

What Discourses Relating to the Purpose of Early Childhood Are Shaping the Work of Early Childhood Practitioners in Three Different Contexts: UK, Bhutan and Fiji?

Margaret Sims¹, Elise Alexander², Karma Pedey³ & Lavinia Tausere-Tiko⁴

¹ University of New England, Australia

² Oxford Brookes University, United Kingdom

³ Institute for Management Studies, Bhutan

⁴ University of the South Pacific, Fiji

Correspondence: Margaret Sims, University of New England, Elm Avenue, Armidale, New South Wales 2351, Australia. E-mail: margaret.sims@une.edu.au

Received: October 17, 2017

Accepted: November 21, 2017

Online Published: December 20, 2017

doi:10.5539/jel.v7n1p223

URL: <https://doi.org/10.5539/jel.v7n1p223>

Abstract

We explore the way dominant political discourses are perceived to influence developing professionalisation of early childhood in three contexts. The UK is strongly influenced by the neoliberal agenda which positions managerialism, bureaucracy, accountability and control as necessary to drive quality improvement. Bhutan has been exposed to western ideologies for a short time (as time counts in human history) and is attempting to manage tensions between western ideologies and the philosophy underpinning Gross National Happiness. Fiji has a history of colonisation. With a growing commitment across Pacific nations to postcolonialism, Fiji professionals are struggling to manage the intersection between their neoliberal western history and their own postcolonial ambitions. We argue a better understanding of the ways in which dominant ideologies impact on the development of early childhood professionalisation will uncover unintended, taken-for-granted assumptions and illuminate potential risks, thus better positioning readers to make informed choices about their work and the development of their profession.

Keywords: early childhood professionalisation, neoliberalism, postcolonialism, international comparison

1. Introduction

The way in which early childhood services develop is strongly influenced by policy discourses and these are underpinned by a range of understandings about how the world operates and what is required to drive national development (Cook, Corr, & Breitreuz, 2016). "Education is a political practice" (Moss et al., 2016, p. 346) and in much of the western world neoliberalism is a key influence (Olssen & Peters, 2005). The influence of neoliberalism has become so pervasive that it is often accepted "...as the only possible economic and social order available to us" (Davies & Bansel, 2007, p. 253). This hegemonic political discourse has had a powerful impact on the way in which early childhood services and early childhood professionalisation have developed across many countries, and it appears from our research that its influence is not always clearly recognised by early childhood professionals (Sims & Pedey, 2015; Sims & Tausere-Tiko, 2016). This is important because we suspect that neoliberalism is eroding our understanding of the purposes of early education and care through its emphasis on labour market supply factors (Moss et al., 2016).

Neoliberalism, as it is evidenced in early childhood, is composed of several key discourses. First is the assumption that children are best viewed as an investment for the future: appropriate early childhood education is considered important not only because it prepares children for school but also because it provides a foundation upon which schooling builds in order to create an employable, compliant citizen (Sims & Waniganayake, 2015). In order for this neoliberal agenda (the term "agenda" is used in the sense identified by Connell, 2013, to refer to the social and economic transformations linked to neoliberal ideology and the strategies used to achieve these) to be operationalised, there is increasing surveillance of early childhood educators implemented using the language of quality. The assumption is that quality can best be ensured when educators are closely monitored, and the

material they teach is identified, checked and controlled through a process of accreditation. Cook et al. (2016) call this a focus on checking that early childhood educators are doing things right, rather than relying on them making professional judgements about doing the right thing. As a consequence of this focus, many early childhood systems across the world have, or are involved in developing, dual processes:

- 1) a quality assurance process that attempts to ensure high quality pedagogy is delivered through scrutiny of what goes on in classrooms with young children;
- 2) an accreditation process that specifies the knowledge and skills required by educators and ensures that this content is covered in pre-service courses.

The impact of this level of monitoring and control has been to de-professionalise teachers (Jovanovic & Fane, 2016; Sims, Forrest, Semann, & Slattery, 2014), taking away the decision-making power which enabled them to make pedagogical decisions relevant to each child and to context, and instead imposing upon them guidelines for practice based on external standards. Undertaking higher qualifications no longer becomes an exercise aimed at increasing critical thinking, professional reflection and decision-making capacity but rather an exercise of restricting "...the recognition of viable alternatives, making the dominant discourse appear incontestable" (Cumming, Sumsion, & Wong, 2013, p. 224). Skattebol, Adamson, & Woodrow (2016, p. 119) argue professional practice thus becomes narrowed to what is "officially spoken about and recognized". Teachers have, in effect, become technicians (Jovanovic & Fane, 2016) whose role it is to "produce learners who become earners and consumers" (Brown, 2015, p. 237). Goodson (2007) identified this when he wrote about the decline in the number of professionals who teach from vocation and passion, and the growth of technocratic professionalisation.

Accompanying this de-professionalisation comes a discourse of measurable outputs; quality becomes what is measurable and thus quality needs to become standardised in order to implement standardised tests at service/state/national/international levels to demonstrate accountability. Good educators become defined as those whose students score well on standardised tests and in the US, Bill Gates has suggested that teachers' pay should be tied to their students' results on these tests (Hursh & Henderson, 2011).

Taking this position to its conclusion we end up with the concept of functional stupidity (Alvesson & Spicer, 2016). Logical and critical thinking is no longer valued in employees but conformity is. Questioning employer decisions is positioned as the quickest route to career suicide and the focus of education is solely to create compliant, neoliberal citizens whose goal in life is to earn sufficient money to consume (Sims, 2017). In Australian early childhood we see this in leaders whose focus is more on how to best implement the early childhood framework, part of the new national standards, rather than on engaging in debate about improvements (Sims et al., 2014). Ishimine, Tayler, & Thorpe (2009) write this is about following the rules, rather than questioning them. For employees, this becomes the way in which they demonstrate they are doing their job so that they cannot be criticised when outcomes are not as expected.

There is a considerable literature critiquing neoliberalism and the consequences of neoliberal-based education. Alvesson & Spicer (2016)'s concept of functional stupidity mentioned above is a recent example; they demonstrate how the neoliberal focus on compliant employees can result in the collapse of an international business (Nokia) and show how Nokia employees all knew that the mobile platform being pursued by senior management would never work, but were unable to communicate that knowledge effectively because of the organisation's requirements for positivity and compliance. Goodson (2010, p. 775) concurs, pointing out that "those that have pursued neo-liberal reforms in the fastest and deepest manner, such as England, perform very poorly in educational standards." In other words, pursuit of quality through the neoliberal agenda actually acts against the achievement of intended outcomes.

