Open Textbook Author Journeys: Internal Conversations and Cycles of Time

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Abstract

One of the challenges experienced in South African higher education (HE) is a lack of access to affordable, appropriate textbooks and other teaching materials that can be legally shared on online forums and the Internet. There are also increasing calls to address transformation and social justice globally and in South African HE through curriculum transformation. This article draws on the research of the Digital Open Textbooks for Development initiative at the University of Cape Town (UCT). It presents the journeys of four open textbook authors at UCT in relation to the social injustices they witness in their classrooms. It also makes use of **Margaret Archer's** social realist approach to explore **dynamics related to open textbook authors' agency and ultimate concerns,** as well as how their internal conversations shape their practices and approaches to open textbooks. Open textbooks are framed as a set of practices that play out in varying cycles of time and hold promise in terms of addressing the need for greater access and inclusivity in HE.

Keywords: agency, open textbooks, social justice, social realism

Introduction

Calls for action to address inequities in South African higher education (HE) continue to intensify in the wake of COVID-19 shutdowns and severe economic recession—all of which threaten to exacerbate the education divide and other inequalities as large numbers of university students and lecturers struggle to afford access to the connectivity, devices, and educational tools required to participate in new ways of online teaching and learning (Black et al., 2020; Czerniewicz et al., 2020; Soudien, 2020).

The Department of Higher Education and Training's *Access to and Use of Learning Materials: Survey Report 2020* (DHET, 2020) shows that a large number of South African university students (26%) are not buying any textbooks, with only 10% buying five or more. This is despite most (87%) of their modules having a strong reliance on textbooks as a means to deliver course content (DHET, 2020). The primary reason cited by students for not purchasing textbooks is that they are too expensive. In addition to overall cost, there was also a value-for-money factor: a number of students surveyed felt that if they were not going to be using the entire textbook, it was not worth purchasing (DHET, 2020).

A DHET study on the *Social Impact of the COVID-19 Pandemic on Youth in the Post School Education and Training (PSET) Sector in South Africa* (2021) indicates that more than 40% of students were unable to buy their own food during COVID-19 lockdowns, and almost a third of students who had access to online resources had no suitable place to study during lockdowns.

The potential learning losses experienced from not having access to the curriculum through textbooks and other learning materials combined with the challenges of remote learning in the COVID-19 context are exacerbated in South Africa by high data costs when accessing resources on the Internet and sporadic power outages, which amplify economic injustice and unequal access to education.

In addition to concerns around value and affordability, there are also increasing calls to address transformation and social justice in South African HE through curriculum transformation to address **"local and current needs of staff whilst, simultaneously, [being] aligned to and resolving the economic** and socio-**political challenges facing universities and its learners" (Mendy & Madiope, 2020, p.** 2). South African university students are therefore also choosing to forego purchasing textbooks because they are deemed unfit for the local context (Cox et al., 2020).

Research at the University of Cape Town (UCT) suggests that increasing numbers of lecturers are taking steps to explore alternative content creation approaches that address limitations around relevance, format, and genre associated with traditional textbooks (Cox et al., 2020). The discontent experienced by many lecturers at UCT is in line with Jhangiani et al.'**s** (2016, p. 193) assertion **that "traditional** textbooks are, at best, pedagogically impoverished, context-neutral content in an age where Internet connectivity affords access to rich multimedia and dynamic, contextualized knowledge.**"**

The injustices relating to access and representation described here are germane to many countries around the world to varying degrees. The South African UCT context provides a useful focus of study in that it simultaneously presents a broad range of challenges and demonstrates some of the innovative solutions being explored in the context of a resource-constrained developing country.

Open Textbooks for Social Justice

Open textbooks and other forms of open educational resources (OER) published under Creative Commons licences allow academics and students to legally reuse and work with content in new ways without copyright limitations, provided that the original work's author is attributed and a range of licensing conditions are adhered to (Baker & Hood, 2011; Morris-Babb & Henderson, 2012; Moxley, 2013).

