reference for me and others.

1:10 How did you get to know the platform?

1:12 It was through one of my friends who did a course on Rwaq. He explained the idea of Rwaq and its courses. Mostly, the interested people who value the knowledge attend these courses. Because the platform does not issue an accredited certification, it just gives a certificate of completion. Accordingly, it is most likely that attendees are not looking for just accreditation. They have other reasons to attend, such as learning from the course itself. So, I entered the platform, saw how it works, and liked it. Then, I applied and told them that I wanted to give on this subject, and I gave them the idea of the course... they responded quickly and asked me to prepare a promo video for the course, so I prepared it and sent it to them and then it started. Frankly, it was my first experience on this platform, and I was surprised by the number of attendees, which shocked me, as we are now close to nine thousand.

2:03 How do you find the course participants?

The students are from several Arab countries, but with genuine enthusiasm, which shows in follow-ups, participation in the discussion forum, and asking questions. Some volunteered to summarise the visual materials professionally after each lecture. These things encourage the teacher and make him feel that he is in front of a group that came with their desire and wants to learn. That’s why I always found the experience to be very rich.

The students are diversity in ages and educational level; some hold a PhD, some are doing PhDs and are from different fields. In addition to the variety of ages and degrees, the interaction is present in the discussion forum. One asks, and the other answers. One presents information, and one summarises. All these things are honest and exciting to see people sit and work on their own. They are not waiting for you to evaluate, nor are you expected to give
a certain credit for their interaction because they know that there aren’t any certificates, degrees, or evaluations from the beginning. Their interactions emanate from the self.

4:07 How would you describe your experience with designing and recording the course?

I admit this course completely lacks professionalism. As you see, I use PowerPoint, press the record button, sit, and scribble on the screen while explaining. So, I was between two things: Either I deal with it with skills I have, I may have the knowledge, but not the presentation and photography skills, or postpone it until finding a volunteer could help with the design. So, I said that the content could be worth more than the presentation. Thank God the simplicity and the lack of professionalism benefited me in terms of being spontaneous and natural. I was recording spontaneously and did not even edit the recording. It is the first recording that I record and move on. Things went well, and nobody complained about it. Although I know this was less than humble, I expect the content itself was able to reach, which concerned me in the first place.

Of course, I didn’t have any other options other than PowerPoint, and I didn’t know any other way of presenting the course. The PowerPoint provides me with what I needed, such as recording and interacting with the slide in front of me, and it was enough for me to convey the idea that I wanted to deliver.

Is one supposed to stop there, and was this enough? Definitely no, I am looking for more profession away to this when I find the person who worked with me when the support comes, I will not say no, but do I stop until this circumstance happens? I mean, this is the critical question in the matter, so I said: I will start, and things may change later, whether I learn by myself by taking courses or finding a volunteer to work with me; this will be great. The course is repeatable. This is the first run of the course, and I may repeat it on other platforms by considering the comments. Some questions and insights also were raised in this course. These showed the gaps. Indeed, some things have not been covered or I did not pay attention to, but all these things contribute to building the content better for future times. Also, if I can produce it better professionally, it will surely be an excellent thing.

8:12 Where did you record the course?

I recorded it at home, in front of my family with my laptop and on PowerPoint, the boys, girls, and the wife were sitting with me, and I also felt their interaction. As long as I finished the video, I asked about their feedback and satisfaction with the clarity of the ideas. Having my
family in front of me keeps me focussed and prevents me from being distracted. I think this is better than speaking to myself. The attendance of the people in front of me makes things much better, I focus on my idea, and the second thing is that I ask them after I finish about their opinion.

9:27 I wonder what the reasons might be behind teaching online course freely?

It is a moral duty and obligation. Any academic works at the university, receives a salary for his work, but he has a duty towards the society, to the large community beyond the university. Everyone should ask himself what I did for the society? I expect that during this time with the emergence of digital platforms that connect academics to the largest possible number of people, I expect this is a good opportunity to contribute to this aspect. Instead of restricting academics’ and faculties’ role to the hall of campuses and within limited number of students that sits in front of his students and receives a salary for his practise.

I think it can be considered as zakat of knowledge, as we have zakat on money. It also creates a good impression at the end, like a mental image of the person in people mind. When the teacher introduces a really good course, it will be a reference for the people in this subject.

12:01 How do you interact with students? I notice that you are always present in the comments, trying to respond to everyone, and you do not leave a comment without a response.

It is my personality anyway, I mean even with my students I teach in the university. Sometimes I get overwhelmed by student’s comments, but even still I try as much as possible not to leave anyone comment without a response because it is the student’s right, as he attended, listened and commented. The simplest of his rights is over me to let him know that I saw your comment, and this is the simplest thing, and if time is tight and I am busy, I click the like button and come back to make a comment afterward.

This is my nature. If you notice, I also upload videos week by week because I did not record the entire subject once. I record part and upload it to see the interaction of people, their questions and concerns, check if there is a technical issue and if my voice is clear. For instance, I have been told that my voice was weak in one of the lectures. I consider these comments and students’ questions to respond in the following video. This is also considered a kind of interaction. The course would be different if it were recorded all at once.
Pre-recording and pre-designing the course miss the idea of development or interaction. I mean, even some commentators, I intentionally mentioned their names because they made a significant effort. I expect this gives a kind of appreciation and improves the interaction. The students will know that I respect and value their opinion, and further, I will apply it in the course. I let them know that the interaction is appreciated and that I am benefiting from it and developing it in light of their comments and in light of their questions. I also received suggestions through private messages, especially from people with good technical experience. This also helps me in overcoming technical issues, and I benefited from their technical skills and capabilities.