Given, then, that this hegemonic discourse is not recognised for its ability to create a vibrant, creative world, what are the alternatives? There is a growing movement coming from what Connell (2007) calls the majority south (in comparison to what she identifies as the hegemonic north) which is based on Indigenous ways of thinking about the world. From these varying epistemologies and ontologies comes the concept of Indigenous research based on Southern theory and encompassing discourses such as critical race theory (Baszile, 2015; Parker, 2015) and post colonialism (Boisselle, 2016; Childs & Williams, 2013). In this space, early childhood educators from a range of nations outside the dominant north experiment with different ways of developing their own systems with the aim of creating citizens strong in their own cultural identity (Bat & Fasoli, 2013; Gonzales & Shields, 2014; Sims & Tausere-Tiko, 2016). The key discourses here thus focus on empowerment of Indigenous culture and values, the need for children to grow up strong in their culture and the expectation that early childhood educators will operate in ways that support these aims.

In many cases in the majority south, early childhood systems are only just beginning to develop and professionals are looking to systems from the hegemonic north to help them in this process. Whilst there is a significant literature in existence around the systems developed in the hegemonic north (for example, in Australia-Sims, Mulhearn, Grieshaber, & Sumsion, 2015; Sumsion et al., 2009), and there is recognition of the importance of developing unique, Indigenous systems based on Indigenous values and processes (for example, the work in Canada with First Nations people undertaken by Pence, 1998, 1999, 2001), there is little work examining the intersection of these different epistemologies/ontologies. This research aims to examine that boundary, asking early childhood professionals to reflect on the ways in which they see the early childhood profession developing in their context. We use these reflections in our interpretations to explore the boundaries between the hegemony of neoliberalism from the majority north with the realities of their own, unique contexts. Our argument posits that a better understanding of the ways in which dominant ideologies impact on the development of early childhood professionalisation will uncover unintended, taken-for-granted assumptions and illuminate potential risks, thus better positioning readers to make informed choices about their work and the development of their profession

2. Methodology

The study took a mixed methods approach based on pragmatism. Pragmatism acknowledges that there are multiple realities but that these realities are layered so that it is possible to have both subjective and objective positions as well as a mixture of these (Feilzer, 2010). This approach enables us to explore participants' understanding of their reality which is, we argue, influenced by powerful, hegemonic ideologies such as neoliberalism and colonialism, a position originally described by Freire (1973) and further developed in Connell (2007)'s work in southern theory. Participants' understandings are layered and the aim of this research is to develop shared meanings (in the sense as described by Bruner, 1990) with participants through narrative.

2.1 Participants

2.1.1 Contexts

For the purposes of this study 3 contexts were purposively selected:

- 1) **The UK.** The early childhood profession in the UK experienced major changes during the time New Labour and Tony Blair were in power. These changes introduced the major elements of neoliberalism: increasing scrutiny of the day-to-day work of early childhood educators under the guise of quality control, increased external determination of pre-service preparation courses and courses for up-skilling the existing workforce under the guise of course accreditation, and the imposition of a national curriculum which specified the desired learning outcomes for young children (Abbott & Langston, 2005; Cotzias, Whitehorn, & STA Teacher and Assessment Moderation Team, 2013; Kwon, 2002; Simpson, 2010).
- 2) **Bhutan.** Bhutan became a constitutional monarchy in 2008. The constitution identifies the responsibility of the state to pursue Gross National Happiness (GNH) which aims "to orient the people and the nation towards happiness, primarily by improving the conditions of not yet- happy people" (Ura, Alkire, Zangmo, & Wangdi, 2012, p. 1). Underpinned by Vajrayana Buddhism, the national agenda is focused on developing citizens whose focus, rather than the individualism espoused in most western countries, is one of compassion and caring. Bhutan has only recently been opened to the influence of the majority north (for example television was only allowed into Bhutan in 1999, Sims & Pedey, 2015). This recent exposure of Bhutan to the influence of the majority north and its associated neoliberalism and the history of Bhutan with its Buddhist state religion and focus on GNH offers an opportunity to explore how perceptions of EC participants are shaped by this context.
- 3) **Fiji.** Fiji is composed of 330 small islands of which 110 have human habitation. It was settled originally by Melanesians and the first European contact was around the early 19th century when missionaries began working there. The successful conversion of a large number to Christianity is reflected in the proportion of today's population who continue to identify as Christian (64%). The first British Consul arrived in 1858 and Indian indentured labourers began arriving around 20 years later. Ethnic Indians currently comprise 37.5% of the population and outnumbered Indigenous Fijians until the late 1980s. Ethnic Indians were entitled to elect 3 members to the Legislative Council from 1929 but Indigenous Fijians and women were not given the vote until 1963. Fiji gained independence from Britain in 1970. The education system remains based on the British system (<https://www.cia.gov/library/publications/the-world-factbook/geos/fj.html>). Whilst modern culture remains a mixture of Indigenous Fijian, Indian and western, there is a growing desire expressed by Indigenous Fijians to forefront their understandings and world views (Tausere Tiko, 2014) which can be theorised using a post-colonial framework (Sims & Tausere-Tiko, 2016; Sims & Tausere Tiko, in press).

2.1.2 Individuals

Participants were contacted through a range of networks including universities and training institutions, and professional organisations' email lists and newsletters. Participants were asked to pass information about the study to others so that recruitment snowballed. There were certain limitations particularly in Fiji and Bhutan associated with the restricted penetration of the internet. To address this, in Fiji hard copies of the survey were given to those attending a regional summit enabling access to limited numbers of participants who lived on islands without internet access. In Bhutan, the local researcher visited services and supported participant access. Note that in Bhutan formal child care services are only located in the main metropolitan area (26 centres) where there is appropriate internet access, and whilst there are community centres (54) located across the country these offer a range of services and are not dedicated early childhood services. Representativeness of the sample is not claimed and is not a requirement of the pragmatic epistemology/ontology.