Open textbooks are freely available digital collections of scaffolded teaching and learning content published under open licences on platforms and in formats that provide affordances for content delivery on a range of devices, the integration of multimedia, and the incorporation of content from varying sources through collaborative authorship models.

Like traditional textbooks, open textbooks are written by academics and disciplinary experts and are subject to a range of quality assurance methods. They are typically digital, although they can include versions that can be printed on demand and distributed to students who are constrained in terms of Internet connectivity and digital access (Bethel, 2020; Frydenberg & Matkin, 2007; Jhangiani et al., 2016).

In South African HE, the potential of open textbooks is increasingly being recognised, as evidenced in the Open Textbooks in South African Higher Education initiative, in which managers, government bodies, and knowledge-production sector partners are collaboratively exploring open textbooks as a means to address curriculum transformation and social (in)justice in the classroom (Digital Open Textbooks for Development, 2021).

This article responds to the insights of Haveman (2016), **who recognises that "openness in education is not a movement for the emancipation of resources, but of people and practice"** (p. 7), and Pitt et al. (2020), **who call for a "deeper understanding of both the student and educator experience"** (p. 12). There is also a strong awareness that the characteristic of something being open does not equate to **equality and democratisation of knowledge and that "t**rue democratization and globalization of knowledge cannot exist without a critical examination of the systems that contribute to the production **of scholarship"** (Inefuku, 2017, para. 8). Cronin (2020) calls for this kind of critique of openness, moving beyond simply considering access to also considering awareness of the Global North–centric hegemony.

The research p**resented here will explore openness on an individual level, where educators' open** practices play out in a complex, continually negotiated manner (Cronin, 2017). Using a social realist approach (Archer, 2003, 2005, 2007), we will demonstrate how the agency of these authors is intertwined with their practices and social justice motivations. However, we see that even in cases where there is an intention of justice, effective pathways are only enabled by the agents themselves when they are able to find ways around constraints. Those who do not manage to complete the work are burdened into inactivity by the challenges of academic life.

The study presented originates in the research of the Digital Open Textbooks for Development (DOT4D) project, which investigates the current ecosystem of open textbook publishing and provides implementation support in open textbook publishing activity at UCT. It has a social justice agenda in that it interrogates economic maldistribution, cultural misrecognition, and political misrepresentation

in the context of open textbook provision using critical theorist Nancy Fraser's (2005) social justice framework.

This article presents the stories of four open textbook authors to examine the various approaches adopted at UCT to address injustice in the classroom. It also explores the dynamics related to these **authors' agency and ultimate concerns.** In line with this approach, this article addresses the following research question:

What are the drivers and social justice imperatives that inspire academics at UCT to adopt innovative approaches to producing open textbooks, and how do these relate to these **academics'** ultimate concerns?

The findings are of particular interest to academics navigating the complexities of open textbook production in that they provide insight into the personal strategies associated with undertaking this **work and into dynamics relating to certain authors' inability to complete their content development** processes. An understanding of these complex dynamics will also aid institutional managers and policy-makers engaging with this new area of work.

Theoretical Framework

Debates focused on social justice currently dominate much of the critical questioning of the inequalities present in HE (**Hölscher** & Bozalek, 2020). The open education movement has also been critiqued for not foregrounding social justice in all of its work (Lambert, 2018). These are macrolevel debates. In this article, the focus is not on the broader aspects of social justice but rather on the consideration of micro, individual agency—level contributions towards redressing injustice.

The overarching imperative of the DOT4D initiative is to produce evidence for the ability of open textbooks to address social injustice in South African HE. Within this context, the work of Nancy Fraser, a political philosopher, is used to identify the dimensions of injustice and to critically examine the role of open textbooks (Cox et al., **2020**). Fraser's (2005) trivalent lens is used to identify inequality, specifically as relates to economic (maldistribution of resources), cultural (misrecognition of culture and identities), and political (misrepresentation or exclusion of voice) injustice. In this article, Fraser is used to frame the drivers or reasons given by the authors to create open textbooks.