I also think neglecting this important part of the course, I mean the interaction may be interpreted as a kind of superiority and arrogance. People have different things to share. I mean, there are things that students are better than me, and they guide me even in my speciality. I learn from them. So the benefit is mutual and in two directions.

19:03 What problems did you encounter, and how did you overcome them?

The first thing is the technical aspect. It was the biggest issue. The platform did not provide enough technical support. I mean, their effort is appreciated, but when you provide the platform you have to know that there are non-professional people whose knowledge is very modest in technical aspects, so they need technical support.

I personally need someone to tell me how to do technical things and fix technical problems, but when you leave me with myself, I solve them in my way, which may not be the best way to resolve these issues. I, for instance, had technical problems. If you notice I got many questions regarding the videos, as some students could not open the videos. I mean, there are things that I can’t answer. I stand helpless in front of them. So, therefore, if I had technical support, I mean, why the platform would not give me one day a week and an hour a week to check the problems I have, which I face, and solve them for me simply.

Even the videos I sent to the platform just added the platform logo without editing or reducing the video size. As I could not upload some videos due to the file size, I had to create a YouTube channel to upload the video and post a link to the course. This makes the uploaded process easier to open videos from YouTube and even download them there easier.

20:11 You have overcome this problem by uploading the videos on your YouTube channel?
Yeah, I thought this was an alternative solution. Because I could not find any other way to solve it on Rwaq. When I started uploading videos on the platform, I needed high-speed internet, but my internet was too slow. I was able to upload the video on YouTube, but I can’t upload it on Rwaq. I might need a certain level of internet speed so that I can upload it into the platform. Opening a YouTube channel was more manageable, and also I liked seeing people’s comments on YouTube. People did not encounter any technical issues.

23:06 This raise a question about the ownership Do you have the right to upload the course material somewhere else?

I do not expect the platform has the right to own the course as there is no agreement on that. It is true that the platform offers support, allows teachers and students access and so on, but the course is the teacher’s ownership unless there is contact between the teacher and the platform. In this case, the platform can own the course, and the teacher gets paid in return or the agreement states that, for example, I, as a teacher, provide materials, and the platform presents the course professionally. Well, in this case, the platform can own the course, and I do not have the right to present it elsewhere. The contract is the law of the contractors, but there was no agreement on the contract between the platform and the teacher.
Appendix 3 Screenshots from Manual and digital coding

Figure 39 Initial manual coding of the first interview

Figure 40 Digital coding in MAXQDA
Appendix 4 Information sheets and participants’ consent form

I am Nada Alsayegh, a doctoral student in Digital Education at Edinburgh University. I am conducting a study aiming to examine MOOCs and MOOC teacher experiences in the Saudi Arabian context. In particular, it seeks to understand the spatial implications of an Arabic MOOC project and how it relates to teacher identity. This study is interested in examining the actual practise of MOOC teaching, how it is formed and what it may involve, including the materials and digital technology that form the experience.

I would like to invite you to participate in this study by sharing your experience as an MOOC teacher/ founder. The participation involves an interview and observation of your online course. The interview will be conducted online and arranged based on your schedule. It may take from 40 to 60 minutes, and it will be recorded for study purposes. The questions will involve how you feel about MOOCs, and more focus will be given on your practise as an MOOC teacher, the opportunities and challenges you encountered during the experience and how you managed them. In the interview, we will discuss your experiences in designing and delivering the course, and I also may ask questions based on the online course you introduced. I will also engage in observation, which may include copying direct quotes or taking screenshots from the course.

Be assured that your responses and identity will be kept strictly confidential and anonymous. Your information will be stored on secure systems, and access to the data will be restricted to the researcher and academic supervision team. Your personal information will not be disclosed or used without anonymising. All interview and observation data used in the research will be kept anonymised and confidential.

If you are interested to taking part in this study, you will be asked to sign the consent form, which is attached below. You are free to withdraw at any time, without giving a reason. If you have any questions or concerns regarding your participation, please do not hesitate to
contact me through my email, and I will be happy to answer any questions you may have.
Research title: Massive Open Online Courses and Teachers in Saudi Arabia

Researcher: Nada Alsayegh

This consent form is necessary for us to ensure that you understand the purpose of your involvement and that you agree to the conditions of your participation. Therefore, please carefully read and make sure you understand the accompanying information sheet. If you need more details about what is mentioned here, you should feel free to ask. After signing this form, please send it back to the researcher.

Please tick the boxes beside the statements you agree with:

☐ I have read and understood the Participant Information Sheet and agree to participate in this research project.

☐ I understand the purpose of the research, and I have had a chance to ask questions and have had them answered to my satisfaction.

☐ I understand that my participation is voluntary, and I may refuse or withdraw at any time without consequences.

☐ I understand that interviews will be recorded.

☐ I am willing for anonymised extracts from my interviews to be used as part of the research.

☐ I understand that the researcher will join the course for observation and may take screenshots of the courses and videos lectures.

☐ I am willing to share images of my workplace to be used for this research.

☐ I understand that the data collected will — although fully anonymised — appear in publications relevant to this area of research.

If you have any further questions or want clarification regarding this research and/or your participation, please feel free to contact the researcher.

Researcher:

Nada Alsayegh

Participants’ name: .................... Signature: .................... Date:....................