In total there were 45 participants from the UK, 28 from Bhutan and 65 from Fiji. The majority were female and more of the Bhutanese were under 35 years of age and had worked in the sector for a shorter time (under 5 years) compared to those from the UK and Fiji. More of the UK participants had advanced (Master's, EdD, etc) qualifications whereas just over half of the Bhutanese and Fijian participants had a basic certificate. More than half of participants from each country worked face to face with children, or in a management or support role that required face to face contact with children. Nearly a fifth of the Fiji participants were students studying EC. The number of academics in the UK participant group was much higher than in the other 2 countries which reflects the relative newness of tertiary education in EC in Bhutan and Fiji. In both these latter two countries there are only 2 institutions offering courses, the courses have small enrolments and in neither have these courses yet developed into Bachelor level qualifications.

2.2 Data Collection Strategy

Data was collected via an online survey. The survey was developed as part of a larger study (Sims, 2014; Sims & Pedey, 2015; Sims & Tausere-Tiko, 2016) and questions were customised to context. For example, names of EC qualifications were country-specific. Age ranges of children covered in the EC settings were not specified except in the questions that specifically addressed infants and toddlers. Participants were free to answer questions in any way they chose, including differentiating their answers relative to different ages of children. Information about the study was circulated electronically as described above, and verbally through the researchers. Participants were asked to click on the link provided which took them to the information letter and the survey. Where participants did not have access to the internet a hard copy of the survey was handed to them, and their data entered electronically by one of the researchers later. The survey collected information via rating scales and open-ended questions. For the purpose of this paper the scale related to the purpose of early childhood services and the relevant open-ended questions were selected.

The recruitment process and the survey received appropriate Ethics Consent from the host university which operates under the Australian guidelines (National Health & Medical Research Council, Australian Research Council, & Australian Vice-Chancellors' Committee, 2007 [updated 2015]). All participants had sufficient command of English to give appropriate informed consent given that English is the medium of instruction in secondary schools in each country.

2.3 Analysis

The pragmatic epistemology/ontology underpinning this study recognises multiple layers of understandings thus the analyses are designed around using different approaches to explore different layers. Quantitative analyses involved cross-tabulation conducted using SPSS to demonstrate the percentage of participants from each country who selected each rating level (very important, somewhat important, not really important, not important at all) from each context (UK, Bhutan and Fiji). Cramer's V was calculated for each variable as this is the recommended non-parametric statistic (Nussbaum, 2015; Prematunga, 2012) for nominal comparisons where the cross-tabulation is larger than a 2x2 table and when there are not the same number of categories in each of the nominal variables [in this case the tables were 3x4].

Qualitative data was analysed using the constant comparison method of content analysis as initially described by Glaser (1965). Themes were identified and quotes assigned to themes were used to identify the boundaries of each theme.

3. Results

Whilst the data was collected using 4 possible ratings it is presented in Tables 1-8 as binary (important/not important) to make it easier to see the trends in the data (note that the analyses were performed across all 4

ratings, not the 2 presented here in the tables). Cramer’s V is also presented for each variable along with the level of significance. The trends identified in this data are illustrated with quotes to demonstrate the layering of the data and interpretation.

The data demonstrates that participants from the UK are most likely to rate issues related to children’s rights as more important than participants from Bhutan or Fiji. Whilst in the rating data children’s rights to have both a range of experiences and interactions are rated as highly important by UK participants, the qualitative data does not reflect these areas. Instead, participants from Bhutan and Fiji emphasised the rights of children to be strong in their culture:

I wish that they get more opportunities to experience Bhutanese culture, games, songs, etc. At the moment, children are exposed to Western Culture and values. This is forced by the wish of the Children to enhance the ability of their children communicate in English and imbibe western culture so that they can do well in a globalized world where people with good English background and exposure to western culture survive the best (Bhutan 1.11.1)

To be life-long learners, have pride in their culture and country (Fiji 1.11.4)

Table 1. Cross-tabulation for children’s interactions by context

variable	Very or somewhat important %	Of little or no importance %	Cramer’s V	Level of significance
Theme: children’s rights				
We need EC services because:				
Children need a range of interactions with adults and peers				
UK	94.6	3.6	0.464	0.000
Bhutan	80.0	20.0		
Fiji	35.8	64.2		

As part of this, is an emphasis on children’s right to feel they belong:

My main purpose of my work with the children is to a safe healthy/learning environment where each individual student is encouraged to participate in any learning activities provided either indoor or outdoor, academically or otherwise—to ensure the message that everyone belongs (Fiji 1.10.5)

Table 2. Cross-tabulation for group participation by context

variable	Very or somewhat important %	Of little or no importance %	Cramer’s V	Level of significance
Theme: children’s rights				
We need EC services because:				
Children have the right to participate in group contexts				
UK	55.5	44.4	0.277	0.022
Bhutan	28.0	72.0		
Fiji	47.7	52.3		

The lack of a focus on children’s right to culture in the UK data, we suggest, arises from the current political and social contexts in each country. As explained in the discussion of context above, in both Bhutan and Fiji there is interest in using national culture and values to shape the development of their own EC system as evidenced by a range of research addressing this issue: for example Nabobo-Baba (2006) Nabobo-Baba (2006) and Tausere-Tiko (2014) in Fiji, Pedey (2014) and Wangmo (2014) in Bhutan. In comparison, the EC sector in the UK has had a much longer history and the focus on culture here is more about adaptations to address multiculturalism (for example Grant, 2005) rather than postcolonialism.

Participants from Fiji and the UK rated children’s right to learn through play highly whilst participants from Bhutan rated this area as less important. The positioning of play in children’s learning is something that research has found differs across different cultures (Pacini-Ketchabaw, 2014) and it is clear that play is constructed by children to reflect their culture and their economic and social experiences (Shimpi & Nicholson, 2014). Colonial/western hegemony proposes that not only should children play in a certain manner (and in particular play is separated from work), but that adults should support that play in certain ways. Postcolonial research

questions these universalist assumptions; play, it has been suggested, needs to be examined within the context of a network of human relationships (Shimpi & Nicholson, 2014). It is interesting that in the qualitative data, only one participant from Bhutan (none from the UK and Fiji) specifically mentioned children's rights to play:

In the case of Bhutan, parents are very ambitious and thus want to prepare their children for transition to school. This overwhelms the children as they are deprived of so many beautiful experiences and fun of learning through play. For instance, the room for children are designed like a classroom with tables and benches to sit and write and which doesn't allow free play (Bhutan 2.4.4).