In addition to **Fraser's** work, these case studies reveal the importance of the agency of the lecturers creating this content. Margaret Archer's social realist approach is used to try and surface why some of the lecturers in this cohort are able to get further along in their open textbook development processes than others, as well as the challenges that exist for open textbook authors in general. Archer is a sociologist, and her theory (2003) seeks to explain the relationship between structure, culture, and agency. She argues that the power of agency is key to understanding this relationship. She theorises how agents (the open textbook creators in this instance) have ways of anticipating challenges and acting strategically.

These constraints are considered and acted upon as "agents identify their own interests, and they must design projects they deem appropriate to attaining their ends" (Archer, 2003, p. 9). Archer (2007, p. 42) refers to these interests as being the **"ultimate concerns"** of individuals, "goods that they care most

about." Individuals reflect on their actions through what Archer calls an "internal conversation." These internal conversations result in courses of action—the principle being that agents deliberate constraints and enablements in their contexts and choose specific stances based on these internal conversations. There are four different modes of internal conversation: communicative reflexive, autonomous reflexive, meta-reflexive, and fractured reflexive (Archer, 2003).

Communicative reflexives require others to give them advice or back up their actions. They are "family orientated," seek like-minded people, and typically prefer to stay in the same hometown and/or job (Archer, 2003, p. 168). Communicatives tend to evade constraints and enablements, choosing to maintain situations. They struggle when they move away from friends and family whom they trust. They are not particularly ambitious.

Autonomous reflexives make their own decisions and do not require deliberation with others to act; they are, in this sense, self-contained. They are task oriented and are strategic in their approach to constraints and enablements. Archer (2003, p. 254) refers to them as "agents of change." They are strategic in their approach to constraints and enablements. Autonomous reflexives are mostly individualist, self-disciplined, and self-motivated (Archer, 2007). They do not require approval from others for their work. They are ambitious and conceptualise clear projects in life.

Meta-reflexives reflect on reflecting. Their internal conversations are focused on the self, and they tend to be subversive towards constraints and enablements, choosing to be critical of society and change their projects throughout their lives. They are self-critical and strive for self-knowledge and finding value in their actions.

Fractured reflexives are unable to take action. This fracture can be temporary and the result of life events, such as divorce, family death, or moving to a different country. Fractured reflexives are passive agents who tend to live in the moment and make their way through life in an ad hoc basis (Archer, 2012, p. 279).

Archer's work (2003, 2007) has previously been used to understand the contribution and non-contribution of OER at UCT (Cox, 2016). Cox (2016) has found that applying Archer's concept of ultimate concerns combined with an understanding of the academic's internal conversation helped to explain why lecturers undertook OER production. Her study found that it was mostly autonomous reflexives who were contributing OER at UCT. They were driven by an awareness of a Global South need for accessible, localised content, and their contribution aligned with these concerns. They were ambitious, task-driven individuals who were happy to share imperfect (even incomplete) materials as they were confident that the materials would be used. Meta-reflexives, by contrast, felt that sharing OER was a great concept, but they were focused on the students in their physical classrooms and were reluctant to have their materials publicly available for scrutiny (Cox 2016).

Methodology

This study used a case study approach (Merriam, 2009) to conduct a comprehensive examination of four open textbook authors at UCT. The case studies aimed to capture the details of open textbook production and provided a detailed narrative description of the experiences of academics who are open education practitioners and have experience with producing open textbooks at UCT. In this context,

open education practitioners are identified as academics who produce OER and adopt open pedagogical approaches towards content sharing, providing feedback, innovating in teaching and learning, using open licen**ces, giving credit, and focusing on students' needs relating to access and supportive learning.**

Case Study Selection and Respondent Profile

This study made use of a purposeful sampling technique (Robinson, 2014) in selecting case study participants; that is, specific academics within the institution who were involved or had been involved in the production of open textbooks were invited to participate. This selection process took into consideration gender and race profile, evidence of transformation within the resource (in terms of decolonisation, localisation, multilingualism, and curriculum transformation), the inclusion of multiple voices (particularly the student voice in collaboration), and the technological innovations presented. Of the four participants interviewed, three were female and one was male. One participant was a head tutor and three were senior lecturers. The selected participants were from different disciplines, and all adopted different approaches to textbook production.