Table 3. Cross-tabulation for range of experiences by context

variable	Very or somewhat important %	Of little or no importance %	Cramer's V	Level of significance
Theme: children's rights				
We need EC services because:				
Children need a range of experiences				
UK	96.3	3.7	0.434	0.000
Bhutan	73.0	26.9		
Fiji	56.8	43.2		

However, perhaps aligned with the western ideas of play as a tool whereby children can learn without stress, a number of participants shared their beliefs that children have the right to enjoy their lives in the present:

I want children to be able to be happy safe and secure in the here and now. Childhood is an important stage of life not just a preparation for adulthood (UK 1.11.2.17)

I see my vision of early childhood as a profession is not different from the gardener whose main focus is to ensure that his plants have enough water, have enough sunlight, have enough space to grow and mature, he creates the balance amongst the different plants within his garden. Each plant is different however, they have one common link and that is to be nurtured and cared for. Fiji 2.9.2

Table 4. Cross-tabulation for learning through play by context

variable	Very or somewhat important %	Of little or no importance %	Cramer's V	Level of significance
Theme: children's rights				
We need EC services because:				
Children have the right to learn through play				
UK	81.4	18.5	0.284	0.017
Bhutan	53.9	46.1		
Fiji	86.1	14.0		

The neoliberal agenda which emphasises the importance of early childhood for national economic wellbeing (in the present in terms of freeing parents for employment and in the future in terms of ameliorating disadvantage so children are better prepared for the future) is also more strongly supported by participants in the UK. One might argue that the discourse around addressing disadvantage is not only focusing on preparing children for future employment, but also focusing on children's rights to social inclusion. Unfortunately the question was asked in a manner that does not enable these two meanings to be teased out although in the qualitative data, one participant from Fiji reported:

Advocate for the best conditions ever whereby children thrive no matter what circumstances they live in, Quality Childhood ensures Quality Future. Therefore, children ought to receive the basic necessities of life so dignity and respect for quality life is upheld particularly those in disadvantaged communities (Fiji 1.10.1)

Table 5. Cross-tabulation for parental employment by context

variable	Very or somewhat important %	Of little or no importance %	Cramer's V	Level of significance
Theme: EC as an investment				
Subtheme 1: investment in employment/national productivity now				
We need EC services because				
Children need to be well cared for when their parents work				
UK	70.3	29.6	0.275	0.024
Bhutan	68.0	32.0		
Fiji	40.9	59.1		

However, in contrast, the neoliberal positioning of children as investments for the future (preparing for school and preparing for future employment) is more evident in the responses of participants from Fiji. In terms of the role of early childhood in preparing children for school, nearly twice as many participants from Fiji and Bhutan were likely to see this as important compared to participants from the UK.

Children are more prepared for what will be expected of them at school (UK 2.4.2.6)

To make children ready for school. To be confident enough to face challenge in their life in future (Bhutan 1.10.20) to help them grow with a good and high self esteem educate them so that they are equipped and ready for primary school (Fiji 1.10.22)

Table 6. Cross-tabulation for future employability by context

variable	Very or somewhat important %	Of little or no importance %	Cramer's V	Level of significance
Theme: EC as an investment				
Subtheme2: investment in the economic future				
We need EC services because:				
Children who have quality early childhood services are better prepared for employment in the future				
UK	27.0	62.9	0.171	0.471
Bhutan	44.0	56.0		
Fiji	53.5	46.5		

In terms of preparing children for employment and/or future success participants reported:

Teachers are expected to deliver a curriculum in order to prepare pupils to achieve success in tests and exams (UK 2.4.2.4)

To be successful in life Bhutan (Bhutan 1.11.16)

I want them to be able to finish school go to universities or college and maybe get for their studies or get a good job (Fiji 1.11.55)

Table 7. Cross-tabulation for school readiness by context

variable	Very or somewhat important %	Of little or no importance %	Cramer's V	Level of significance
Theme: EC as an investment				
Subtheme2: investment in the economic future				
We need EC services because:				
Children need to be prepared for school				
UK	23.6	76.5	0.429	0.000
Bhutan	34.0	56.0		
Fiji	62.8	37.2		

Along with this, participants reported they felt a key element of early childhood services was to ensure children had the best start in life as this laid the foundation for future success.

We would also like all young children to gain the best start in life (UK 1.11.2.16)

So, to make them grow into better human beings, I took the decision of being with children (Bhutan 1.10.10)

Starting early to prepare children for a successful life is positioned as more efficient:

It would be easy to tackle and develop the children in their prime years than later years that will be hard to mould (Fiji 1.8.7)

Table 8. Cross-tabulation for amelioration of disadvantage by context

variable	Very or somewhat important %	Of little or no importance %	Cramer's V	Level of significance
Theme: EC as investment in social justice for the economic future				
We need EC services because:				
Children who are disadvantaged need to have learning opportunities outside the home				
UK	81.4	18.5	0.294	0.011
Bhutan	52.0	48.0		
Fiji	56.9	43.2		

This discourse is influenced by the developmental ideology, articulated by participants from Fiji, but not those from the UK or Bhutan. This discourse addressed not only developmental domains but also the concept of holistic education.

To develop them holistically in all 6 domains (Fiji 1.10.11)

Participants from both Bhutan and Fiji (but not the UK) also positioned early childhood as important in preparing future citizens:

to make them better future citizen (Bhutan 1.8.16)

I want them to become good children and in turn become good citizen of Fiji (Fiji 1.11.41)

Good citizens by definition held certain values and participants reflected on these and the importance of early childhood services in teaching these values:

To help them become a better human being. Let them experience time together, explore nature, to learn better and become good mannered (Bhutan 1.10.2)

My aspiration for children in Fiji is to develop into healthy beings, responsible individual and reverence for God. To have a sense of identity, respect for other cultures and the environment and also to develop them into life-long learners, that they will contribute to the country in the future (Fiji 1.11.6)

This focus on citizenship may well be associated with growing interest in postcolonialism (as demonstrated in work such as that of Boisselle, 2016; Childs & Williams, 2013; Gonzales & Shields, 2014). Alternative theoretical approaches arising from this movement include Southern Theory (Connell, 2007), Critical Race Theory (Baszile, 2015) and post-qualitative inquiry (Gerrard, Rudolph, & Sriprakash, 2016) and associated with these are a range of indigenous frameworks necessary to position research appropriately using southern/indigenous worldviews (for example de Sousa Santos, 2008; Land, 2015; Martin, 2008; Tausere-Tiko, 2015). These academic positions, we argue, arise from the cultural milieu in which participants are living thus it is not surprising that these ideas should be reflected in participants' responses. Issues around what kinds of citizens a nation wishes to produce are clearly important in both Bhutan and the Fiji but not on the minds of participants from the UK.

4. Discussion

One element of the neoliberal agenda is the positioning of children as investments; children are future human capital (Parziale & Scotti, 2016). Policy documents in the European Union, for example, position early childhood education as a tool used to address economic and social disadvantage, break the cycle of poverty and increase employability of children when they grow up (Urban, 2012). A number of authors have argued that, in

the western world, the neoliberal concept of children as an investment for the future over-rides the concept of social justice (Adamson & Brennan, 2013; Brown, 2015; Dýrfjörð & Magnúsdóttir, 2016; Hulme, McKay, & Cracknell, 2015; Moss et al., 2016; Otterstad & Braathe, 2016; Simpson, Lumsden, & McDowall Clark, 2014). We see elements of this in our data. In general participants from Bhutan and Fiji were more strongly focused on children as human capital for the economic future. This may be linked to the economic status of the countries concerned. Both Bhutan and Fiji are identified by the IMF as emerging markets (see <https://www.imf.org/external/pubs/ft/weo/2015/01/pdf/tblpartb.pdf>), a term used to refer to movement towards a free market system (Kvint, 2009). In that context it is not surprising that citizens would be thinking about employment, income generation and the economic wellbeing of themselves, their children and their nation. In contrast, the UK is identified by the IMF as one of the 10 most advanced economies in the world as measured by Gross Domestic Product and the purchasing power of citizens (see <http://www.imf.org/external/pubs/ft/weo/2015/02/weodata/index.aspx>). It is in this context that we see participants from the UK focusing on elements of social justice: in particular addressing issues of disadvantage from a social justice perspective. However, addressing disadvantage may, in itself, be superimposed on the investment narrative: preventing or ameliorating disadvantage is positioned as economically sound practice in the more recent work of Heckman (2014) for example. Caspi et al. (2016) demonstrate that the most disadvantaged 22% of their longitudinal sample were responsible in later life for 66% of welfare payments and 81% of criminal convictions. In the US, Atinc, Putcha, and Van der Gaag (2014, p. 1) argue “The playing field has the highest chances of being leveled [their spelling] early on”, but the ultimate purpose of levelling the playing field is to prevent “higher costs down the road”, a position feeding into the economic argument. Thus even as the data appears at one level to suggest that participants from the UK were more likely to use a social justice discourse (as evidenced, for example in the quote: *I want children to be able to be happy safe and secure in the here and now. Childhood is an important stage of life not just a preparation for adulthood [UK 1.11.2.17]*) underpinning this are elements of the same investment narrative as seen more clearly in the data from participants from Bhutan and Fiji. This narrative is clearly very strong.

The concept of children’s rights is often positioned as representing western ideological views (Douglas & Sebba, 2016; Valentin & Meinert, 2009) and generally our data reflects this with participants from the UK rating issues relating to children’s rights higher than participants from Bhutan and Fiji. This critique led Shimpi and Nicholson (2014, p. 725) to argue we need to develop a concept of rights that is more contextual, that is one that takes more account of local and cultural issues. As Liebel (2012) suggests, children’s rights are likely to be understood and enacted differently in different cultural and political contexts and this will have influenced participants in how they addressed this in the study.

The majority of research in early childhood comes from a western view as demonstrated by Fenech (2011, p. 106) who identified that research in the sector over the past three decades has overwhelmingly been conducted in the USA (70.4% of all articles reviewed). Following well behind were studies from Europe (12.4%), the Asia-Pacific (7.7%), the United Kingdom and Ireland (4.7%), Canada (2.1%), and other countries (0.01%), with remaining studies being conducted over multiple continents.

The key point here is that the research, used by advanced economy nations to guide the development of their own early childhood systems, comes from a western perspective that does not address the impact of powerful, hegemonic, and perhaps unacknowledged, neoliberalism (Urban, 2012). Much research on the professionalisation of early childhood addresses concerns that this agenda in the western world is already shaping the evolution of the sector in ways that do not recognise some of the elements that many writers position as important. Cook et al. (2016), for example, emphasise that neoliberalism prioritises detachment, standardisation and technical processes and that these are at odds with key values in the early childhood sector around the need to take into account context and the importance of ongoing relationships. The key element here is the importance of context; of the need for discretionary decision-making which enables unique actions in response to each child’s experiences at any moment in his or her unique ecological niche. Part of this is embedding early childhood work in the fluid relationships early childhood educators build with individual children at every moment they share experiences. Relationships are never static and can change from moment to moment and relationship work requires ongoing adjustments, the antithesis of standardisation, and the loss of this from the education discourse (Sims, 2014; Sims & Pedey, 2015; Sims & Tausere-Tiko, 2016; Sims & Tausere Tiko, in press; Sims & Waniganayake, 2015; Sims, Waniganayake, & Hadley, 2017) represents to us a major risk that the early childhood sector will be modified by neoliberalism. This fear was expressed by research participant Bell in Stover (2013, p. 7):

I just don't think you can tread with heavy boots on early childhood. And you can call it what you damn well like, but a lot of what they're doing now is just that. It's not respecting the importance of that time. It's imposing adult values on what is so precious.

Our data suggests that these elements of neoliberalism are influencing the thinking of many of the participants in this study and that the human capital investment notion in Bhutan and Fiji is coupled with the notion of citizenship. We argue that this notion is linked to the ideals of postcolonialism, from which arises the dream, communicated in the study by a number of participants, to develop their own education systems. Of relevance in this context is the concept of hybridisation introduced by Paananen, Lipponen, & Kumpulainen (2015). They argue the Finnish early childhood sector is influenced by a mixture of the social-democratic discourse and neoliberalism. In the case of Fiji the hybridisation arises from a mixture of neoliberalism and postcolonialism. Bhutan may represent a triple hybridisation: neoliberalism, postcolonialism and the ideologies associated with GNH. The way the early childhood sector evolves in each of these contexts is likely to reflect this hybridisation.