Data Gathering and Data Analysis

After obtaining ethical clearance, the case studies were developed through survey and interview processes. The study also used open textbook grant proposals and reports from the DOT4D grants programme, in addition to the field notes of the DOT4D publishing and implementation manager, as data sources.

Each of the case study participants completed a background, technology fluency, and personal reflection survey (Masuku et al., 2021), which included questions on demographics and use of technology. This survey also included the Internal Conversation Indicator (ICONI), a tool developed by Archer (2007, 2016**) designed to identify a person's dominant mode of reflexivity** (see Appendix). **Archer's ICONI** methodology has been critiqued for not taking social context into account (Caetano, 2014), and additional questions have been added to the questionnaire (Golob & Makarovic, 2019). These recent **works recognise the value of Archer's contribution**, and in this study, ICONI is used together with other **forms of data in order to build holistic cases, thereby including participants' motivation and other** contextual aspects.

Following the survey, the interview process comprised two sets of interviews with four open textbook authors at UCT. The first of these interviews was focused on surfacing key details on historical legacy, disciplinary norms, content development approaches, and motivations. The second interview was focused on gathering points of clarification and reflections around curriculum transformation and decolonisation. The field notes comprised notes from publishing conversations between the DOT4D publishing and implementation manager and project grantees; transcripts of the conversations that took place in two key DOT4D advocacy and community building events at UCT in the course of 2018; and minutes of conversations with senior representatives of UCT libraries. As Phillipi and Lauderdale (2018) point out, field notes are an essential component of rigorous qualitative research and are recommended as a means of documenting contextual information.

The grant proposals, submitted by UCT academics at the start of the grants programme in January 2019, shared the aspirations and envisioned plans of the grantees for their open textbook initiatives. The grant reports, submitted at the end of the grants programme in February 2020, provided a reflection of the

grantees' processes and the results of their initiatives at the end of the grant period, surfacing the successes and challenges encountered.

Multiple data sources provided rich, nuanced data, which were used in constructing the narratives and findings presented here. These data sources were analysed collectively by the DOT4D principal investigator and researcher, and the results of their analysis were cross-verified to ensure rigour in the analysis process.

Participants were invited to review drafts of their case studies in order to provide feedback and clarification. This consultation with authors served as a valuable data verification process as well as a reflexive opportunity for authors to examine their practice.

Findings

This section presents the findings of this study in relation to drivers and social justice imperatives. We also examine the internal conversations authors have in terms of their agency and ultimate concerns to gain a sense of the reflexive conversations that authors have with themselves regarding motivations and ultimate concerns.

The stories presented provide insights into the motivations and processes of the following four open textbook authors:

- Abimbola Windapo (associate professor, Department of Construction Economics and Management),

- Stella Papanicoalou (senior lecturer, School of Architecture, Planning and Geomatics),

- Dr Claire Blackman (lecturer, Department of Mathematics and Applied Mathematics), and

- **Kensleyrao "Kensley" Apajee (**head tutor, Department of Mechanical Engineering).

Of the four cases discussed here, one (Abimbola) completed a full textbook publishing process, resulting in the release of a finalised textbook. This publishing process was, however, disappointing for the author in that she unwittingly signed a copyright transfer agreement, and the work released does not authentically qualify as an open textbook because of the absence of an open licence on the published work. Stella released first a mini textbook(let) (which functioned more as a guide than a complete textbook) and had further ambitions to extend the content development process. Her approach was iterative and entailed working with students over a period of several years in order to obtain the content required for a comprehensive textbook. Claire was forced to put her open textbook development process into incubation due to time and other professional constraints, including the impact of the COVID-19 pandemic. Kensley had made significant progress in the conceptualisation and design of his textbook and produced a number of chapters, but his process was derailed by personal circumstances.

The varying approaches presented are not judged or rated in terms of overall efficacy or preferable approach but are instead intended as narratives demonstrating the realities academics at UCT face in trying to undertake this work.