Our research focused on our participants' understandings of the influences shaping the development of their profession, and this allowed us, in our interpretations, to explore the ways we thought they negotiated the boundaries between their own cultures and contexts and hegemonic neoliberalism. We suggest that there are clear neoliberal influences impacting on the views of all our participants. In our previous publications we have suggested that it is important for professionals to be aware of the extent of these neoliberal influences if early childhood systems are to be developed that are true to context; that will enable systems to develop that truly honour the ideals of postcolonialism (Sims & Pedey, 2015; Sims & Tausere-Tiko, 2016; Sims & Tausere Tiko, in press). Being aware of the impact of different ideologies is, we argue, the first step in supporting the different paths down which professionalisation can develop in different contexts. There is no one right path; the postcolonial agenda suggests there are multiple paths along which different nations can develop their early childhood sector. Participants in Bhutan shared a dream that the system they develop will strongly represent their national focus on GNH. Many participants in Fiji wanted a system that will ensure their children will grow up culturally strong. Participants from the UK said they were interested in addressing issues of social justice and children's rights. To achieve these goals early childhood professionals need to focus on the end point but be very aware of the stones that may trip them up as they progress along their path. We hope that our work encourages resistance of the hegemonic neoliberal agenda and the valuing of diverse strategies that reflect situated context.

References

- Abbott, L., & Langston, A. (2005). Birth to three matters: a framework to support children in their earliest years. *European Early Childhood Education Research Journal*, 13(1), 129-143. <https://doi.org/10.1080/13502930585209601>
- Adamson, E., & Brennan, D. (2013). Social investment or private profit? Diverging notions of "investment" in early childhood education and care. *International Journal of Early Childhood*, 46(1), 47-61. <https://doi.org/10.1007/s13158-013-0098-x>
- Alvesson, M., & Spicer, A. (2016). *The Stupidity Paradox: The Power and Pitfalls of Functional Stupidity at Work*. Pearson.
- Atinc, T., Putcha, V., & Van der Gaag, J. (2014). Costing early childhood development services: the need to do better (p. 10). Washington, DC: The Brookings Institution.
- Baszile, D. T. (2015). Rhetorical Revolution: Critical Race Counterstorytelling and the Abolition of White Democracy. *Qualitative Inquiry*, 21(3), 239-249. <https://doi.org/10.1177/1077800414557830>
- Bat, M., & Fasoli, L. (2013). Action research as a both-ways curriculum development approach: Supporting self-determination in the remote Indigenous child care workforce in the Northern Territory of Australia. *Action Research*, 11(1), 52-72. <https://doi.org/10.1177/1476750312473341>
- Boisselle, L. N. (2016). Decolonizing Science and Science Education in a Postcolonial Space (Trinidad, a Developing Caribbean Nation, Illustrates). *Sage Open*, 6(1). <https://doi.org/10.1177/2158244016635257>
- Brown, C. P. (2015). Conforming to reform: Teaching pre-kindergarten in a neoliberal early education system. *Journal of Early Childhood Research*, 13(3), 236-251. <https://doi.org/10.1177/1476718X14538602>
- Bruner, J. (1990). *Acts of meaning*. Cambridge, Mass: Harvard University Press.
- Caspi, A., Houts, R., Daniel, B., Harrington, H., Hogan, S., Ramrakha, S., ... Moffitt, T. (2016). Childhood forecasting of a small segment of the population with large economic burden. *Nature Human Behaviour*, 1(article number 0005), 1-10. <https://doi.org/10.1038/s41562-016-0005>

- Childs, P., & Williams, P. (2013). *An Introduction To Post-Colonial Theory*. Abingdon, New York: Routledge.
- Connell, R. (2007). *Southern theory. the global dynamics of knowledge in social science*. Crows Nest, NSW: Allen & Unwin.
- Connell, R. (2013). The neoliberal cascade and education: An essay on the market agenda and its consequences. *Critical Studies in Education, 54*(2), 99-112. <https://doi.org/10.1080/17508487.2013.776990>
- Cook, K., Corr, L., & Breitzkreuz, R. (2016). The framing of Australian childcare policy problems and their solutions. *Critical Social Policy, 36*(4), 1-22.
- Cotzias, E., Whitehorn, T., & STA Teacher and Assessment Moderation Team. (2013). Topic Note: Results of the Early Years Foundation Stage Profile (EYFSP) pilot. *Research report* (p. 79). London: Department for Education.
- Cumming, T., Sumsion, J., & Wong, S. (2013). Reading between the Lines: an interpretative meta-analysis of ways early childhood educators negotiate discourses and subjectivities informing practice. *Contemporary Issues in Early Childhood, 14*(3), 223-240. <https://doi.org/10.2304/ciec.2013.14.3.223>
- Davies, B., & Bansel, P. (2007). Neoliberalism and education. *International Journal of Qualitative Studies in Education, 20*(3), 247-259. <https://doi.org/10.1080/09518390701281751>
- de Sousa Santos, B. (Ed.). (2008). *Another knowledge is possible. Beyond northern epistemologies*. London: Verso.
- Douglas, G., & Sebba, L. (2016). *Children's Rights and Traditional Value*. Abingdon, Oxon: Routledge.
- Dýrfjörð, K., & Magnúsdóttir, B. (2016). Privatization of early childhood education in Iceland. *Research in Comparative and International Education, 11*(1), 80-97. <https://doi.org/10.1177/1745499916631062>
- Feilzer, M. Y. (2010). Doing Mixed Methods Research Pragmatically: Implications for the Rediscovery of Pragmatism as a Research Paradigm. *Journal of Mixed Methods Research, 4*(1), 6-16. <https://doi.org/10.1177/1558689809349691>
- Fenech, M. (2011). An Analysis of the Conceptualisation of 'Quality' in Early Childhood Education and Care Empirical Research: Promoting "Blind Spots" as Foci for Future Research. *Contemporary Issues in Early Childhood, 12*(2), 102-117. <https://doi.org/10.2304/ciec.2011.12.2.102>
- Freire, P. (1973). *Pedagogy of the oppressed*. New York: Seabury.
- Gerrard, J., Rudolph, S., & Sriprakash, A. (2016). The Politics of Post-Qualitative Inquiry: History and Power. *Qualitative Inquiry*.
- Glaser, B. (1965). The constant comparative method of qualitative data analysis. *Social Problems, 12*(4), 436-445. <https://doi.org/10.2307/798843>
- Gonzales, S. M., & Shields, C. M. (2014). Education "reform" in Latino Detroit: achievement gap or colonial legacy? *Race Ethnicity and Education, 18*(3), 321-340. <https://doi.org/10.1080/13613324.2014.911170>
- Goodson, I. F. (2007). All the lonely people: the struggle for private meaning and public purpose in education. [Article]. *Critical Studies in Education, 48*(1), 131-148. <https://doi.org/10.1080/17508480601120954>
- Goodson, I. F. (2010). Times of educational change: towards an understanding of patterns of historical and cultural refraction. *Journal of Education Policy, 25*(6), 767-775. <https://doi.org/10.1080/02680939.2010.508179>
- Grant, C. A. (2005). *Research in multicultural education: From the margins to the mainstream*. London, New York: Routledge.
- Heckman, J. (2014). *Going forward wisely*. Paper presented at the The White House Summit on Early Education, Washington D.C. Retrieved from http://heckmanequation.org/content/white-house-summit-early-education#disqus_thread.
- Hulme, R., McKay, J., & Cracknell, D. (2015). From commissar to auctioneer? The changing role of directors in managing children's services in a period of austerity. *Educational Management Administration & Leadership, 43*(1), 77-91. <https://doi.org/10.1177/1741143213494886>
- Hursh, D., & Henderson, J. (2011). Contesting global neoliberalism and creating alternative futures. *Discourse: Studies in the Cultural Politics of Education, 32*(2), 171-185. <https://doi.org/10.1080/01596306.2011.562665>
- Ishimine, K., Tayler, C., & Thorpe, K. (2009). Accounting for quality in Australian childcare: a dilemma for policymakers. *Journal of Education Policy, 24*(6), 717-732. <https://doi.org/10.1080/02680930903207695>

- Jovanovic, J., & Fane, J. (2016). Learner engagement under the “regulatory gaze”: possibilities for re-positioning early childhood pre-service teachers as autonomous professionals. *Early Years*, 36(2), 148-164.
- Kvint, V. (2009). *The Global Emerging Market: Strategic Management and Economics*. New York, London: Routledge.
- Kwon, Y. I. (2002). Changing Curriculum for Early Childhood Education in England. *Early Childhood Research & Practice*, 4(2), 12 pages downloaded.
- Land, C. (2015). Acting politically with self understanding *Decolonizing solidarity. Dilemma and directions for supporters of Indigenous struggles* (pp. 159-201). London: Zed Books LTD.
- Liebel, M. (2012). *Children’s rights from below: Cross-cultural perspectives*. Houndmills, UK: Palgrave MacMillan. <https://doi.org/10.1057/9780230361843>
- Martin, K. (2008). *Please knock before you enter. Aboriginal regulation of Outsiders and the implications for researchers*. Teneriffe, QLD: Post Pressed.
- Moss, P., Dahlberg, G., Grieshaber, S., Mantovani, S., May, H., Pence, A., ... Vandebroek, M. (2016). The Organisation for Economic Co-operation and Development’s International Early Learning Study: Opening for debate and contestation. *Contemporary Issues in Early Childhood*, 17(3), 343-351. <https://doi.org/10.1177/1463949116661126>
- Nabobo-Baba, U. W. (2006). *Knowing and learning: an indigenous Fijian approach*. Suva: Institute of Pacific Studies Publications, University of the South Pacific.
- National Health & Medical Research Council, Australian Research Council, & Australian Vice-Chancellors’ Committee. (2007 [updated 2015]). *National Statement on Ethical Conduct in Human Research*. Canberra, ACT: Australian Government.
- Nussbaum, E. M. (2015). *Categorical and Nonparametric Data Analysis: Choosing the Best Statistical Data Analysis. Choosing the best statistical technique*. New York: Routledge, Taylor and Francis.
- Olssen, M., & Peters, M. (2005). Neoliberalism, higher education and the knowledge economy: from the free market to knowledge capitalism. *Journal of Education Policy*, 20(3), 313-345. <https://doi.org/10.1080/02680930500108718>
- Otterstad, A. M., & Braathe, H. J. (2016). Travelling inscriptions of neo-liberalism in Nordic early childhood: Repositioning professionals for teaching and learnability. *Global Studies of Childhood*, 6(1), 80-97. <https://doi.org/10.1177/2043610615627927>
- Paananen, M., Lipponen, L., & Kumpulainen, K. (2015). Hybridisation or ousterisation? The case of local accountability policy in Finnish early childhood education. *European Educational Research Journal*, 14(5), 395-417. <https://doi.org/10.1177/1474904115601446>
- Pacini-Ketchabaw, V. (2014). Postcolonial and anti-racist approaches to understanding play. In S. Brooker, M. Blaise & S. Edwards (Eds.), *Sage Handbook of Play and Learnig in Early Childhood* (pp. 67-78). Los Angeles: Sage. <https://doi.org/10.4135/9781473907850.n8>
- Parker, L. (2015). Critical Race Theory in Education and Qualitative Inquiry: What Each Has to Offer Each Other Now? *Qualitative Inquiry*, 31(3), 199-205. <https://doi.org/10.1177/1077800414557828>
- Parziale, F., & Scotti, I. (2016). Education as a Resource of Social Innovation. *Sage Open*, 6(3), 1-9. <https://doi.org/10.1177/2158244016662691>
- Pedey, K. (2014). *Parents grow old, children embody our hope. (Pha gee ba ta bu so)*. (Master of Education (Honours)), University of New England, Armidale, NSW.
- Pence, A. (1998). Renceptualising ECCD in the majority world: one minority world perspective. *International Journal of Early Childhood*, 30(2), 19-30. <https://doi.org/10.1007/BF03185631>
- Pence, A. (1999). “It takes a village..”, and new roads to get there. In D. Keating & C. Hertzman (Eds.), *Developmental health and the wealth of nations: social, biological and educational dynamics* (pp. 321-336). New York: Guilford.
- Pence, A. (2001). Through the looking glass. Cross-cultural early childhood education. *Every Child*, 7(3), 8-9.
- Prematunga, R. K. (2012). Correlational analysis. *Australian Critical Care*, 25(3), 195-199. <https://doi.org/10.1016/j.aucc.2012.02.003>