Drivers and Social Justice Imperatives

The UCT academics engaged in this study identified a number of drivers that inspired them to undertake their open textbook development processes. These drivers had a strong social justice dimension in that they addressed issues of access and representation.

The drivers **or factors motivating academics to produce open textbooks can be framed using Fraser's** (2005) trivalent lens. To obtain a DOT4D grant, the grantees were required to indicate how they considered curriculum transformation and student inclusion as part of their open textbook development process. Their drivers were therefore quite explicitly mentioned. However, the authors had their own personal motivations and emphasised and explored different aspects of social justice.

Economic injustice (maldistribution of resources) is addressed in the nature of the open textbook being freely available. Affordable access was mentioned by three of the four case study participants as a starting point and primary motivating factor for producing this work.

In terms of cost as a barrier to access, Jhangiani et al. (2016, pp. 186–187) express how the system of **production for conventional textbooks sustains its profits at the expense of students and "is a logical** result of the current education labour system and the growing tendency to see the education sector as an unmined source (students as consumers) rather than a source of a public good (learners as productive citizens)." **Studies supporting these claims have not only revealed OER's ability to reduce** the price barriers to HE (Hodgkinson-Williams & Arinto, 2017) but have also explored how the provision of OER has specific impact on historically underserved and low-income students (Jenkins et al., 2020), which is particularly relevant in the South African context. The examination of this impact (of OER) through a social justice lens confirms that advocating for the affordability of textbooks is a redistributive justice issue. The creation of OER such as open textbooks is an avenue for realising a more socially just HE experience (Jenkins et al., 2020).

The cultural dimension (misrecognition of culture and identities) **is manifest in the authors' ambition** to transform curriculum. The four academics in this study were exploring different ways to shift away from the dominance of knowledge from the Global North. They aimed to include in current curricula ideas and perspectives that are more locally relevant and better suited to contexts and experiences within the Global South while balancing the value of contributions from the Global North. Leibowitz **(2017) describes this as "cognitive justice." She ex**plains that:

> this does not mean that all forms of knowledge are equal, but that the equality of the knowers forms the basis of dialogue between knowledges, and that what is required for democracy is a dialogue amongst knowers and their knowledges. (p. 101)

Political injustice (misrepresentation or exclusion of voice) is addressed by authors who are motivated to change the way they teach and include students as co-creators of teaching and learning content. This pedagogical change driver has the potential to redress both cultural injustice, through local authors (specifically students) collaborating to create local content, and political injustice, through the inclusion of voices which have previously been excluded.

Also noted as a social justice imperative among academics producing open textbooks is the aspiration **to shift and reshape pedagogy. Freire's (2000) writings in** *Pedagogy of the Oppressed* speak to the challenges of pedagogical practices and propose a pedagogy that shifts the dynamics between teacher,

student, and society. With open textbooks, academics are given an opportunity to reimagine the pedagogical approach in ways that encourage learners' participation in the cocreation of knowledge, as well as other empowering shifts in the teacher–student relationship. Jhangiani and DeRosa (2017) highlight the significance of pedagogical change in their discussion on open pedagogy and express the ways in which students and teachers could "open" education and transform pedagogy, particularly through the use of OER. As Bliss et al. (2013) argue, the creation of resources such as open textbooks by academics allows for all participants (students and teachers) to contribute to the knowledge commons and not only consume from it.

Abimbola was motivated by a number of social justice imperatives. She was concerned about the cost of textbooks and wanted to increase the accessibility of teaching materials. Her focus was different than that of the other case study participants: her primary concern was the imperative to make other researchers, practitioners, and government stakeholders aware of the research being done at UCT in her field. Abimbola began sharing teaching resources in 2010.

Stella wanted to make content that was relevant to her students; she stated that "buildings in the Global South should be made more visible and accessible to students." Her work is positioned as a response to the dominance of European and North American examples in the literature, which often leads students to believe that buildings located elsewhere and theorised by scholars from the Global North have more relevance than buildings closer to home. In addition to this, she focused on empowering students, providing them with a platform to cocreate content. In so doing, she incorporated the content development process for her textbook as part of the classroom experience. She described this approach as "an attempt at decolonising the curriculum and rethinking pedagogical approach to create a more student-centred approach to teaching."

Kensley started his open textbox development process because he felt the current textbook was too expensive (it cost around 2,000 South African rand (ZAR) or $135 US) and not adequate for teaching the drawing course in the South African context. He indicated that in addition to the prescribed work using imperial rather than metric measurements, as is convention in South Africa, many other conventions used locally also differed from those presented in the textbooks from the Global North. Moreover, students not only had to learn this new discipline in a rapid and condensed manner in one semester, but they had to do so in English, which for many was a second or third language. Kensley aimed to address economic and cultural injustices; the open textbook development process empowered him as a student author.

Claire had three primary motivations for wanting to undertake her textbook development process: (a) cost savings (the current textbook costs around ZAR700 or $50 US); (b) a need to tailor the content to her students' context (as opposed to being from a Global North perspective); and (c) pedagogical innovation, in that she wanted to empower students to be able to think critically.

Internal Conversations: Agency and Ultimate Concerns

This section presents an analysis of the four open textbook authors' responses to the ICONI questionnaire (Archer, 2016), which identified authors' internal conversations, as well as findings from the first round of interviews, which probed ultimate concerns and responses to constraints and enablements.

According to Archer's categorisation, three of the case study participants were meta-reflexives and one was an autonomous reflexive (Table 1). The numerical indicator used in Table 1 categorises the case study participants on a scale of 1 to 7, in which 1 is low and 7 is high. A participant's highest score indicates their mode of reflexivity. Scores of 4 are midway and scores under 4 are considered underdeveloped in the participant.

At first, this categorisation seemed to contradict the findings of Cox (2016), where contributors of OER were mostly autonomous reflexives. The ICONI survey was administered early in the DOT4D research process; at the end of the process, three of the four case study participants did not complete what they set out to do. This inability to complete the task **can be explored using Archer's** social realism and her **modes of reflexivity and agents' ultimate** concerns.

Table 1

Case Study Participants' Ranking from ICONI Questionnaire

Mode of internal conversation	Abimbola	Stella	Kensley	Claire
Communicative reflexive	1.00	1.60	3.00	1.60
Autonomous reflexive	6.00	6.00	5.00	5.60
Meta-reflexive	4.00	7.00	6.30	6.60
Fractured reflexive	1.25	1.00	2.25	2.00

Note: Bold text indicates the dominant mode of internal conversation.

Abimbola had a dominant score of 6 for autonomous reflexive, and she scored a 4 for meta-reflexive. Archer (2012) considers this a midway score. Her meta-reflexive nature is evidenced when she describes **her ultimate concerns ("I think it's just to make a difference in people's lives ...** just to be able to **contribute to society"), but her remarks about her concerns are typically** autonomous reflexive. She stated,

> I see it as if time is running out. One has to quickly make use of the available time you have to make all these contributions to **change our society, especially Africa ... I'**m always looking for these opportunities.

Abimbola acknowledged that time is a barrier, but she strategically overcame this by employing student assistance:

> I **build on the capacity I have, like the students ... you have to be able to give other people the opportunity. You have to coordinate what others are doing ... I have a team** of students ... I have to acknowledge them.

Stella has a dominant meta-reflexive score of 7, the maximum one can score. She also has an autonomous reflexive score of 6. She reflects deeply on her process and acknowledges her own growth, **discussing how she has learned to "go with the process" and not wait for everything to be finalised. This** is a typical meta-reflexive comment, as academics with this characteristic tend to be self-critical to the point that it prevents them from sharing their teaching materials online (Archer, 2003).