- Shimpi, P. M., & Nicholson, J. (2014). Using cross-cultural, intergenerational play narratives to explore issues of social justice and equity in discourse on children's play. *Early Child Development and Care*, 184(5), 719-732. <https://doi.org/10.1080/03004430.2013.813847>
- Simpson, D. (2010). Becoming professional? Exploring Early Years Professional Status and its implications for workforce reform in England. *Journal of Early Childhood Research*, 8(3), 269-281. <https://doi.org/10.1177/1476718X10362505>
- Simpson, D., Lumsden, E., & McDowall Clark, R. (2014). Neoliberalism, global poverty policy and early childhood education and care: a critique of local uptake in England. *Early Years*, 35(1), 96-109. <https://doi.org/10.1080/09575146.2014.969199>
- Sims, M. (2014). Is the care-education dichotomy behind us? Should it be? *Australasian Journal of Early Childhood*, 39(4), 3-11. Retrieved from <http://search.informit.com.au/documentSummary;dn=936652015347402;res=IELHSS>
- Sims, M. (2017). Neoliberalism and early childhood. *Cogent Education*, 4, 1365411. <http://dx.doi.org/10.1080/2331186X.2017.1365411>
- Sims, M., & Pedey, K. (2015). Are we all travelling similar paths to early childhood professionalisation? The case of Bhutan. *International Journal of Innovation and Research in Educational Sciences*, 2(3), 218-226. Retrieved from http://ijires.org/administrator/components/com_jresearch/files/publications/IJIRES_301_Final.pdf
- Sims, M., & Tausere Tiko, L. (in press). Neoliberalism and Post-colonialism in conflict: hybridisation in early childhood in the South Pacific. Article forthcoming in *Directions Journal of Educational Studies*, 15 December 2016.
- Sims, M., & Tausere-Tiko, L. (2016). We're going on a bear hunt: reconciling neoliberalism and postcolonialism in Pacific early childhood. *Cogent Education*, 3(1), 1152673. <https://doi.org/10.1080/2331186X.2016.1152673>
- Sims, M., & Waniganayake, M. (2015). The performance of compliance in early childhood: Neoliberalism and nice ladies. *Global Studies in Early Childhood*, 5(3), 333-345. <https://doi.org/10.1177/2043610615597154>
- Sims, M., & Waniganayake, M. (2015). The role of staff in quality improvement in early childhood. *Journal of Education and Training Studies*, 3(5), 187-194. <https://doi.org/10.11114/jets.v3i5.942>
- Sims, M., Forrest, R., Semann, A., & Slattery, C. (2014). Conceptions of early childhood leadership: driving new professionalism? *International Journal of Leadership in Education: Theory and Practice*, 18(2), 149-166. <https://doi.org/10.1080/13603124.2014.962101>
- Sims, M., Mulhearn, G., Grieshaber, S., & Sumsion, J. (2015). *Australian National ECEC reforms, with a focus on the National Quality Framework and the National Quality Standard. Expert report for the German Youth Institute*. Munich: Deutsches Jugendinstitut e. V (German Youth Institute). http://www.fruehe-chancen.de/fileadmin/PDF/Archiv/Expertise_Australien_DJI_final.pdf
- Sims, M., Waniganayake, M., & Hadley, F. (2017). Educational leadership—an evolving role. *Educational Management, Administration and Leadership*, 20 pages downloaded. <https://doi.org/10.1177/1741143217714254>
- Skattebol, J., Adamson, E., & Woodrow, C. (2016). Revisioning professionalism from the periphery. *Early Years*, 36(2), 116-131. <https://doi.org/10.1080/09575146.2015.1121975>
- Stover, S. (2013). Working theories on “unintended consequences” of early childhood education in Aotearoa, New Zealand. *Australasian Journal of Early Childhood*, 38(3), 4-8.
- Sumsion, J., Barnes, S., Cheeseman, S., Harrison, L., Kennedy, A., & Stonehouse, A. (2009). Insider perspectives on developing Belonging, Being and Becoming: The Early Years Learning Framework for Australia. *Australasian Journal of Early Childhood*, 34(4), 4-13.
- Tausere-Tiko, L. (2014). Understanding Indigenous Fijian Notions of Child Development Within Global Influences: Some Views From The Literature. *Micronesian Educator*, 18, 121-140.
- Tausere-Tiko, L. (2015). *Indigenous Fijian Notions of Child Development. Understanding children's ways of learning, knowing, and doing, and implications for policy and practice in the early years of school*. (PhD), University of New England.

- Ura, K., Alkire, S., Zangmo, T., & Wangdi, K. (2012). *A short guide to Gross National Happiness Index*. Thimphu, Bhutan: The Centre for Bhutan Studies.
- Urban, M. (2012). Researching Early Childhood Policy and Practice. A Critical Ecology. *European Journal of Education*, 47(4), 494-507. <https://doi.org/10.1111/ejed.12012>
- Valentin, K., & Meinert, L. (2009). The adult North and the young South. Reflections on the civilizing mission of children's rights. *Anthropology Today*, 25(3), 23-28. <https://doi.org/10.1111/j.1467-8322.2009.00669.x>
- Wangmo, T. (2014). *Examining "funds of knowledge" of pre-primary children as they transition from home to school in Bhutan : in a context of "educating for gross national happiness"*. (PhD), University of New England, Armidale, NSW. Retrieved from [http://une-edu-primo.hosted.exlibrisgroup.com/primo_library/libweb/action/display.do?tabs=detailsTab&ct=display&fn=search&doc=61UNE_ALMA7184765820002706&indx=3&recIds=61UNE_ALMA7184765718476582&recIdxs=2&elementId=2&renderMode=poppedOut&displayMode=full&frbrVersion=4&frbg=&&dsent=0&scp.scps=scope%3A%2861UNE%29%2Cprimo_central_multiple_fe&mode=Basic&vid=61UN&srt=rank&tab=61une_search&vl\(freeText0\)=Examining%20%27funds%20of%20knowledge%27&duid=true&dstamp=1483667614116](http://une-edu-primo.hosted.exlibrisgroup.com/primo_library/libweb/action/display.do?tabs=detailsTab&ct=display&fn=search&doc=61UNE_ALMA7184765820002706&indx=3&recIds=61UNE_ALMA7184765718476582&recIdxs=2&elementId=2&renderMode=poppedOut&displayMode=full&frbrVersion=4&frbg=&&dsent=0&scp.scps=scope%3A%2861UNE%29%2Cprimo_central_multiple_fe&mode=Basic&vid=61UN&srt=rank&tab=61une_search&vl(freeText0)=Examining%20%27funds%20of%20knowledge%27&duid=true&dstamp=1483667614116)

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).