Stella's immediate response to the question "What are your ultimate concerns and reasons for getting **out of bed?"** was **"I'm often not motivated … I like connecting with people. I see if I can make something happen or facilitate something to happen." When asked how she overcomes barriers**, she stated, **"Sometimes those barriers help form what you want to do, and so that's how I take it**," and then intriguingly she said, **"I'm not good at doing the finished product."**

Kensley scored 6.3 for meta-reflexive, 5 for autonomous reflexive, and 3 for communicative reflexive. The 3 score is below 4 and thus is not a dominant mode of reflexivity, but it is the highest score in the communicative reflexive group, and Kensley**'s** back-and-forth conversation with the interviewer revealed this. He enjoyed conversation. His ultimate concern at the time of the interview was teaching: **"I just love teaching. It's just so enriching … and … I like to talk about life. That's why we are living."** He discussed his concern that some engineers don't think outside of the box, something that bothered him. He stated **that "some researchers, some engineers, they're just stuck in a straight line in their minds**." This had resulted in him sometimes being resentful and not putting in as much effort as he might otherwise.

Claire scored 6.6 for meta-reflexive and 5.6 for autonomous reflexive. Her ultimate concern was **"watching people, students in particular, grow**. **Both academically but also emotionally … and supporting that process**.**"** She emphasised the importance of her students, stating:

> I work hard to create an environment where students feel comfortable to ask questions and get things wrong. I do mindful meditation at the start of every class with my students so that they can learn to calm themselves.

She discussed why teaching **is so important to her: "I feel universities are no longer like the sole** providers of content, so if we actually want to keep being useful we need to change the focus of how we **teach." She also acknowledge**d hindrances and constraints in her context: **"I'm a** white person from a privileged background **… so there is an entire context of which I have no experience."** Claire emphasised that **"time is a problem … time and energy" and then concede**d that she was **"working on it"** but was realising that she **"can't do everything. And some days I'm just like**, okay, **today I'm just teaching**."

The various scenarios presented here indicate a complex interrelationship between drivers and social justice imperatives and internal conversations.

Discussion

The open textbook authors profiled here were motivated and had a strong sense of agency. This agency helps to explain why they were able to engage as open practitioners despite their personal and professional constraints, as well as why some projects moved further along the production process

towards publication than others in the cycle of time under examination. The findings reveal differences in drivers and ultimate concerns, as well as in authorship and content development approaches.

The UCT academics engaged in this study were motivated by a range of drivers or imperatives, including the need for affordable access, curriculum transformation and decolonisation, pedagogical innovation, and student empowerment.

Abimbola's work was based on her motivation to make a difference in **people's lives and to contribute** to changing society. Her ultimate concern was focused beyond the classroom. This links to her autonomous reflexivity. She would make a plan to get things done. She completed her OER with student help and was typically autonomous in her delegation of work and in overcoming time as a constraint.

Stella learned valuable lessons in her open textbook journey, but her careful, self-critical approach slowed down the completion of her process. In a typically meta-reflexive manner, she was constrained by her need for excellent quality. She reflected that she should have started sooner and not waited for all the material required before initiating the process because it is in the process that the clarity emerges. Several iterations are required **before the idea settles. She believed that the lesson was to "dive in and** give it time and be flexible to make changes along the way that will improve the end product but always to hold the original intention in focus."

At the time of undertaking his open textbook initiative, Kensley was still a student and tutor, and his understanding of what students need for success was therefore especially nuanced. He discussed how he was grappling with making language accessible. Kensley did not complete his chapters, juggling the **commitments of the many roles he was playing as part of his department's teaching staff and as an** emerging open textbook creator, all while managing his life as a student studying abroad. He deliberated and struggled to reconcile all aspects of his life. Typical for a meta-reflexive, he was looking for a kind of self-transcendence.

Claire had thoughtfully planned out how she would continue her work as an open practitioner through the development of an open textbook, including her work on helping students write proofs and helping **them to learn how to think mathematically. Her aim was to focus on "making the language of** mathematics more accessible." **As a** meta-reflexive, Claire was focused on her students. She was value oriented and struggled to align her ultimate concerns. Claire is an example of an author with the best intentions that simply could not find the time, due to competing requirements, to write her textbook. This was unexpected in that at the beginning of her open textbook development process, she had already generated content and was comfortable with the publishing platform she intended using to develop content. She was excited to get started but could not subvert the lack of time, and her classroom-focused project was of higher concern than producing an open textbook.

The drivers for creating open textbooks and associated social justice imperatives, the ultimate concerns, and the reflexivity and the agency of these four case studies are intermeshed aspects that help to explain the success or lack of success of these initiatives.

In addition to this set of intermeshed factors, it is important to consider the institutional backdrop against which these authors undertook their work and to contextualise their efforts with regards to the degree of institutional support and recognition they received. All the authors in this study relied to

various degrees on institutional support to undertake their open textbook development processes and raised concerns about the sustainability of the work going forward without adequate resourcing.

Conclusion

The social realism theoretical approach has enabled a deeper understanding of open textbook creation at UCT and the cycles of time over which this activity plays out. There is no formal requirement or mandate for these academics to create open textbooks; instead, they are driven to make this contribution by the fact that their practices align with their internal conversations and ultimate concerns, which in the case of the four authors examined here are all social justice focused.

Lessons learned highlight the complexities of conceptualising and creating open textbooks over cycles of time. Open textbook authors face many challenges. In some cases, their plans have to be scaled down, while in other cases, their plans are completely derailed. Some academics may be open practitioners, but the constraints in their contexts prevent them from completing their journeys.

As we have seen in this study, open textbooks have the potential to address social injustice in South African HE. This potential can only be realised, however, if there is broader institutional and inter-institutional support for open textbook production and use. The Open Textbooks in South African Higher Education initiative has recognised this need and aims to maximise efficiencies through collaboration and support in order to address the sustainability of open textbook production across the South African HE sector.

While an enabling environment is key, the level of success in completing a textbook development process and the efficacy of the resource produced relies most significantly on the social injustice dynamics in the classroom and the internal conversations academics have as they grapple with these factors in their teaching.

The research presented here provides a theoretical explanation for the completion or lack of completion of four open textbook initiatives. It could be valuable for prospective open textbook authors to complete the ICONI questionnaire so they can anticipate possible constraints. Researchers studying open textbook creation and adaptation could test this theory on a larger sample. Future DOT4D research will include the articulation of models of open textbook production using Fraser's social justice theory to better understand inclusivity and student co-creation in authorship, quality assurance, and publishing processes.

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Appendix

Internal Conversation Indicator (ICONI) questionnaire

This questionnaire was developed by Margaret Archer (2016). It is a tool used to gain a sense of your internal conversation regarding your teaching practice and personal motivation.

1. Some of us are aware that we are having a conversation with ourselves, silently in our heads. We might just call this "thinking things over." Is this the case for you?

Yes

No

2. On the whole …

(1 = strongly disagree; 7 = strongly agree)

2.1. I daydream about winning the lottery.

1	2	3	4	5	6	7

2.2. I think about work a great deal, even when I am away from it.

1	2	3	4	5	6	7

2.3. I dwell long and hard on moral questions.

1	2	3	4	5	6	7

2.4. I blot difficulties out of my mind, rather than trying to think them through.

1	2	3	4	5	6	7

2.5. My only reason for wanting to work is to be able to pay for the things that matter to me.

1	2	3	4	5	6	7

2.6. Being decisive does not come easily to me.

1	2	3	4	5	6	7

2.7. I try to live up to an ideal, even if it costs me a lot to do so.

1	2	3	4	5	6	7

2.8. When I consider my problems, I get overwhelmed with emotion.

1	2	3	4	5	6	7

2.9. So long as I know those I care about are OK, nothing else really matters to me at all.

1	2	3	4	5	6	7

2.10. I just dither, because nothing I do can really make a difference to how things turn out.

1	2	3	4	5	6	7

2.11. I'm dissatisfied with myself and my way of life—both could be better than they are.

1	2	3	4	5	6	7

2.12. I know that I should play an active role in reducing social injustice.

1	2	3	4	5	6	7

2.13. I feel helpless and powerless to deal with my problems, however hard I try and sort them out.

1	2	3	4	5	6	7

3. In general, what are the three most important areas of your life now—those that you care about deeply? (List the most important first, e.g., interpersonal relations with family and friends; work, career and performance achievements; financial success; socio-ethical preoccupations; spirituality.)